

**Hudson River Sustainable Shorelines  
Advisory Committee – Meeting 1  
9:30am-Noon, June 23, 2010**

*Meeting Summary*

**Advisory Committee Members Present:** Kristen Cady-Sawyer (NYS OPRHP Environmental Management Bureau), Mark Castiglione (Hudson River Greenway), Emma Cattafi (Amtrak Environmental Health and Safety), Alexander Ciesluk (NYSDEC – Permits), Bonnie Devine (NYS DOS), Frances Dunwell (NYSDEC HRNERR), Robert Elliot (OurHudson.org), Drew Fixell (Village of Tarrytown), Rick Gilbert (McLaren Engineering), Mark Lowery (NYSDEC – Office of Climate Change), Dawn McReynolds (NYSDEC), Doug Melnick (City of Albany), Barney Molloy (Historic Hudson River Towns), Werner Mueller (HDR), Fred Nuffer (State Emergency Management Office), Doug Schroeder (MetroNorth Railroad), Michael Shaugnessy (Ulster Savings Bank), Tracey Tomajer (NYSDEC), Larry Wilson (NYSDEC).

**Project Team Members Present:** Betsy Blair (NYSDEC – HRNERR), Ona Ferguson (Consensus Building Institute), Patrick Field (Consensus Building Institute), Stuart Findley (Cary Institute of Ecosystem Studies), Emilie Hauser (NYSDEC – HRNERR), Nordica Holochuck (New York Sea Grant), Greg Lampman (NYSERDA), Kristin Marcell (NYSDEC – Hudson River Estuary Program), Daniel Miller (NYSDEC – Hudson River Estuary Program and HRNERR), Jon Miller (Stevens Institute Department of Civil, Environmental, and Ocean Engineering), Barry Pendergrass (NYS DOS Office of Coastal, Local and Community Sustainability), George Schuler (The Nature Conservancy), Sacha Spector (Scenic Hudson), David Strayer (Cary Institute of Ecosystem Studies).

**Welcome and Introductions**

Betsy Blair, Principal Investigator on the Hudson River Sustainable Shorelines project, welcomed everyone to the first Sustainable Shorelines Advisory Committee meeting, noting that the primary objectives for the day were to introduce Advisory Committee members to the Sustainable Shorelines Project's research agenda, timeline, and outreach activities; to gather feedback on the products that have been developed to date; and to hear participant advice on the project direction and products. Fran Dunwell introduced the Hudson River Estuary Program and state goals and objectives, emphasizing the ongoing need for partnerships to achieve success. The facilitation team reviewed the agenda for the day.

Participants introduced themselves and articulated those aspects of the Hudson that are most important to them including: the interface between water and land for people and other species, the ability to adapt well to sea level rise, protecting infrastructure (including transportation and public spaces), wildlife habitat, economic uses of the river, the beauty of the Hudson, safe and public access to the river and protection of the shoreline.

## **Project Overview: Why Hudson River Shorelines Matter, the Project, and the Role of the Advisory Group**

Betsy Blair described the Hudson River Sustainable Shorelines project. The Hudson River shoreline provides key functions including siting or protection of important human water dependent infrastructure (e.g., wastewater treatment plants), public recreation access and ecological infrastructure such as physical barriers and key habitat.

The goals of this multi-year project include involving, informing and influencing key decision-makers and clarifying tradeoffs among different shoreline choices made by landowners. The scope of the project is from the Tappan Zee Bridge to the Troy Dam, including 300 miles of shoreline. Researchers are looking at climate change projections for sea level rise and potential impacts on the shorelines such as erosion and inundation and options for responding. The four project objectives are to identify tradeoffs in ecosystems services among various man-made and natural shoreline types, to look at tradeoffs in performance of shoreline treatments, to evaluate short and long-term costs of shoreline choices and to provide useful science-based information and tools to decision-makers. The NYS Climate Smart Communities Program will be one venue for sharing results.

The Advisory Committee is made up of people with a wide range of backgrounds and expertise (see participant list in Appendix). This project has two other standing groups: a Coordinating Team that meets regularly to manage the overall project and a Project Team that meets a few times a year consisting of the technical researchers, representatives of related efforts and the Coordinating Team.

In response to Betsy's presentation, participants asked for a clearer statement of project mission, vision, goals and objectives and measurable results sought. They would like the project to have a clear explanatory tag line under the overall project title. They want to know succinctly what the project is trying to accomplish, for example a certain percentage of a certain kind of shoreline, or preserving current mix or ensuring a different mix for sustainability. What would we want to see in 50 years, and how will we know when it is enough? What set of actions are we asking stakeholders to take and when will the project achieve its goals? In reply, Project Team members said the goal is to promote informed choices about engineered shoreline structures in order to sustain biological diversity as we revitalize human communities and protect vital infrastructure. The project seeks to develop new information to meet multiple goals, from protecting existing shorelines to investigating new designs as landowners invest in shorelines that provide greater diversity of function and sustainability. One participant suggested that the big goal is to help people avoid economic and ecological disaster in coming decades along the Hudson River Estuary.

### **Participant Guidance on the Project**

Participants helped the Project Team by reflecting back their own understanding of the project, including:

- Creating a national model to influence public and governmental policies on sustainable shorelines.

- Gathering information on the economics and values and risks of different types of shorelines.
- Gathering quantitative natural resource data in a proactive way about key issues that municipalities will face in the future.
- Communicating scientific results in a timely way to those who might be influenced (landowners, municipal decision-makers, facilities and construction people) so that people can take appropriate and necessary action.
- Providing quantitative natural resource and climate change data so it can be used in local communities to create climate change adaptation plans.
- Creating ecologically, economically and physically realistic and grounded tools for protecting human and natural capital in the Hudson River Valley.

People said that those components of the project they expect to be especially useful include: the research on key topics in advance of crises that require that information, real information that can be communicated clearly, identification of simple choices for municipal leaders to choose among as they are often limited financially and in terms of technical or other expertise, data that can help municipal leaders convince others that climate change needs to be a factor in long-range planning, and social marketing to promote transformation. Participants also noted that this project is an opportunity to help landowners do the right thing and reduce conflicts with permitting agencies while improving the shoreline. They suggested that there is value in working regionally on this topic, thinking about the Hudson Valley as a whole.

Other comments and suggestions from Advisory Committee members on the Sustainable Shoreline projects:

- It would be helpful to have project leaders describe what an ideal shoreline decision-making process or outcome would look like, to make clear what this project is promoting. This could use models, cases, visual images and stories about how waterfront areas would look and what services they would provide. The way this project is described should connect to peoples' values.
- Consider the temporal aspects of climate change adaptation. Are there certain shorelines that need to be hardened or relaxed at different times over the next 80 years? This is a balancing act at a regional scale, not just a local one.
- Also consider the temporal aspects of the message. Some short-term messages that work with long-term objectives might be important for local officials who have limited time in office. Focus less on climate change and more on methodologies for ensuring a natural habitat-friendly shoreline that also provides some stabilization structures.
- Currently, mayors, town councils and other municipal officials are not able to know what crises are looming, what their options are to address those issues, and what is fiscally and ecologically measurable. This project can help provide some of that information, thereby helping local officials think long-term.
- Are there still shoreline implications of this project without sea level rise? Could you start some messaging about the need to appropriately develop shorelines for economic and ecological health, without focusing on climate change, so as not to discourage people who doubt climate change? Perhaps this could include talking

about resource values (if you want to keep fishing, we all need variation in our shorelines).

- It would be useful to have financial modeling of the different shoreline management options to help landowners consider costs and benefits. This should be a risk-based analysis of the implications for human infrastructure that will help decision-makers decide where to best spend their limited resources.
- The goal should be to reach a tipping point for people to change attitudes and understanding in a profound way about what can and should be done along the shorelines. Objectives should include both changing state policy and regulations and influencing local decisions. You can't do any of this without constituent support and understanding.
- In some cases, railroads own a significant percentage of a municipality's shoreline, which means they may be responsible for bearing the costs of protecting the shoreline for the whole community.
- Framing this work positively is important: protect critical facilities! Create habitat! Describe how designing good shorelines will get new benefits.

### **Project Business**

The Advisory Committee would like to meet several times a year, so the next meeting will likely be in the fall. The Committee would like updates on products in draft form and the opportunity to indicate interest and give feedback at key moments, possibly via email or conference call/webinar.

For more information on this project, contact Betsy Blair, Principal Investigator, at 845-889-4745 X 113, [bablair@gw.dec.state.ny.us](mailto:bablair@gw.dec.state.ny.us).

## Appendix: Members of Advisory Committee

Kristen	Cady-Sawyer	NYS OPRHP Environmental Management Bureau
Mark	Castiglione	Hudson River Greenway
Emma	Cattafi	Amtrak Environmental Health & Safety
Alexander	Ciesluk	NYSDEC - Permits
Bonnie	Devine	NYS Department of State
Dennis	Doyle	Ulster County Planning Board
Frances	Dunwell	NYSDEC Hudson River Estuary Program
Robert	Elliott	ourHudson.org
Drew	Fixell	Village of Tarrytown
Rick	Gilbert	McLaren Engineering
Bill	Goetz	CSX
Megan	Jadrosich	FEMA Region II Mitigation Division
Mark	Lowery	NYSDEC Office of Climate Change
Louis	Marquet	LeylandAlliance LLC
Dawn	McReynolds	NYSDEC
Doug	Melnick	City of Albany
Barney	Molloy	Historic Hudson River Towns
Werner	Mueller	HDR
William	Nechamen	NYSDEC Flood Plain Management
Lois	New	NYSDEC Office of Climate Change
Fred	Nuffer	State Emergency Management Office
Doug	Schroeder	Metro North Railroad
Mike	Shaughnessy	Ulster Savings Bank
Tracey	Tomajer	NYSDEC
Larry	Wilson	NYSDEC