MUNICIPAL ACTIONS to PROTECT and IMPROVE WATER QUALITY IN THE DELAWARE RIVER WATERSHED

DELAWARE VALLEY dvrpc REGIONAL PLANNING COMMISSION

ACTION PLAN TO IMPLEMENT RECOMMENDATIONS

EXPANDING EXISTING EFFORTS

Municipalities Lead by Example with Best Management Practices and Green Stormwater Infrastructure

This recommendation encourages municipalities to lead by example by implementing stormwater best management practices (BMPs) and green stormwater infrastructure (GSI) projects in highly visible locations in parks and other municipal-owned properties, supplemented with educational signage and outreach.

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Introduction

The purpose of this recommendation is to provide education, outreach, planning, and design to municipalities to improve local water quality and comply with Municipal Separate Storm Sewer System (MS4) and Total Maximum Daily Load (TMDL) requirements. Funding this project would enable nonprofits and consultants to work directly with municipalities in the Delaware River Watershed to reduce pollutants from development that degrade streams and rivers.

Nonprofits and consultants would provide technical assistance to municipal officials and their staff to better help them understand and respond to water quality requirements. Assistance would include information about GSI practices and other BMPs, which benefit not only local residents and waterways, but also downstream water quality and the Delaware Estuary as a whole.

In Pennsylvania, many municipalities must comply with MS4 requirements and are therefore managing stormwater running off from private and public lands. *Leading by example*—municipalities implementing best practices on their own properties—is an effective role modeling strategy that demonstrates compliance, shows water quality is a priority, and educates the general public, as well as developers and large property owners. In order to most effectively ask private property owners.

Several nonprofits and consultants, including the Brandywine Conservancy and Meliora Design, have helped municipalities identify cost-effective practices to improve water quality. For example, the Brandywine Conservancy has helped the Oxford Area School District in Chester County reforest riparian areas through a volunteer tree planting in East Nottingham Township. In addition, a rain garden was installed at Upper Oxford Township's municipal park.

Partners

This recommendation aims to educate municipalities and assist with planning and implementing stormwater BMPs and GSI. Outreach and education would target municipal officials, engineers, and staff. MS4 regulations

present a regulatory driver for stormwater management; therefore, the target audience for this recommendation is:

- municipalities subject to MS4 permit or TMDL requirements; and
- municipalities interested in implementing innovative stormwater management measures.

Ideally, GSI would be demonstrated in three different types of municipalities: older suburban, newer suburban, and denser boroughs. In addition to the municipalities, several other partners would need to be involved. Nonprofits and consultants would provide the technical assistance to municipalities to implement BMPs/GSI. The proposed work would be divided as follows:

- nonprofits: education and outreach to municipalities and the public;
- nonprofits and contractors: identify/prioritize locations for implementation;
- consultants/contractors: develop designs and plans for BMPs/GSI;
- consultants/contractors: construction of BMPs/GSI; and
- municipalities: partners throughout the process.

Phases

The likely phases of this project would be:

- Initial Planning and Prioritization;
- Design and Documentation of Demonstration Projects;
- Construction of Demonstration Projects; and
- Outreach and Education.

With proper funding, a collection of demonstration projects could take as little as three years. The educational signage and outreach is a vital component of the BMP and GSI projects. Many residents are only familiar with manicured lawns in parks; adding BMPs and GSI, without the proper educational signage and outreach, may raise concerns about the “unkempt” look of facilities like rain gardens, as well as concerns about ticks and other wildlife.

Anticipated Outcomes

It is important for municipal officials and their staff and communities to have first-hand experience with GSI practices. Local installation will provide a better understanding of construction and maintenance requirements, aesthetics, and performance of green infrastructure. This in turn will better inform municipal standards and requirements for GSI on private development and provide municipal officials with “something to point to” when development occurs in their community.

Anticipated Outcomes

A short-term outcome will be beautification of municipal lands.

Long-term outcomes include increased municipal compliance with the TMDL reductions and MS4 permitting requirements, improved water quality as evidenced by reduced pollution, and more municipal officials and general public who value water quality.

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