



**SPRING  
2017**

## **Green Infrastructure Recommendations for the Capital Region**



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# Foreword

The New York League of Conservation Voters Education Fund is a 501(c)(3) nonprofit organization dedicated to educating New Yorkers on environmental issues and engaging them in civic life.

In February 2017, the NYLCV Education Fund convened a public policy forum on the topic of green infrastructure, or the use of nature-based systems to improve drinking source water quality and combat combined sewer overflows (CSOs), in New York's Capital Region. This event is part of a series of forums around the state on the subject of green infrastructure, including events in New York City and Buffalo.

The NYLCV Education Fund commissioned a background paper in 2016 to examine local and regional green infrastructure projects and explore opportunities for the expanded use of green infrastructure in the Capital Region. The subsequent policy forum featured a discussion between environmental advocates, local officials, and experts on the ways the region can maximize the power of green infrastructure to address CSOs, encourage sustainable development, and ensure source water protection throughout the region.

We would like to acknowledge the organizations and officials whose invaluable feedback and contributions over the last three months helped us shape our recommendations: the Capital District Regional Planning Commission, the Cornell University Water Resources Institute, the City of Albany Department of Water, the U.S. EPA, New York State Environmental Facilities Corporation, Riverkeeper, Siena College and the Nature Conservancy. Thank you also to Roux Associates, Nixon Peabody and Albany Law School, the generous sponsors of our program.

A copy of our recommendations will be sent to elected officials, agency heads and other administrators throughout the region. We are grateful for their comments and look forward to working with all interested parties to make New York's Capital Region greener, healthier and more resilient for all.

Signed,  
Marcia Bystryn, President  
New York League of Conservation Voters Education Fund

# Introduction

Industrial development, contamination in rivers, lakes, and aquifers and CSOs that discharge untreated sewage continue to threaten the health of the Capital Region's water supplies. Green infrastructure installations can reduce pressure on traditional "gray" infrastructure and help control CSOs during periods of heavy rain. They can also serve as an important tool to protect and restore drinking source water outside of the Capital Region's urban areas. For both of these reasons, funding and implementing more green infrastructure could have lasting environmental, economic and public health benefits for the region.

In order to harness the full value of green infrastructure in the Capital Region, regional leaders must first protect the freshwater and tidal wetlands, flood plains, stream and river corridors and forested watersheds that constitute existing green infrastructure. Municipal leaders should also pursue partnerships and dedicate funding to create projects in each of the six Albany Pool Communities, which include the cities of Albany, Troy, Rensselaer, Cohoes and Watervliet, and the Village of Green Island. Policymakers and advocates should also work to better quantify the overlapping economic, social and ecological co-benefits of green infrastructure for both urban and rural communities.

Finally, in addition to improving information and data about green infrastructure, there is a significant ongoing need for education about the use of nature-based systems and the purposes they can serve in maintaining and improving water quality. This should include providing access to existing educational resources and developing new resources and guidelines to accelerate the incorporation of green infrastructure into contemporary planning and policymaking. Local leaders in the Capital Region have taken a number of steps toward maintaining and even increasing green infrastructure in the region, but NYLCVEF believes that more can be done. The following recommendations outline opportunities to expand green infrastructure in the Capital Region and statewide.

## Preserve Existing Green Infrastructure

Preservation of existing natural areas such as wetlands, flood plains, stream and river corridors and forested watershed regions should be of the utmost importance in discussions about green infrastructure. These areas provide flood protection, reduce the impact of storms, alleviate CSOs, and broadly improve water quality. The state should update its wetlands maps and consider amending regulations to allow for improved maintenance of these freshwater resources.

- Prioritize the preservation of existing green infrastructure in the Capital Region.
- Update the New York State Regulatory Freshwater Wetlands maps to reflect changing boundaries and modern scientific assessments of the Capital Region and its freshwater resources.

## Focus on Source Water: Approach Green Infrastructure as a Regional and Watershed-Scale Issue

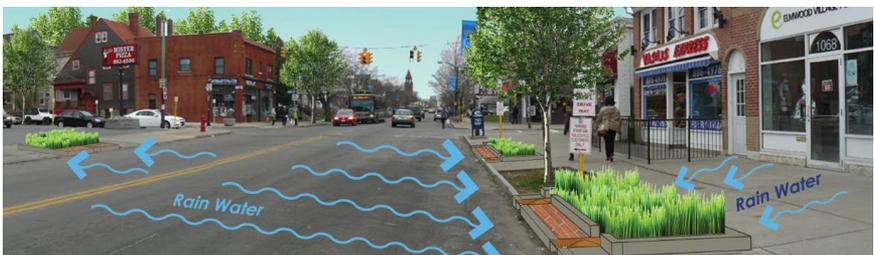
Although significant research has been done to evaluate the importance of green infrastructure in the Albany Pool Communities, additional needs for stormwater management and source water protection exist throughout the Capital Region. Local, regional and federal authorities would all benefit from greater collaboration on green infrastructure across the Capital Region and throughout local subwatersheds.

- Preserve existing green infrastructure, including wetlands, floodplains, and stream and river corridors to ensure continued flood protection and water quality improvement.
- Municipal and county governments should create regional partnerships and pursue grant funding at the watershed and subwatershed levels.
- Waterway remediation plans should consider all water management and water quality goals and obligations including CERCLA (Superfund), Clean Water Act, consent orders and resiliency.

## Identify and Integrate Best Practices

New York State and local agencies should provide local residents and interested parties access to project databases and repositories, technical guidelines on green infrastructure installation best practices and information about stormwater event reductions and water quality improvements. Access to better information and additional dissemination of best practices will increase effectiveness of future green infrastructure practices in the region.

- Implement green infrastructure projects on waterfront edges as natural barriers in flood-prone inland areas to mitigate rain-induced flooding, increase resiliency, and improve public and overall ecosystem health.
- Fully evaluate opportunities for green infrastructure retrofits on both public and private property for each CSO plan.
- Develop and grow a green infrastructure maintenance workforce of municipal, private and nonprofit / social enterprise workers.
- Identify and leverage funding for green infrastructure projects through a coordinated effort on this issue led by municipal and county officials.
- Explore private property retrofit incentive programs such as the Stormwater Management Incentives Program and Greened Acre Retrofit Program in Philadelphia, the Rainwise Program in Seattle and the Riversmart Homes program in Washington, D.C. as well as Pay-for-Performance and Pay-for-Success contract models such as the Environmental Impact Bond issued by D.C. Water.
- Form partnerships with private firms, nonprofits and universities for research, development and piloting of new and innovative green approaches and for improved collection of data on direct and co-benefits that justifies further use of green infrastructure.



## Increase Opportunities for Community Engagement with Green Infrastructure

Local governments should increase public awareness of the value of green infrastructure and opportunities for its inclusion in mainstream land use development planning. Ultimately, this would improve water quality compliance and move toward green infrastructure best practices in lower-income or less-engaged communities.

- Explore programs to increase availability of public data on green infrastructure.
- Promote opportunities for project funding and education from local, state and federal sources, including documents from the EPA such as the Green Infrastructure Opportunities and Green Infrastructure Modeling Toolkit.
- Facilitate opportunities for information transfer and sharing between local governments and community-based organizations.
- Ensure easy access to information among citizens through online databases and project repositories of Best Management Practices maintained for the entire watershed, technical guidelines on GI installation at private lot levels and access to real time information on stormwater quality and event reductions achieved at mini watershed levels.
- Disseminate information about best management practices for management and maintenance of community-based green infrastructure projects.



NYLCVEF held a public policy forum on green infrastructure in the Capital Region in February, 2017.

## Develop Additional Revenue Sources for Green Infrastructure and its Maintenance

Green infrastructure projects implemented by various levels of government in the Capital Region have benefitted from state funding, public-private partnerships and local philanthropic funding. In order to increase funding for green infrastructure in the longer term, municipal and county governments must look to develop additional sources of funding that push projects to develop multi-tier benefits and produce benefits towards diverse goals.

- Pursue additional funding opportunities for projects through the Clean Water State Revolving Funds (CWSRF) administered by the NYS Environmental Facilities Corporation (EFC) under the Green Innovation Grant Program (GIGP).
- Executive offices at the municipal and county levels should lead a coordinated effort between agencies to drive collaboration, set interagency stormwater targets and report back on the milestones across agencies.
- Reexamine stormwater fee-based programs to encourage property owners to convert a certain percentage of their property to green infrastructure.
- Identify targeted communities in the Capital Region that are eligible for state resiliency funding and can benefit from green infrastructure as part of their long-term resiliency planning efforts.
- Prioritize effective private partners to pilot green infrastructure in housing, industrial areas, parking lots and roofs.
- Explore private-public partnership for green infrastructure maintenance, including leveraging job training programs across the region to build opportunities for operations and maintenance trainees and workers to transition to higher skilled, full-time occupations beyond stewardship and “green jobs” training programs.
- Incorporate recommendations from the Capital District Regional Planning Commission’s Stormwater Retention Credit Banking Feasibility Study into future green infrastructure planning efforts.



The New York League of Conservation Voters Education Fund educates, engages, and empowers New Yorkers to be effective advocates on behalf of the environment -- from clean energy and funding for parks, to solid waste and green buildings.

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