

River Habitats & Shorelines

June, 2008

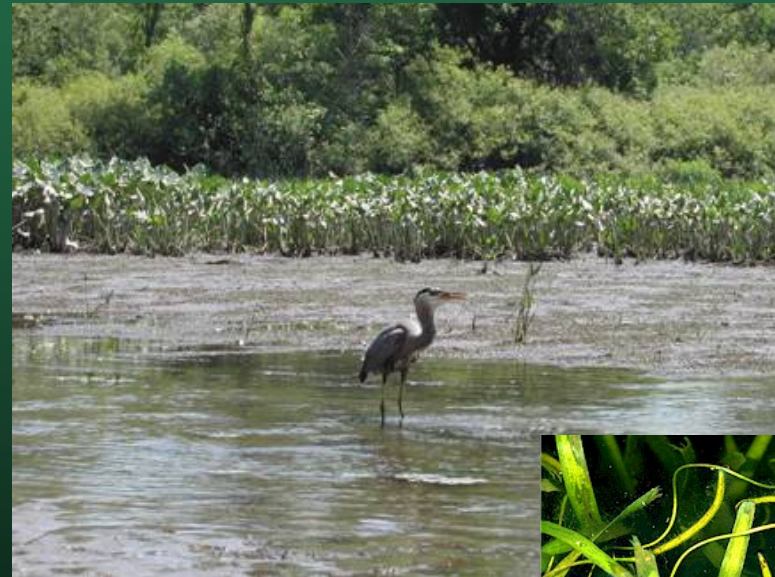


Why do we care?

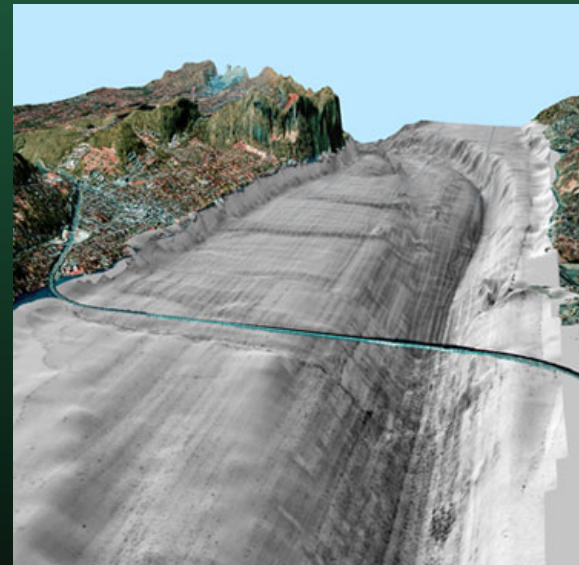


Wetlands, Shallows and Shorelines Provide Important “Ecosystem Services”

- Vital habitat
- Oxygen enrichment
- Sediment & nutrient removal
- Flood water storage



So Do Deeper Waters ...



Hudson River Action Plan Goal 2: River Habitats and Shoreline

“Conserve, protect and enhance critical river and shoreline habitats so that life cycles of key species are supported for human enjoyment and to sustain a healthy ecosystem.”



Critical Problems We Face

- Climate change, especially sea level rise
- Habitat fragmentation & loss from development and shoreline hardening
- Invasive species



Conservation Approach for Habitat and River Shorelines

- Map habitats & communities
- Characterize ecosystem services
- Monitor change
- Understand human impacts & other risks
- Promote effective conservation



Current/Upcoming Work: Habitat Mapping, Characterization, and Monitoring

- Re-mapping of SAV (submerged aquatic vegetation) and tidal wetlands with 2007 photos
- Cary Institute tidal marsh function study
- Benthic mapping of shallows
- Shoreline functions literature review and field study



Current/Upcoming Work: Habitat Restoration

- Oyster restoration feasibility study
- Target Ecosystem Characteristics project
- Eel passage
- Phragmites management at 2 sites



Current/Upcoming Work: Climate Change Adaptation

- Hudson Valley Climate Change Network
- Rising Waters Project
- Topographic mapping, flood mapping, and storm surge prediction
- Land acquisition needs assessment
- HR Shoreline Adaptation Project



HR Shoreline Adaptation Project

- 3 elements:
 - Ecosystem services
 - Cost assessment
 - Stakeholder identification & targeted outreach
- Social science research & tools
 - Joint fact finding
 - Diverse stakeholders and partners



Monitoring Effectiveness

- Track progress on targets and projects; annual updates to committee
- Measure 10 performance measures



Thank you!

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