



New Jersey Shore Protection



Construction of Proposed Composite Bulkhead at Deal Lake



New Jersey Dept. of Environmental Protection
Office of Engineering & Construction
Bureau of Coastal Engineering
Benjamin Keiser, Manager

Village of Loch Arbour
Monmouth County, New Jersey
Betty McBain, President, Board of Trustees



New Jersey's Shore Protection Program



State of New Jersey

Chris Christie, Governor

Kim Guadagno, Lt. Governor

Dept. of Environmental Protection

Bob Martin, 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 -

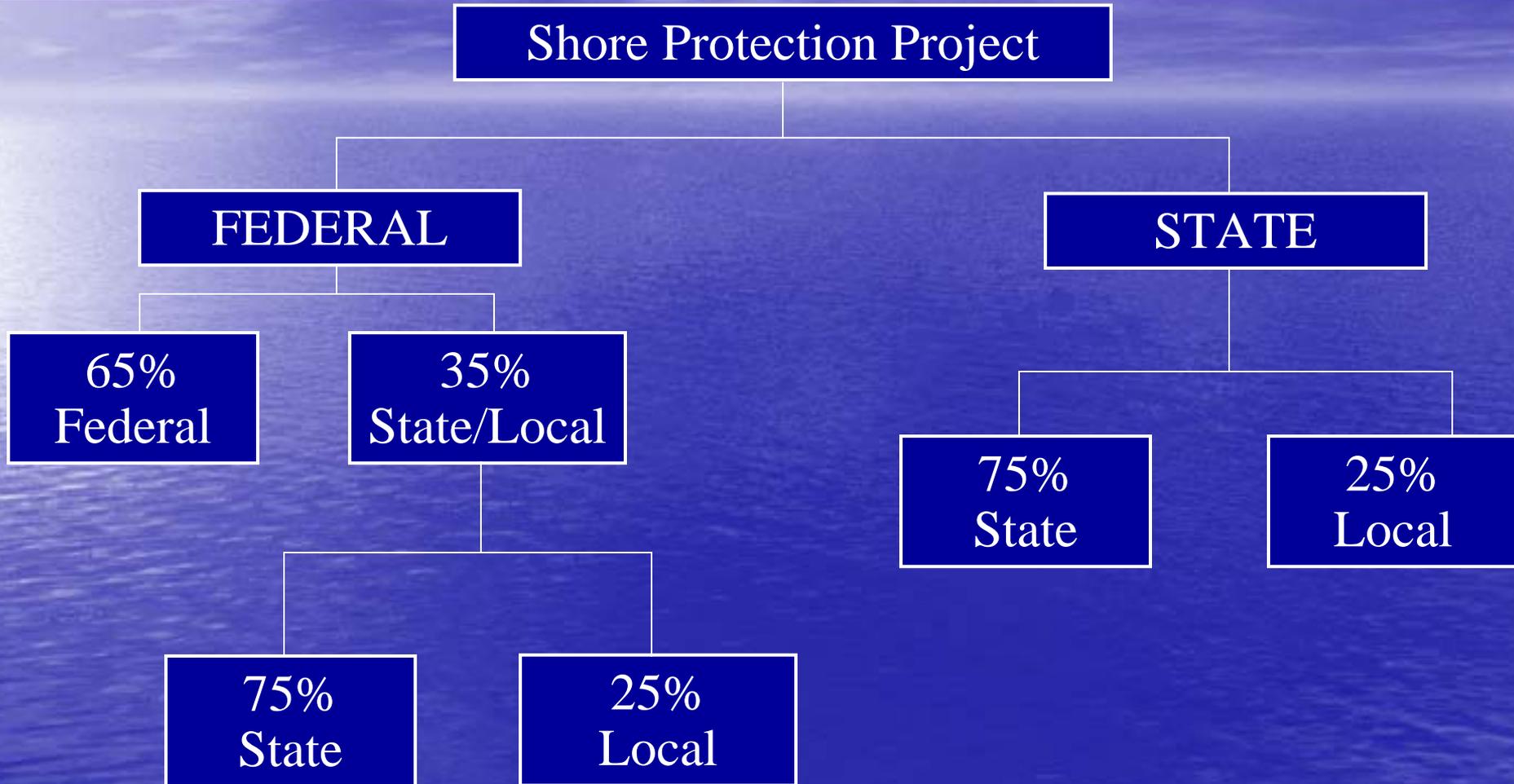
- Stevens Institute of Technology
- Richard Stockton College of New Jersey
- Division of Fish and Wildlife
- New Jersey Geological Survey



New Jersey Dept. Environmental Protection
Bureau of Coastal Engineering

Shore Protection Program

Shore Protection Construction – Cost Share Structure





Deal Lake Bulkhead – East Section

Village of Loch Arbour, NJ



Bureau of Coastal Engineering
New Jersey Dept. of Environmental Protection
Office of Engineering & Construction



Deal Lake Bulkhead – West Section

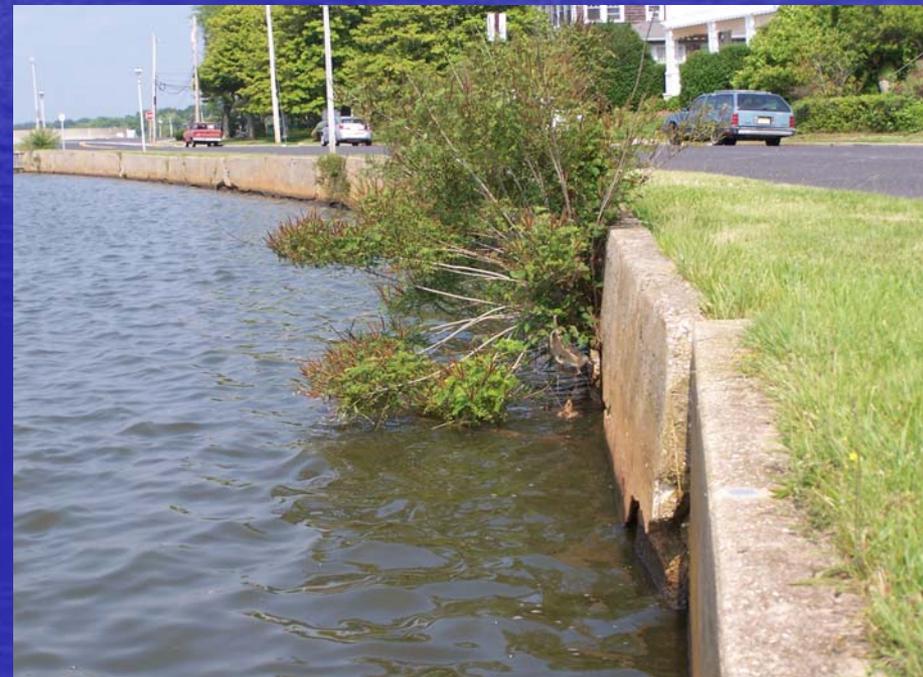
Village of Loch Arbour, NJ



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Office of Engineering & Construction



Problem Areas – East Section





Problem Area – West Section





Existing Conditions East Section





Existing Conditions West Section





Required Permits



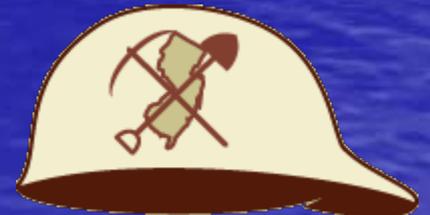
- **State**
 - CAFRA
 - Waterfront Development
 - Water Quality Certificate
- **Federal**
 - Individual Permit
- **Timing Restriction**
 - March 1st – June 30th
 - No In-water Work Permitted



Contractor



- **Green Construction, Inc.**
 - Headquarters in South River, NJ
 - Since 1980
 - Owner – Joe Abreu





Financial

- **Total Project Cost: \$ 1,342,738.88**
- **75/25 Cost Share**
 - 75% State = \$ 1,007,054.16
 - 25% Municipality = \$ 335,684.72



Project Specifics



- **Composite Sheet Pile Bulkhead**
 - 2,090 L.F.
 - EverComp 26.1 Sheet Pile - 20' Long
- **Existing Concrete Wall Removal**
- **Site Restoration – Topsoil & Hydroseed**
- **Concrete Curb Replacement**
- **Street Light & Conduit Replacement**



Project Specifics Con't.



- **Contract Timeframe – 120 days**
 - September 15th – Received Bids
 - November 15th – Tentative Notice to Proceed
 - March 15th – Tentative Construction Completion
- **Must maintain a clean and safe work site**
- **Must abide by all Federal, State, and Local regulations**



What To Expect



- **Minimal Traffic Flow**
 - Detoured Route Along Work Area
- **Reduced Lighting Along Roadway**
- **Onsite State Inspection**



What To Expect Con't.



- Sheet Driving and Excavation Equipment



New Jersey Department of Environmental Protection *Shore Protection Program*



www.nj.gov/dep/shoreprotection