

Locally Driven Policies to Help Improve Water Quality in the Raritan River Basin

Edward J. Bloustein School – Public Policy Practicum, Spring 2017

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Practicum Goal: To research and identify existing policies locally and regionally that promote, support, or challenge fishable, swimmable, or drinkable water supplies in the Raritan watershed. The Practicum will examine and identify innovative county and municipal policies from across the country that can be applied locally and regionally in New Jersey.

Methodology: Literature review of federal, state, and Raritan-specific reports. 20+ interviews with nonprofit advocates, public officials within and outside NJ, and private firms in natural resource management. Attending SRRI 2017 Raritan Integrated Water Quality Assessment Stakeholder Meeting and similar presentations.

Overview

Costs of Poor Watershed Health

- Phosphorus
- Fecal Coliform
- Sedimentation

Policy Challenges

- Enforcement
- Integration
- Knowledge gaps
- Resistance to change

Laws and Regulations

- NJ Water Pollution Control Act
- Freshwater Wetlands Protection Act
- Water Supply Management Act
- Flood Hazard Area Control Act
- Water Quality Management Planning
- Stormwater Management Rules

Higher Feasibility Recommendations

Recommendation: Developer Incentives to Use Green Infrastructure

Who has done it: Chicago, IL., Sarasota County, FL.

About:

- Multiple interviewees discussed concept of incentives to encourage green infrastructure
- A developer incentive program could leverage permitting time or waivers for certain building designs in exchange for the developer using pervious pavement, green roofs, rain gardens, and other methods to control stormwater on site
- In both Chicago, IL and Sarasota County, FL developer incentives such as expedited permitting times and reduced building permit fees have helped increase the use of GI techniques

Recommendation: Operating Permits for Septic System Owners

Who has done it: Chatham, Byram, Sparta, Hopatcong, West Milford, Jefferson, Montville, Mt. Olive, Montgomery, and Frankford, NJ

About:

- Permits require owners to provide proof of pump-outs every few years to maintain the permit. Regular pump-outs by a licensed service provider will result in fewer instances of malfunctioning systems and water contamination.
- Ordinances can mandate only new septic systems abide by the rule to increase political feasibility.
- Chatham Township requires both new and existing system owners to renew their permit every 3 years or face a \$250 fine.

Recommendation: Local ordinance to expand riparian buffer requirements

Who has done it: Cranbury, Washington Township, Mount Olive Township, Tewksbury Township, Lebanon Borough, High Bridge, Clinton Town, and Clinton Township

About:

- Buffers create zones around streams in which development is prohibited
- Protecting these areas serves to improve water quality and protect aquatic ecosystems
- These towns have effectively created ordinances that exceed NJ standards
- Many have simply voluntarily adopted the standards of the Highlands Council

Recommendation: Local stormwater management ordinances that are more stringent than state minimum standards.

Who has done it: Cranford, Princeton (proposed), Newark, NJ

About:

- All municipalities can adopt, implement, and enforce stormwater management ordinances that are more stringent than the state requires.
- **Cranford:** major development defined as creating at least 1,000 sq. ft. of impervious cover, rather than state trigger of 11,000 sq. ft.
- **Princeton:** If passed, ordinance will require on-site stormwater management for all developments with more than 400 sq. ft. of impervious surface
- **Newark:** requires 100% of stormwater runoff to be captured on-site for new developments and large redevelopments

Recommendation: Local ordinances requiring green infrastructure use

Who has done it: Princeton considering it

Why we recommend:

- Green infrastructure sustainably manages stormwater
- Developers and property owners will do the minimum for permit
- Requirement will increase green infrastructure use

Longer-Term Recommendations

Recommendation: Green Infrastructure continuing education requirements for professionals, mandatory water quality education for appointed and elected planning/zoning board members

Why We Recommend:

- Professionals simply may never have exposure to green infrastructure because they self-select other training topics to fulfill CEU requirements
- Planning/zoning board members have minimal training, but are in charge of granting waivers for stormwater management

Recommendation: Conduct a study reviewing municipal water quality ordinances and create a science-based ranking system for effectiveness

Why We Recommend:

- Provides science-based assessment of municipal policies
- Neutral information that helps communities see where they can improve

Recommendation: Stormwater Fee

Why We Recommend:

- Recommended by nearly all interviewees as essential to water quality policy
- County and local governments in New Jersey lack statutory authority to implement stormwater fees,
- Fees can help raise funding for stormwater and other infrastructure improvements/retrofits.

Case Studies

Cranbury, NJ:

- Riparian zones protect all Category One waters by a 300 ft. buffer and all other surface body waters by 150 ft.

Newark, NJ:

- A nonprofit, Newark DIG, has implemented 35 projects using GI practices and is bringing stakeholders throughout Newark together.
- A Stormwater Ordinance is in place that requires 100% of stormwater runoff from new land development (or significant redevelopment) to be captured on site.

Charles River, MA:

- Following a court-ordered cleanup, and the establishment of the Massachusetts Water Resources Authority, water quality has improved dramatically over the last three decades.
- Increased communication between municipalities facilitates the opportunity for collaboration and efficiency, through exposure to new ideas and demonstrated work.

Anacostia River, MD:

- Through the work of the Natural Resources Defense Council, this 9 mile river that runs through parts of Washington, D.C., has seen major improvements due to the encouragement of low impact development and a reduction of stormwater runoff.

James River, VA:

- The James River Association has provided vital education to residents and representatives on water quality issues. This has contributed to the development of an informed and vocal constituency.
- The Stormwater Local Assistance Fund is a tool that facilitates state and local grantmaking.
- Past successes in water quality improvements suggest that the most effective path forward is a strong partnership between the state and local governments, and active involvement of stakeholders.