

Long Island: Coastal Zone Policies

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The Coasts of Long Island



Coastal Zone Management

- To ensure people's appropriate use and protection of the state's coast and waterways.
- Includes:
 - Fresh and salt water wetlands.
 - Fresh and salt water beach environments.
 - Salt water tidal ecological zones.
- NYS coastal resources website is www.nyswaterfronts.com

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QUESTION of the Day

Reacting to sea level rise.

Should we?

How should we?

What happens if we don't?

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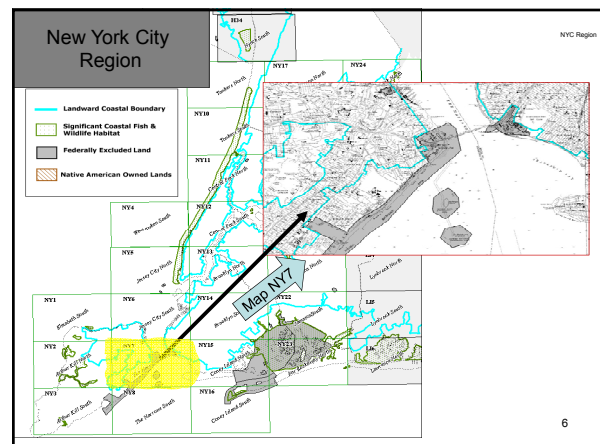
NYS Coastal Atlas

The NYS Coastal Atlas divides NYS into four geographic areas. Long Island is covered by the New York City and Long Island coastal regions.

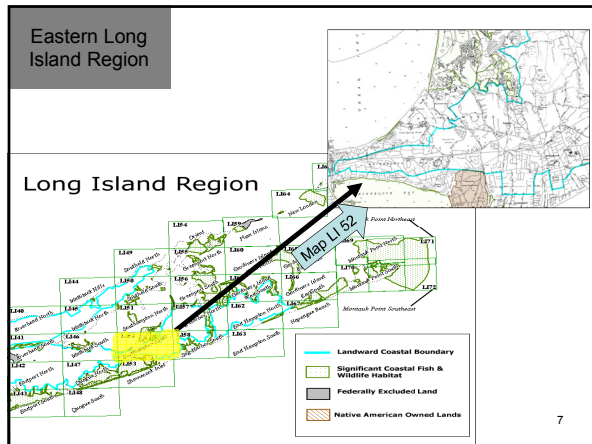


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http://www.nyswaterfronts.com/maps_regions.asp



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NYS Coastal Policies

The NYS Division of Coastal Resources divides the waterfront into four groups for the management of the coastal zone.

1. **Natural Waterfront**
2. **Working Waterfront**
3. **Developed Waterfront**
4. **Public Waterfront**

GOAL: "The articulation of coastal policies to create and maintain clean, accessible and prosperous areas for present and future generations."

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Natural Waterfront

- Areas where the shoreline has not be hardened.
- Has a rich diversity of resources that support economic productivity.
- Areas that are a source of scenic beauty.
- Areas that provide recreational enjoyment.



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Working Waterfront



Ports and harbors with water-dependent uses.

- Areas that support businesses which require a water location to function (includes tourism) or harvest living or mineral resources from these waters.
- Agricultural uses that are influenced by the beneficial effects of a water body on climate.

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Developed Waterfront

- Areas with an altered coastline and man-made structures that have a history of waterfront use. These include:
 - industrial areas
 - commercial areas
 - recreational areas
 - traditional harbors
 - residential areas



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Public Waterfront

- Areas that offer a significant recreational resource including
 - parks
 - beaches
 - historic sites
 - any public access point



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Longshore Sand Movement

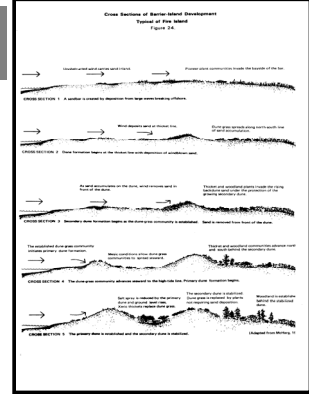


Sand moves in both directions along the shore, but generally more sand moves to the west than to the east resulting in a net westerly transport. There is considerable uncertainty in the values shown here due to variability in the rates of movement at different times and places and difficulties associated with trying to measure the amount of sand moving along the coast. SOURCE: Long Island Dynamics South Shore, September, 2007.

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Creation of a Barrier Island

1. Sand bar is created by waves.
2. Dune formation begins as wind blows sand inland, piling it above high tide.
3. Secondary dune develops behind primary dune. Woody plants invade.
4. Dune grass anchors dunes collecting more sand.
5. Primary dune is established. Dunes grow in height. Vegetation sequence advances.



Source: National Park Service Report, 1977

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Beach Erosion



Aftermath of winter 1991 coastal storms at West Hampton Dunes.

Source: N. Coch, Queens College-CUNY

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Breach at West Hampton Dunes

The breach of the barrier island at West Hampton Dunes in December 1992.

Source: NOAA



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West Hampton Dunes Video

Incredible Journey: The Story of West Hampton Dunes is a video documentary of the effort by a group of Long Island residents to reclaim their waterfront property in the aftermath of bad official decision-making and in the face of official opposition to restoration and redevelopment.

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Resources

- http://longislandsoundstudy.net/wp-content/uploads/2010/02/1_LivingTreasures_Intro_Lo_Res.pdf - 6 page slide show
- www.nyswaterfronts.com
- http://www.nyswaterfronts.com/maps_regions.asp
- <http://longislandsoundstudy.net/> - Long Island Sound Study
- <http://www.dec.ny.gov/energy/45202.html> - Sea Level Rise Task Force
- <http://www.nyswaterfronts.com/index.asp> - view short videos from the hot links on this web page.

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