

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



ACTION PLAN TO IMPLEMENT RECOMMENDATIONS

INNOVATIVE NEW IDEAS

Create a Municipal Incentive Program that Encourages Property Owners

Create an incentive program at the municipal level that encourages property owners to reduce impervious surfaces and install low-impact development (LID)/green stormwater infrastructure (GSI) elements.

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Introduction

Municipalities can manage all of the stormwater that falls on their land and still not achieve their stormwater mitigation goals: privately owned land makes up a greater percentage of the total land area in virtually every community and thus has a greater influence on water quality. To address this imbalance, municipalities rely on some combination of incentives and penalties at their disposal to motivate landowners to manage their own stormwater.

An incentive program for managing stormwater, as a voluntary strategy that provides financial assistance to participating property owners, is a politically friendly and positive approach that should be easy for most municipalities to support. There are different “flavors” of incentive programs that have precedent in the Delaware River Basin and in the United States generally.

Municipalities can use these incentive programs separately or in combination to address their community’s individual circumstances and needs. For example, a municipality already running a stormwater fee program can use an incentive program to help property owners reduce their stormwater fees without losing momentum toward achieving its stormwater runoff objectives. The stormwater fee itself can help defray the costs of running the incentive program. A municipality facing rapid growth and development pressures can use incentives for developers to get them to incorporate green stormwater treatments into site plans. A municipality that wants to improve water quality in a single area (such as a flood-prone neighborhood or an impaired watershed) can use a grant incentive program that funds stormwater projects based on applicants’ locations.

Partners

Municipalities have the authority to run a stormwater incentive program, although not all municipalities may have the authority to provide funding directly to private landowners for projects. Municipalities without this authority may seek to partner with a nongovernmental entity who can disburse funds appropriately.

Because incentive programs are not common in municipalities within the Delaware River Watershed, this recommendation would also benefit from an outreach program. **Water quality advocates**, whether in the public or private sectors, have a role in communicating the benefits of stormwater incentive programs to municipal officials and staff, as well as to residents and local business owners.

Background

There are five main categories of stormwater incentives:

- Stormwater fee discounts: Municipalities reduce property owners' stormwater fees when they use LID or GSI strategies to reduce stormwater runoff rates and volumes on their property.
- Development incentives: Municipalities offer permitting benefits to developers who include LID/GSI in their site design. Benefits may include faster permitting, fewer stormwater requirements, or increases in floor-area ratios (i.e., the ability to add more floors to their building).
- Grants: Municipalities provide grants or matching grants to property owners to construct LID/GSI on their properties.
- Rebates and installation financing: Municipalities provide funding, tax credits, or reimbursements to property owners who install LID/GSI. Because this incentive can occur after construction, funds can be awarded based on performance of the project.
- Awards and recognition programs: Municipalities publicly promote exemplary LID/GSI projects that property owners have constructed (and/or designed), sometimes with a monetary award as well. This incentive was a separate recommendation in this project.

The U.S. Environmental Protection Agency developed reports about municipal stormwater incentives in [2009](#) and in [2014](#) that describe these strategies in greater detail and offer case studies in municipalities throughout the United States. Within the Delaware River Watershed, however, the incentives approach is still rare. The City of Philadelphia and West Chester Borough are two of the currently few municipalities in the region that run landowner incentive programs. An explanation of their programs follows.

City of Philadelphia

Through its Green City, Clean Waters program, the City of Philadelphia charges property owners a stormwater fee based on the property's impervious surface coverage. Nonresidential property owners can reduce their fee by participating in the [Stormwater Management Incentives Program](#), which is a combination of a **stormwater fee reduction and grant incentive**. This program provides financial assistance in the form of a grant for the construction of GSI that manages the first inch of stormwater runoff onsite. As described in the [grant manual](#), eligible projects include detention and retention basins, green roofs, porous paving, rain gardens, and other types of GSI.

The grant is competitive, and projects are awarded based on a variety of factors, including the total volume of stormwater managed onsite, the project's cost efficiency, integration with other projects, and public education benefits. Property owners must sign an operations and maintenance agreement with the Philadelphia Water Department when they receive the grant to ensure that the GSI will be maintained in the long term.

Philadelphia residents can also participate in the Rain Check Program, which is funded by the Philadelphia Water Department and run by the Pennsylvania Horticultural Society. Residents participate in an educational workshop and can get a **free rain barrel or cost reductions** in installing a downspout planter, rain garden, or porous paving.

Borough of West Chester

West Chester Borough runs a **stormwater fee discount** program alongside its "Stream Protection Fee" (stormwater fee) program. According to the borough's [policies and procedures manual](#), the goals of the

incentive program are to encourage private investment in best management practices and ensure that the borough's fee program is "equitable and fair" by giving property owners opportunities to reduce their fees.

Property owners may receive a reduction of up to 60 percent of their fees, in one of two forms: a one-time cash-back rebate only available to single-family residential properties, or a recurring fee reduction credit available for nonresidential properties and all types of residential properties. Properties with LID/GSI projects in one of five categories are eligible; sample projects within these five categories include rain gardens, constructed wetlands, vegetated swales, and tree canopy cover. West Chester gives further help to residents participating in this program by running a smaller **tree donation program**.

West Chester awards credits to property owners based on the number of square feet of impervious surface that the property owners manage using LID/GSI. Property owners apply to the borough's public works department, and if approved, receive the credit retroactively and applied to their bills for up to three years.

Anticipated Outcomes

By running an incentive program, municipalities can expand stormwater mitigation efforts beyond their own properties and into the community at large. Particularly through granting and rebate/installation programs, municipalities can target areas of greater need. By incentivizing private landowners to do the "heavy lifting" of installing and monitoring LID/GSI, such programs free municipalities to take on a smaller oversight role than that required for regulations.

Proposal

Municipalities develop their own incentive programs, which, as mentioned previously, they can tailor to local circumstances and needs. The best strategies for a municipality depend on the following factors:

- the authority that the municipality has with regard private landowners;
- availability of internal and external funding sources;
- capacity of municipal staff or a partner entity to develop and run the program;
- interest from potential key partners (e.g., elected officials, neighbors in target communities, developers, GSI designers/builders);
- local development pressures (both for determining target areas and development incentives);
- appropriate GSI treatments for addressing local water quality impairments; and
- priority properties/neighborhoods (e.g., first-come, first-served; priority neighborhoods with high levels of imperviousness; many small versus several large; lower-income communities).

Funding

Some municipalities may be able to pay for running the incentive program, or the incentives themselves, out of their annual budget. Most municipalities will need some outside assistance with initiating the program or successfully running it in the long term. State departments of education; county conservation districts; or agencies, foundations, or businesses with a local or regional focus could provide matching grants either to serve as (1) start-up funds for municipalities to plan and execute their incentive program, or (2) yearly grants for select municipalities to run their program annually (perhaps ones that have greater financial need or are in a target watershed).

In general, municipalities are likely to get a higher return on investment, in terms of money spent on water quality improvements, by targeting large property owners in neighborhoods with high impermeability that are

located in the municipality's most impaired watersheds. Municipalities can find this information in their Municipal Separate Storm Sewer System permit, or from the use of a stormwater modeling software.

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