



US Army Corps
of Engineers
New York District



Problem Identification

Physical Setting:

- Continuous strip of a low-lying flat land mass
- Existing low beach berms with intermittent dunes provide minimal barrier to reduce overtopping and inundation

Storms have caused:

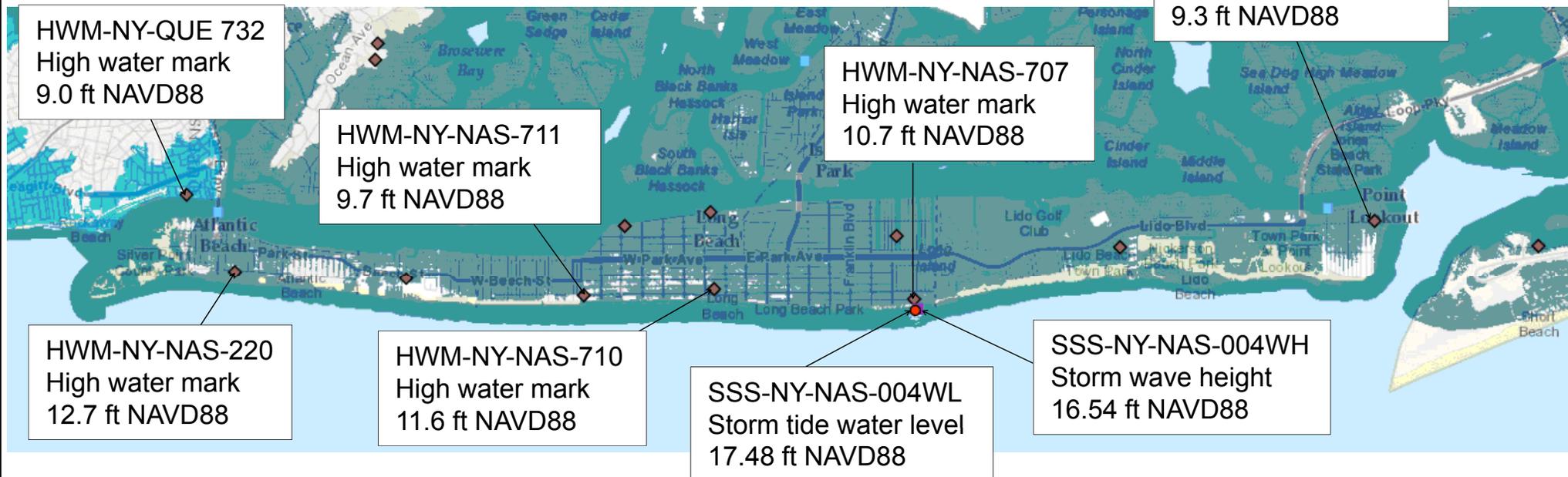
- Reduction in beach height/width
- Accelerated deterioration of constructed stone groins
- Most severe erosion at the eastern end
- Decreased risk management capability of the beach
- Increased storm damage vulnerability of communities

Deterioration of existing coastal storm risk management structures:

- Groins severely battered by storms
- No repair/maintenance since 1950's (initial construction date)

Hurricane Sandy Effects:

- Dune and beach erosion
- ~294,000 cy of sand lost from beach
- Overwash
- Long Beach Island subjected to wave attack and inundated by storm surge
- Flooding from both ocean and bay to the point where the ocean met the bay
- Extensive damage from inundation to residential and commercial structures



Note: Hurricane Sandy USGS Peak Elevations, High Water Marks and FEMA modeled surge extent (blue area)