Coastal Resilience, Long Island, USA

Coastal Resilience Project:
The purpose of the Coastal Resilience project is to provide communities with easy access to information to assist in coastal planning, zoning, acquisition, and other management decisions regarding resources at risk from sea level rise and coastal hazards. One of the principal products of the project is a spatially explicit tool that provides forecasts of inundation on the south shore of Long Island under different sea level rise scenarios. The aim of this web mapping tool is to provide communities with easy access to information for their planning, zoning, acquisition and permitting decisions.

Category: Ecological

General Description:
This dataset shows potential marsh impediments within 50 feet of existing marsh. Impediments are defined as hardened shorelines, roads, or slopes greater than 15 degrees.

Source:
1. 1974 wetland inventory dataset with 1995 update for Shinnecock Bay area: NY DEC
2. 2006 Suffolk Co. LiDAR dataset: Suffolk County, NY
3. 2008 Transportation dataset: NY DOT
4. 2008 Hardened shoreline dataset: TNC-Long Island via Chris Clapp

Caveats and limitations:
This dataset is intended to be used to illustrate potential marsh migration impediments adjacent to existing marshes (within 50ft. of marshes). Although this dataset was generated from the best available county-wide data, marsh-specific high-resolution land use data would more accurately capture potential impediments. Accordingly, this dataset should be viewed as a general indicator of potential migration impediments and a marsh-specific analysis should be used to precisely capture impediments to marsh migration.

Process:

- *Slope impediments* – extracted slopes >= 15 degrees and within 50 ft. of existing marshes from slope map (slope map generated from LiDAR dataset). Converted impeding slopes from raster to vector line datasets.
- *Road impediments* – extracted roads within 50 ft. of existing marshes
- *Hardened shoreline impediments* – extracted hardened shorelines within 50 ft. of marshes

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