

Rockaway's History of Coastal Projects

- State & City Projects constructed 1927 – 1975
 - Over 12 Million CY of sand placed
 - Several hundred groins built, stone and wood
- Joint Corps, State, City Project 1975 - 2012
 - Approximately 19 Million CY of sand placed
 - Terminal groin constructed (1979)



Before and After Initial Construction 1975

Corps Project (Authorized in 1965)

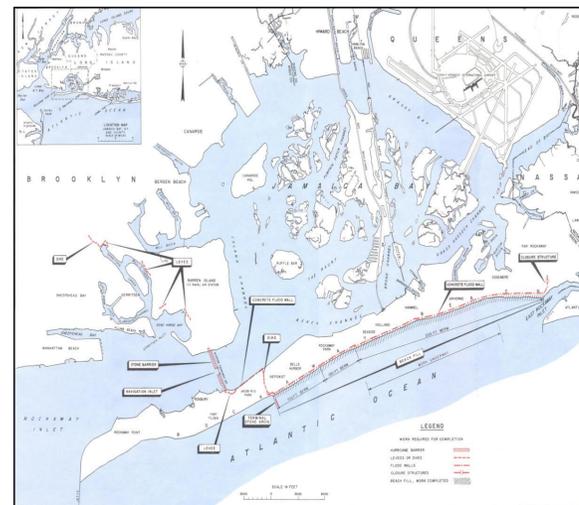
Beach Erosion Control and Hurricane Protection Project

Beach Erosion Control Features:

- Beach Berm at +10 ft MSL, up to 200 ft wide, length - 6 miles
- 5 M CY of sand placed for initial construction
- Renourished for a period of 10 years, each of 1M CY

Hurricane Protection Features:

- Hurricane Barrier w/ Navigation gate across Rockaway Inlet
- Floodwall at +18 ft MSL, for 7.7 miles along Rockaway



Authorized Project

Corps Construction

1974 Corps authorized separate construction of “beach erosion control” portion plus 10-years of renourishment

Constructed in 1975-1977

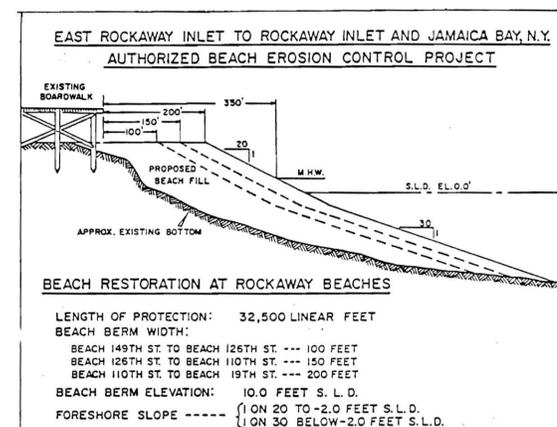
Terminal groin added at Beach 149th Street in 1979

Project Renourished through 1987

“Hurricane Protection Features” were de-authorized by Congress

In 1993, approved to extend renourishment

Renourishment undertaken in 1996, 2000, 2004



Constructed Project Cross-Section

Post-Sandy Projects

The Corps has worked with partners in New York City and New York State to build a robust coastal storm risk management project along the Atlantic Coast of Rockaway

- **3.5 million cubic yards of sand placed**
- More than 6 miles of beach widened and elevated
- City-funded betterment incorporated to elevate berm to provide additional risk reduction
- City's ongoing dune grass planting efforts will strengthen project further
- **More coastal storm risk management than has ever existed in Rockaway**



Crews pumping sand both widened and elevated the existing beach, greatly reducing coastal storm risks