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
  – 891,000 Cubic Yards

• Template
  – Varying Width Berm
  – +6.75 NAVD88
  – 30:1 Beach Slope

• Location
  – State Natural – Polk Ave.
Sea Isle City
Project Specifics

• **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
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
North Wildwood

2009 North Wildwood Beachfill

Ocean Avenue - North

Popeye Avenue

North Wildwood Beachfill Limits
North Wildwood Beach Nourishment
History – 10/1991
North Wildwood Beach Nourishment History – 1991 Aerial

City of North Wildwood

Atlantic Ocean

USACE MAIN

USACE A-1

North Wildwood Borrow Area
Figure 181: In North Wildwood, the worst erosional episode along the New Jersey shoreline is visible. This site commenced eroding and retreating in 1998 at high rates until 2006. The beach berm in 1986 was further seaward than the -11 foot depth distance offshore in 2006. The sand volume loss amounted to 513.79 yds$^3$/ft with an astounding 1055-foot shoreline retreat.
North Wildwood
Existing Conditions

Project Limits 2nd Ave. – Poplar Ave.

Viewing South @ 2nd Ave.  Viewing North @ 24th Ave.
North Wildwood
Existing Conditions

Viewing South @ 16th Ave.

Viewing North @ Poplar Ave.
North Wildwood
Project Specifics

• **Template**
  – 300’ Wide Berm
  – +6.75 NAVD88
  – 25:1 Beach Slope, 12:1 Toe Slope
  – Dune @ elevation +14.75 NAVD88, 25-foot wide crest

• **Additional Work**
  – Outfall Reconstruction – To maintain drainage
    • 2nd Avenue – 48” diameter
    • 21st Avenue – 48” diameter
    • Poplar Avenue (City of Wildwood) – 25” diameter
  – Sand Fence/Dune Grass – To stabilize the new dune
  – Crossover Work: 24 Crossovers total – 4 ADA and 3 vehicular

• **Location**
  – Terminal Groin @ 2nd Ave – Poplar Ave
• **Material**
  – 1,186,400 Cubic Yards

• **Borrow Area**
  – Hereford Inlet
  – ‘Staircase’ Dredge Cut – To maintain integrity of the shoal
    • -12 ft. NAVD88 (landward portion), -19.5 ft. NAVD88 (middle portion), and -27.5 ft. NAVD88 (seaward portion)
North Wildwood Beach Nourishment
What To Expect

- Dredge Pipeline and Heavy Machinery
- 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.*
North Wildwood Beach Nourishment
Proposed Project Costs

- **Total Project Costs:** $22,282,401.40
- **North Wildwood Proposed Costs:**
  - $10,640,526.00
- **Cost Share:**
  - State = $7,980,394.50
  - Municipality = $2,660,131.50

*Costs savings per municipality - $273,333.33*
North Wildwood Beach Nourishment

Environmental Concerns

• **Piping Plover/Beach Nesting Birds**
  - Current conditions not favorable for habitat within footprint but have historically utilized the region

• **Archaeological Resources**
  - Protective measures adjacent to the Borrow Area footprint

• **Munitions/Debris**
  - Screened at Intake
  - Screened at Discharge

New Jersey Dept. Environmental Protection
Bureau of Coastal Engineering
Shore Protection Program