New Jersey’s
Shore Protection Program

State of New Jersey
Jon S. Corzine, Governor

Dept. of Environmental Protection
Mark N. Mauriello, Acting Commissioner

Natural & Historic Resources
Amy Cradic, Assistant Commissioner

Office of Engineering & Construction
David Rosenblatt, Administrator
Bureau of Coastal Engineering

Purpose...

To administer beach nourishment, shore protection and navigational dredging projects throughout the State to:

• Provide for the protection of life and property along the coast

• Preserve our State’s vital coastal resources

• Maintain safe and navigable waterways
Shore Protection Fund
Dedicated for...

“To protect existing development and infrastructure from storm surges, sea-level rise and shoreline migration through dune creation and maintenance, beach nourishment projects, and construction and repair of shore protection structures."

$25 million dedicated annually
Realty Transfer Tax (N.J.S.A. C.13:19-16.1)
Shore Protection Funding
How It’s Divided

Federal Projects - NJDEP - local sponsor in these projects
• Studies
• Storm Damage Reduction/Shore Protection
• Environmental Restoration

State Projects - Municipalities - local sponsor in these projects
• Storm Damage Reduction/Shore Protection

Professional and Technical Services -
• Stevens Institute of Technology
• Richard Stockton College of New Jersey
• Division of Fish and Wildlife
• New Jersey Geological Survey
• **Material**
  – 394,797 Cubic Yards

• **Template**
  – 100’ Wide Berm
  – +7.00 NAVD88
  – 30:1 Beach Slope

• **Location**
  – 1st Street – 15th Street
  – 40th Street – 52nd Street
North Wildwood
Existing Conditions

Project Limits 2nd Ave. – Poplar Ave.

Viewing South @ 2nd Ave.  

Viewing North @ 24th Ave.
North Wildwood
Project Specifics

- **Material**
  - 1,186,400 Cubic Yards

- **Template**
  - 300’ Wide Berm
  - +6.50 NAVD88
  - 25:1 Beach Slope, 12:1 Toe Slope

- **Location**
  - Terminal Groin @ 2nd Ave – Poplar Ave
Stone Harbor

2009 Stone Harbor Beachfill

98th Street

111th Street

Stone Harbor Beachfill Limits
Stone Harbor
Existing Conditions

Project Limits 98th Street – 111th Street

Viewing South @ 98th St.  
Viewing North @ 111th St.
Stone Harbor
Project Specifics

- **Material**
  - 245,000 Cubic Yards

- **Template**
  - 150’ Wide Berm
  - +7.25 NAVD88
  - 20:1 Beach Slope, 12:1 Toe Slope

- **Location**
  - 98th Street – 111th Street
Strathmeme Beach Nourishment
Historical View

North End – Ludlam Island – Circa 1960’s
Strathmere Beach Nourishment
Current Conditions

Seaview Ave – Viewing South
Strathmere Beach Nourishment

Current Conditions

Tecumseh Ave. – Viewing South
Strathmere Beach Nourishment
Current Conditions

Jasper Ave. – Viewing South
Strathmere Beach Nourishment
Scope of Work

- **Total Sand:** 891,000 C.Y.
  - 203,100 C.Y. : Natural Area
  - 264,300 C.Y. : Seaview Ave. – Williams Ave.
  - 423,600 C.Y. : Webster Ave. – Polk Ave.

- **Borrow Area**
  - Corson’s Inlet
  - Varying Depths: -14’ – -20’ NAVD88’

- **Construction:** North to South

- **Production Potential:** 20,000 - 25,000 C.Y.
Strathmere Beach Nourishment
Borrow Area - Corson’s Inlet

1:12,000 (1" = 1,000')

NEW BORROW AREA CONFIGURATION
• Beach berm at a Fixed elevation of +6.75 feet NAVD88
• Berm width varies with location
• Pumped to a offshore slope of 30:1
Approximate Schedule

- **Contract:** 180 Days
- **Mobilization:** 2nd Week of July
- **Construction Start:** 3rd Week of July
- **Strathmhere Completion:** 1st Week of September
- **Total Project Construction Completion:** Jan. - 2010
Strathmere Beach Nourishment
What To Expect

- Dredge Pipeline
- Beach Closings: 1,000’ min. sections
  - Public Safety
  - Adequate Staging
- 24 Hour Operation
  - Continuous State Inspection
- Structure Monitoring
  - Adjacent to Structures
Great Lakes Dredge and Dock Company

- Dredge ILLINOIS
- 30 inch discharge diameter
- Capable of pumping 2,500 cubic yards of sand 25,000 feet per hour

The Illinois at work on Chesapeake Bay.
Strathmere Beach Nourishment
Proposed Project Costs

- **Total Project Costs:** $20,554,651.40
- **Strathmere Proposed Costs:** $6,026,820.33
- **Cost Share:**
  - **State = $4,791,761.50**
    - **Natural Area - $1,086,585.00 – 100% State Funded**
    - **Municipality = $1,235,058.83**
      - **Consolidation costs savings**
        - **$1,166,725.50 if Stone Harbor Awarded**
Strathmere Beach Nourishment
Environmental Concerns

• **Piping Plover**
  – Favorable Habitat: Williams Ave – Webster Ave
  – Not utilized since 2005

• **Archaeological Resources**
  – Outside of project footprint
  – Protective measures within the project footprint

• **Munitions/Debris**
  – Screened at Intake
  – Screened at Discharge
New Jersey Department of Environmental Protection

Shore Protection Program

www.nj.gov/dep/shoreprotection