

Water Resources & the Regional Economy

Breakout Session Summaries Conclusions & Actions Summaries

Part IV

Breakout Session Summaries

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Part IV

Break Out Session 1

Paying for water, sewer and green infrastructure: How can we get creative?

Challenge Statement

Hudson Valley communities face more than \$2.3 billion in investment needs for wastewater infrastructure improvements over the next 20 years, and much more if drinking water infrastructure is considered. The figure for New York City is even larger. Much of this cost will be to upgrade aging pipes and facilities that are not adequate to meet today's standards and needs, in most cases because they are closing in on or have already exceeded their design life. What state and federal funding sources can we tap other than the NYS Environmental Protection Fund and the State Revolving Loan program? Are there other funding mechanisms and alternative approaches to ensure the most efficient use of resources and bring other financing options to bear? What savings might we see if municipalities adopt tax incentives for water conservation and adopt green infrastructure techniques?

Co-chairs

Sandi Allen, NYS Environmental Facilities Corporation (Breakout Facilitator)

Dennis Doyle, Ulster County Planning Department

Ron Hicks, Rockland Economic Development Corporation

Sandy Mathes, Greene Business Alliance

Note taker: Rich Schiafo

Breakout Summary

- Limited funding allows the NYS Environmental Facilities Corporation to fund just 5% of the drinking water infrastructure proposals it receives.
- There are economic incentives for green infrastructure and energy efficiency because these practices reduce costs.
- There are a variety of Industrial Development Authority models for supporting infrastructure and infrastructure improvement, including (a) lower interest rates in return for selected actions like green infrastructure, and (b) benefit assessment fees.
- Reducing water consumption would create more capacity in wastewater plants.
- It's important to present a unified voice across many different interests when trying to promote infrastructure.

The Estuary Program could foster regional discussion and collect data on infrastructure needs and approaches.

Break Out Session 2

Adopting green infrastructure strategies: how can we innovate?

Challenge Statement

“Gray infrastructure” uses pipes and facilities to convey and treat drinking water, wastewater, and stormwater. “Green infrastructure” (GI) includes a wide array of practices at multiple scales to capture and slow stormwater. In a watershed, GI is the use of natural landscape features, such as forests and wetlands, to increase groundwater recharge. In a neighborhood, GI is the use of practices such as trees, green roofs, permeable pavement, and cisterns to reduce runoff. Buffalo, Syracuse, New York City, Philadelphia, Chicago and other communities across the country are expanding the use of these techniques to increase recharge, reduce the amount of wastewater treated, and provide other benefits, such as protection of habitat and scenery, urban greening, reduced heat island effects, and lower energy costs. What GI strategies could be used in Hudson Valley cities? Which GI techniques are most important for towns and rural areas? What additional benefits might communities get if they promote and adopt GI techniques?

Co-chairs

Simon Gruber, Hudson Valley Regional Council (Breakout Facilitator)

Paul Gallay, Riverkeeper

Shoreh Karimpour, NYS DEC Division of Water

Dennis Lucas, Town of Hunter

Suzanna Randall, NYS Environmental Facilities Corporation

Breakout Summary

- We have models for green infrastructure at the city scale throughout the United States. The Hudson Valley has the potential to be a regional model, including practices in cities, towns, villages, and the overall landscape. This could be used as a marketing strategy for economic development.
- Designers and builders are discovering that green infrastructure is a viable and often less costly approach compared with traditional stormwater management.
- We need:
 - A new, more integrative approach to water, energy, and solid waste management;
 - Specifications and standards that go beyond a one-size fits all approach;
 - Greater use of green infrastructure by state and county agencies working on the ground, as well as municipalities;
 - Tools and resources to better estimate the costs and benefits of green infrastructure; and
 - A better definition of green infrastructure that includes both large and small scale practices.

The Estuary Program could be a provider and clearinghouse for green infrastructure tools, codes, specifications, and resources. It could share lessons learned from previous green infrastructure projects. It could also convene a process for integrating efforts across sectors, including planning for economic development.

Break Out Session 3

Managing our water assets regionally: how can we organize ourselves to better conserve our water, provide for sustainable growth and achieve efficiencies?

Water flows and moves without regard to political boundaries. Often the quality and volume of water in one community is influenced by growth patterns, land uses, and water uses in upstream communities, which means that municipalities are not able to ensure clean drinking water and manage flooding on their own. In addition, people who plan for water uses are often not meaningfully working together to solve these cross-boundary water challenges. Decisions made within and outside the Hudson Valley affect us too. How can we manage water resources at the county, watershed, regional, and larger levels? What can be done to foster inter-municipal collaborations?

Co-chairs:

Dave Church, Orange County Planning Department, HREMAC Member (Breakout Facilitator)

Gina D'Agrosa, Westchester County Water Agency and HREMAC Member

Dennis Doyle, Ulster County Planning Department

Todd Erling, Hudson Valley Agri-Business Development Council

Willie Janeway, NYS DEC/Region 3

George Schuler, The Nature Conservancy and HREMAC Member

Note taker: Steve Stanne

Breakout Summary

- Managing water resources is difficult because of home rule and a lack of coordination with state and regional agencies on regional decision-making.
- It is important to get science-based information to decision-makers and expand education to local citizens.
- Watershed-based partnerships could be better organized to support working together at a larger scale. Counties could take on more of a leadership role, especially for multi-county or sub-regional approaches to water management.
- Although the New York State Water Resources Council hasn't been active, it could play a role in translating New York State policy down to the watershed, county, or municipal levels.

The Estuary Program could foster more networking to help stakeholders share approaches, experiences, and information.

Break Out Session 4

Aligning land use with water and economic goals: how will the new NYS Smart Growth Infrastructure Act affect our approaches?

Given the many interests and demands at play, how can we guide water and land-use decisions toward smart-growth solutions that yield the greatest economic, social and environmental benefits? What does the new state smart growth law mean for the Hudson Valley? How can clean water investments in cities, towns and villages spur revitalization of our 21st century infrastructure, enhance quality of life, connect citizens to water resources, and create good jobs, including in the construction, engineering, and agricultural fields while ensuring that land use patterns do not damage our water quantity and quality?

Co-chairs

Susan Jaffe, NYS Empire State Development (Breakout Facilitator)

Paul Beyer, NYS Department of State

Andy Bicking, Scenic Hudson

Lance Matteson, Ulster County Development Corporation

Anne Reynolds, NYS DEC

Note taker: Emilie Hauser

Breakout Summary

- The NYS Smart Growth Infrastructure Act requires all infrastructure agencies to review projects and assign public funding with a smart-growth lens.
- Home rule is a challenge, as it does not facilitate or mandate multi-jurisdictional planning that would fast-track smart growth.
- Funding shortages have made stakeholders more reactive rather than proactive to develop solutions that align smart growth with water protection and economic development.
- There is concern that the new law will create more processes and costs for permit, grant, and other project applicants.
- The new act is an opportunity for many sectors to come together to prevent sprawl.

- Strategic land acquisition plans are in place, so it is possible to build on work that has already been done.

The Estuary Program could continue outreach and technical guidance to municipalities.

Break Out Session 5

Water access and waterfront revitalization as an economic strategy: how can we improve?

How can decision-makers, businesses, conservation advocates, and landowners work together in a non-confrontational manner to foster waterfront development and open space protection that bolsters local economies, serves public needs, and minimizes conflicts between waterfront users? How can investments in water transportation, river access, and river recreation create opportunities for small businesses? How can we ensure that our waterfront assets are resilient to sea level rise and flooding from powerful storms?

Co-chairs

Barney Molloy, Historic Hudson River Towns and HREMAC Member (Breakout Facilitator)

Jonathan Drapkin, Hudson Valley Pattern for Progress

Bob Elliott, NYS Hudson River Valley Greenway Board

Mark Castiglione, NYS Hudson River Valley Greenway and HREMAC *ex-officio*

Jeff Anzevino, Scenic Hudson

Kristin Marcell, NYS DEC Hudson River Estuary Program

Note taker: Suzanne Beyeler

Breakout Summary

- There are opportunities to add new marinas and docks along already-developed shorelines at various locations along there river.
- The density of urban areas can support smart growth.
- Housing along the Hudson's shores should be in scale with their surroundings.
- Year-round opportunities for water access may be difficult due to seasons and the river freezing during the winter.
- Access to the Hudson shoreline can be difficult, depending on communities and constituencies. Railroad tracks, high ways and land uses all make river access difficult.
- Climate change and associated flooding and sea-level rise will affect waterfront development.

The Estuary Program could help developers consider climate change and sea-level rise projections, and provide education on shoreline management. It could promote model projects to show others how waterfront revitalization can be done through integration and planning.

Break Out Session 6

Green cities, clear waters: how do we work together to create synergies for jobs, housing and water?

We have learned that community involvement, education and organization needs to be

established before successful green infrastructure (GI) and watershed solutions can begin in the cities. Municipal planning, community development, and education are all key factors in applying sustainable watershed principles. What groups and government agencies need to be brought in to launch GI techniques and watershed initiatives? What are some of the benefits beyond stormwater management that might make these efforts more enticing to partners?

Co-chairs

Jeff Rumpf, Clearwater and HREMAC Member (Breakout Facilitator)

Alma Rodriguez, Workforce Development Institute

Judy Anderson, Consultant and HREMAC Member

Note taker: Rebecca Houser

Breakout Summary

- Green infrastructure can be cheaper and more effective than gray infrastructure, but it has been poorly branded. There is a need for clearer definitions of green infrastructure and its benefits.
- Green infrastructure requires a paradigm shift towards a more inclusive, community-based approach. Including the larger community is both a challenge and an opportunity, especially to build a sense of individual participation.
- Investing in green infrastructure up above ground, rather than underground in pipes, represents a significant change.
- The many side benefits of green infrastructure will improve depressed or challenged urban areas that need the most support.
- There is also the potential to create green jobs through green infrastructure practices.
- Promoting clean, livable cities that people want to live in will result in less pressure to go into urban sprawl.

The Estuary Program could serve as a clearinghouse for green infrastructure information, connect state and federal models to local needs, and create a model for community-based water management that makes the Hudson Valley a national leader.

Breakout Session Wrap-up

How can we speak with one voice for the region?

Willie Janeway, Region 3 Director, NYDEC

- It has been a long day, so I will keep this short. What I have heard today is that we have many shared goals and a need to work together.
- It is clear that we will be more successful if we all speak with one voice.
- Today is the beginning of an important regional dialogue that we must foster in the coming months and years
- Thank you for participating!

Part V – Conclusions & Actions Summaries

Opportunity & Challenge

The Hudson Valley's abundant water supply is one of the region's most important current and future resources for residents, businesses, and nature. Yet most Hudson Valley residents and decision-makers rarely think about the economic opportunities and challenges of this vital resource, nor of the challenges in ensuring its protection, strategic use, and long-term quality.

The Dialogue

In December, 2010, the NYS Dept. of Environmental Conservation's Hudson River Estuary Program brought together more than 300 business leaders, government officials, economic planners, and water advocates to create a shared understanding of the challenges and opportunities of water management in the Hudson Valley.

Key Conclusions and Next Steps

- Conserving and Managing our Water Resources Should be an Integral Component of a Regional Economic Development Strategy: The Hudson Valley should lead the way in bolstering existing and fostering creative new mechanisms for aligning economic and environmental agendas. "Water ready sites" should be identified where plentiful, clean water exists as part of regional economic development plans. Conservation of ecosystems that provide clean abundant water is cost effective and must be part of the strategy as well.
- Failing Water and Sewer Infrastructure Needs to be Upgraded: Repairing our worn out water and sewer infrastructure is key to the revitalization of our community centers. Although the cost is high, targeted, strategic investments could be identified to make great progress even in these difficult economic times, and there are creative financing ideas that deserve to be explored. In the process, jobs will be created and quality of life improved. Synergies with transportation infrastructure improvements will avoid the problem of tearing up recently-paved streets to install water and sewer pipes.
- Regional Water Supply Planning is Needed: Water is a regional resource, yet no single agency or entity, local or regional, is accountable for sustaining our water resources for future growth or ecosystem needs. An existing regional entity should be empowered to address obvious shortfalls in regional water availability and supply planning and management, taking into account both economic and environmental needs. Failure to address both perspectives can lead to gridlock and inaction.
- Investments in Urban Streams and River Shorelines Can Stimulate New Investment and Tourism and Improve Quality of Life: Urban areas, including many underserved "environmental justice" communities, can be improved through programs designed to provide river access, such as fishing piers, docks and marinas, and through restoration of tributary streams that flow through the neighborhoods of many river cities. "Daylighting" buried waterways and creating streamside parks can spur economic growth and increase the quality of life for urban citizens. Investments in urban areas will help avoid sprawling development in scenic, rural landscapes and farms which are economic assets to be protected.
- IDAs are Developing New Models for Aligning Economic and Environmental Goals: There are a variety of Industrial Development Agency (IDA) models for supporting clean water, including (a) lower interest rates in return for selected best practices for water management, (b) benefit assessment fees, (c) tax incentives, and (d) investments in river access and open

space protection. These models are being piloted in some counties already. IDAs are a potential resource for creatively financing projects and infrastructure: they can structure PILOTs (payments in lieu of taxes) that act like Tax Incentive Financing; they are a key tool for counties and communities; and they can complement incentives/financing decisions at regional or state level.

- “Green Infrastructure” Offers a Cost Effective Tool for Addressing Clean Water Needs: Green infrastructure typically refers to practices which capture rain water in small gardens on streets and roofs to reduce storm water flooding and sewer overflows, thereby resulting in cleaner water ways and lower local costs for emergency response and traffic management. Designers and builders are discovering that cities are excellent places to launch green infrastructure initiatives. In some instances, green infrastructure can be cheaper and can be more effective than traditional methods of storm water control; it can be one new tool in the toolbox of water management. New York City has proposed a green infrastructure plan that will transform the city and reduce sewer overflows by 12 billion gallons per day. State and county agencies can learn from this example and integrate green infrastructure into their on-the-ground projects. Philadelphia has already adopted these practices with great success on a neighborhood scale. Pilot green infrastructure projects can showcase the effectiveness of the different tools, financial savings delivered, and additional benefits received. Green infrastructure has a different meaning in rural and suburban areas, where it is equally important to focus on larger scale natural features, such as aquifer recharge areas, forests, and wetlands which provide clean water at a low cost.
- Climate Change will have Implications for Water Supplies: Climate change and associated flooding and sea-level rise will affect waterfront development and the floodplains of communities on tributary streams of the Hudson. Communities need technical assistance to plan for the changes which are already occurring, and they need maps that show where change will occur. No community has the resources to plan for this by itself. In the Hudson Valley, a regional approach would be cost-effective, accessible, and address the unique challenges of the tidal Hudson and its tributaries.
- Inter-municipal Watershed-Based Management is Needed: Managing water resources is difficult because it can be influenced by actions in multiple municipalities. Because of this, water management is often uncoordinated and ineffective. Counties offer regional approaches but they could do more to advance regional and watershed-based management, which focus on all of the impacts on water within the drainage area of each stream. Existing inter-municipal watershed councils should be bolstered, and new mechanisms for fostering inter-municipal and regional thinking about water management should be developed.
- Smart Growth: There is a consensus for smart growth principles in general: avoid subsidizing sprawl; emphasize more compact development; protect environmental resources and encourage sustainable development practices; encourage use and improvement of existing infrastructure; reduce dependence on automobiles. However, there is division over how to implement smart growth in specific cases. There is also a concern that the new Smart Growth Infrastructure Act will create regulatory overlap and delays. Although the principles of smart growth planning are important, how they are carried out will be crucial. We need an expeditious process. Support for meaningful scale of development is needed if we are to be serious about the growth side of smart growth. Most projects these days involve 20-200 jobs. Examples of successful smart growth consensus in our region include the King’s Highway Corridor in Saugerties and the Greene Business Park in Coxsackie. Both include deliberate business development and natural resource conservation developed through a stakeholder process. Start-up is slow, but the end result is effective.