

Coastal Change Education in NY's Hudson River Estuary Region

Understanding how our coastlines change over time informs sound stewardship. In 2011 New York Sea Grant and the Cornell University Institute for Resource Information Sciences provided geospatial training for more than 100 K-12 and community youth educators.

Professional development partners in this effort included Cornell Cooperative Extension NYC (New York City) educators, community youth mentors and member teachers of the New York State Geographic Alliance.

The year's work built on the prior trainings the project partners conducted in the Mid-Hudson Region and New York metropolitan area.

Using cutting edge publically-accessible internet resources as well as current and historic aerial photographs and printed maps, the project partners enabled program participants to virtually travel "up and away" to explore features of local New York coastlines.

The shoreline study sites used for training were selected based on publicly accessible and audience relevant shoreline areas or parks with restoration projects considered or underway.



Historic aerial photos, such as this one of the Hudson River at Central Park, helped educators "see" geospatially. Photo: USDA



NYSG Hudson Estuary Specialist Nordica Holochuck helps Youth Mentors NYC 2011 participants "explore" NY coastlines using printed maps. Photo: C. Malone

Program participants compared maps from the turn of the century and aerial photos from the 1950s to modern topographic maps and recent photos illustrating changes in the landscape over time. Each replicable set of site materials the project partners developed tells a unique story about the urban and suburban estuaries, of the growth of the coastal communities over time, and the impacts of this growth on habitats.

The project materials include an overview of NYC estuarine waterways, including the Hudson Estuary, the physical setting, environmental challenges, and existing programs working to protect and promote responsible stewardship of the region.

This partnership project was a featured poster presentation entitled "A Day in the Classroom: 100 Years of Change" at the 2011 Land Grant/ Sea Grant National Water conference in Washington D.C.