Use of Models to Assess Climate Change Impacts on Water Resources and Management in the Hudson River Valley

October 16, 2007
Bradfield Hall
Cornell University
Co-sponsored by:
New York State Water Resources Institute
Cornell Climate Impacts Initiative
Hudson River Estuary Program

Agenda

10:30 - 10:45	Welcome and Introductions
10:45 - 11:00	**Art DeGaetano**- review on use of climate data in modeling impacts of climate change
11:00 - 11:30	Discussion
11:30 – 11:45	**Todd Walter**- review of issues of storm water basin design criteria
11:45 – 12:15	Discussion on evaluating/revising stormwater basin design criteria based on projected increases in storm frequency and intensity
12:15 – 1:00	Discussion regarding modeling how sediment loading may impact natural systems and human uses in the mainstem of the Hudson and New York Harbor under projected climate scenarios
1:00 – 1:15	**Phil Liu**- review of storm surge modeling
1:15 – 1:30	**Jery Stedinger**- delineating floodplains and predicting flooding
1:30 – 2:15	Discussion of modeling impacts of storm surge and large rainfall events to create predictive floodplain maps to determine high risk areas
2:15 – 3:00	Discussion on modeling the potential for vegetated shallows and tidal wetlands to migrate or accrete in response to climate change
3:00 – 3:30	Next steps. Discuss the best course of action to develop a cost effective methodology for watershed and inundation modeling that can be replicated in other parts of the state.

Participants

Ann Davis - Marist College (Economist)
Scott Cuppett - Hudson River Estuary Program (Watershed Program)
Barbara Kendall - Hudson River Estuary Program (Stormwater Program)
David Braun - The Nature Conservancy (Research Scientist)
Stuart Findlay - Institute for Ecosystem Studies (Aquatic Biologist)
John Ladd - Hudson River National Estuarine Research Reserve (Geologist, Benthic & shallow water mapping)
Betsy Blair - Hudson River National Estuarine Research Reserve (Director)
Kristin Marcell - Hudson River Estuary Program (Climate Program)
Ricardo Lopez Torrijos - DEC Div. of Water, Floodplain Mapping Unit
Arvind Goswami - DEC Div. of Water, GIS Floodplain Mapping
Bill Nechamen - DEC Div. of Water, Floodplain Mapping Unit
Lois New - NYS Climate Change Office

Cornell University:
Art deGaetano-Earth and Atmospheric Sciences, (applied climatology)
Dan Wilks- Earth and Atmospheric Sciences, (weather generators, downscaling)
Todd Walter- Biological and Environmental Engineering, (ecohydrology, sediment transport)
Phil Liu - Civil and Environmental Engineering, (storm surge modeling)
Rebecca Schneider - Natural Resources (wetlands and sediment transport)
Jery Stedinger - Civil and Environmental Engineering (hydrologist, hydraulics, risk assessment)
Susan Riha - Earth and Atmospheric Sciences (ecohydrology, land use impacts)
Mark Bain- Natural Resources (aquatic/systems ecologist)
Mary Jane Porter - Water Resources Institute (education and outreach)
Andrew McDonald – Water Resources Institute (soil and water management)