# Encourage Greater Upstream/Downstream Municipal Collaboration

*Municipalities should look to collaborate with each other and technical assistance (TA) providers to achieve the greatest bang for the buck when implementing Pollutant Reduction Plans (PRPs), total maximum daily load plans, and installing best management practices (BMPs) to address nonpoint source pollution issues. To encourage higher levels of collaboration, state departments of environmental protection should allow collaboration among noncontiguous municipalities in an affected watershed to promote upstream source water protection.*

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## Introduction

As per the Federal Clean Water Act, municipalities that operate a municipal separate storm sewer system (MS4 municipalities) and that are located within a U.S. Census Bureau-defined urbanized area must comply with a basic set of regulations to manage stormwater runoff. These are organized around what are commonly referred to as the six minimum control measures, or MCMs. While each state organizes its program in slightly different ways, generally the six MCMs are as follows:

1) public education and outreach;
2) public participation and involvement;
3) illicit discharge detection and elimination;
4) stormwater runoff control at construction sites;
5) post-construction stormwater management at new development and redevelopment sites; and
6) pollution prevention and good housekeeping at facilities owned by, and with activities performed by, the permittee, such as public works facilities.

Notably, municipalities must manage stormwater at new construction sites, but the rules governing MS4 municipalities, which were first promulgated in 1999, do not directly require municipalities to address stormwater runoff from development existing *prior* to the establishment of the MS4 regulations. As a result, many of the Delaware River Basin's waterways in urban and suburban areas, a large number of which were developed prior to 1999, are impaired by stormwater runoff, particularly due to the discharge of nutrients and sediments.

## A New Mandate

To address this issue, some states, including Pennsylvania, require municipalities that discharge stormwater into impaired waterways to develop and implement plans to reduce the amount of pollutants discharged into those waterways, regardless of whether the runoff results from new or existing development. In Pennsylvania,

these plans are known as Pollutant Reduction Plans, or PRPs. Beginning in 2018 and extending for a period of five years, municipalities will be required to construct on-the-ground projects (referred to as BMPs), such as riparian buffers, rain gardens, or streambank restoration projects, to reduce the amount of nonpoint source pollutants, specifically sediments and nutrients, entering surface water bodies.

Although municipalities have generally been able to comply with the six MCMs using existing resources and within their own geographic territory, implementing the new pollution reduction rules on all existing development is a significant new undertaking. In addition, the siting of on-the-ground BMP projects to reduce pollutant loads may or may not make sense within the boundaries of a particular municipality. Accordingly, municipalities should look at opportunities to collaborate with neighboring towns to achieve the greatest bang for the buck when implementing BMPs.

### Pollutant Reduction Plans

Between 2018 and 2023, Pennsylvania MS4 municipalities discharging into impaired waters must achieve a 10 percent reduction in the amount of sediment they discharge over their current baseline. Municipalities are free to implement whatever BMPs they deem most effective within their own boundaries. However, achieving the required reductions can often be more cost effective if projects are implemented in neighboring or upstream municipalities within the same watershed. This is especially true in built-up municipalities, such as boroughs, where there may not be enough room to construct hundreds of acres of rain gardens, create or restore riparian buffers, or install some other type of BMP needed to trap and remove sediments from streams. In these built-up municipalities, acquiring the land to construct BMPs would likely be expensive and may even be impossible. Fortunately, in terms of watershed-wide water quality, the specific municipality in which sediment reductions are achieved does not matter.

Accordingly, the Pennsylvania Department of Environmental Protection (PADEP) encourages neighboring MS4 permittees to collaborate in the development and implementation of their PRPs and in the eventual operation and maintenance of any structural BMPs installed as part of such plans. Credit for the pollutant reductions afforded by the BMPs may be shared between the collaborating MS4s.

### Municipal Collaboration

Because of the potential advantages and increased flexibility of this approach, municipalities should pursue and implement multi-municipal or even county-wide PRPs. To do so, PADEP requires collaborating municipalities to have a written agreement to ensure proper roles and responsibilities. According to PADEP, all such agreements should include the following topics:

- Scope of the Agreement:
  - complete PRP implementation (or individual BMP implementation).
- Roles and Responsibilities:
  - how projects will be selected;
  - selection of engineering and other contracted services;
  - long-term operation and maintenance;
  - adaptive management of the PRP (or the individual BMPs) over the permit period; and
  - commitment to using the PRP (or to implementing the individual BMPs).
- Allocations of cost and pollutant reduction:
  - methodology for sharing the cost; and

  - methodology for distributing the pollutant reductions.
- Timeline for implementation:
  - schedule of milestones to complete and implement the plan (or the individual BMPs).

## Proposal

The general outline and requirements for municipal collaboration are straightforward in concept. However, many municipalities do not have the expertise and staff capacity to prepare all the materials and conduct the technical analyses required for municipal collaboration. Accordingly, a consortium on nonprofits, counties, and other TA providers should be established to help municipalities conceive, plan, and design multi-municipal PRPs together. This TA could be provided by the *Strike Force* proposed in a separate Action Plan, or by specific nonprofits with a focus on these issues.

Pennsylvania already has two excellent examples of collaborative approaches to address watershed-wide nonpoint source pollution from stormwater runoff, one led by a county and the other led by a consortium of nonprofit and academic institutions. For more information, visit the sites for the York County Stormwater Consortium and the Wissahickon Clean Water Partnership.

### Action for PADEP

According to PADEP guidelines, *neighboring* municipalities can work together on implementing PRPs and installing BMPs. While more than one municipality may collaborate, thus potentially covering a large geographic area, collaborating municipalities should have *contiguous* land areas according to PADEP. PADEP's encouragement of collaboration is positive, but the need to be contiguous limits the ability of a single municipality to collaborate with another noncontiguous municipality in an upstream (and likely less developed) portion of an affected watershed on source water protection projects.

**Municipal Collaboration: Case Study**

The municipalities of the Wissahickon Creek Watershed in southeastern Pennsylvania joined together to form the **Wissahickon Clean Water Partnership**, a coalition of towns and sewer authorities to address impaired streams. The partnership has been facilitated by TA provided by the Pennsylvania Environmental Council, Temple University Center for Sustainable Communities, and the Environmental Finance Center of University of Maryland.

By working together on a coordinated solution, the Wissahickon Clean Water Partnership aims to ensure that local interests are emphasized while helping municipalities, sewer authorities and taxpayers keep costs down in the long run. The ultimate goal of the partnership is to synthesize a Water Quality Improvement Plan to meet pollutant reduction requirements and to protect and improve the Wissahickon Creek for all to enjoy.

PADEP should revise its PRP guidance to explicitly allow collaboration among noncontiguous municipalities in the same affected watershed. This would further increase the flexibility of municipalities to pursue joint PRPs and could further enhance the ability of BMPs to achieve the greatest pollutant reductions while encouraging upstream source water protection. Agreements between the cooperating municipalities would still be required to ensure that each participating municipality receives commensurate credit for its role in reducing pollutants.

## Anticipated Outcomes

By facilitating increased collaboration through the provision of TA and by allowing increased collaboration across wider geographic areas, on-the-ground BMPs that achieve the greatest overall pollution reductions and

ancillary community benefits for a watershed will be planned, designed, built, and maintained in a much more efficient manner.

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