



Healthy Waters, Healthy Communities

How municipalities can reduce runoff pollution

Municipalities may be rural, urban, or suburban, but all municipalities are located in a watershed.



Pennsylvania's share of the Chesapeake Bay Watershed

- Spans almost half the state
- Is home to approximately 4 million Pennsylvanians
- Covers all or part of 43 counties
- Includes 1,000 boroughs, townships, and cities
- Includes about 33,000 farms
- Contains over 49,000 miles of rivers and streams
- Includes Susquehanna River Basin and Potomac River Basin

watershed: an area of land where all the water flows toward the lowest point, usually a stream, lake, or river. The watershed then eventually drains into larger bodies of water, such as the Chesapeake Bay and Lake Erie.

IMPAIRED: Over 15,000 Miles of Streams and Rivers

Agricultural, business, and residential development have changed Pennsylvania's landscape, replacing natural areas with hard surfaces such as compacted soil, parking lots, roads, and roofs. Rainfall that would naturally soak into the ground and be absorbed by tree and vegetation roots now "runs off" these hard surfaces. This stormwater runoff carries pollutants from these surfaces into streams, rivers, and lakes.

Everyone adds to the pollutant loads our waterways are carrying:

- nutrients (nitrogen and phosphorus) from manure and other crop fertilizers
- sediment (eroded dirt)
- vehicle fluids and other toxic contaminants
- lawn fertilizers and pesticides
- road salt
- viruses and bacteria from pet waste or faulty septic systems
- cigarette butts and other litter

LIGHTEN THE LOAD: 5 Ways Municipalities Can Reduce Runoff Pollution

1. Do a thorough analysis of your local stormwater runoff conditions to develop cost-effective projects that are successful in the long term in helping rain soak into the ground. There are many good sources of information online, such as:

- DEP Pennsylvania Stormwater Best Management Practices Manual
- Pennsylvania Environmental Council Stormwater Management Education



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- Pennsylvania Municipal Authorities Association Stormwater Webinar Series
- Chesapeake Bay Watershed Municipal Online Stormwater Training Center

2. Be proactive to find sources of funding for projects. A few examples:

- Pennsylvania Growing Greener Grants program
- Pennsylvania Department of Conservation and Natural Resources Community Parks and Recreation Grants program
- PENNVEST
- National Fish and Wildlife Federation

3. Collaborate with neighboring municipalities on plans and projects to find opportunities for more cost-effective solutions.

4. Contact your Chesapeake Bay Watershed Plan Countywide Action Team. These county leaders and neighbors can tell you:

- About potential funding and technical help for stormwater management projects;
- How your stormwater projects can count toward county water quality goals.

5. Go beyond newsletter notices to engage community residents. Offer volunteer projects, such as raingarden planting, adopt-a-storm-drain, stream bank tree planting, or others. Give residents a phone number to call to report oil sheens or foamy discharges.

A healthy watershed is a highly functioning natural system:

- Provides water for drinking, farming, business, and household use.
- Helps prevent loss of land from erosion.
- Makes soil healthier for better crop yield.
- Helps absorb carbon dioxide from the air.
- Offers super fishing, kayaking, boating, hiking, and more outdoor recreation.
- Reduces flooding and need for flood damage repair, as more soil is available to absorb rainfall.
- Keeps water bills in check by reducing treatment plant processing.
- Improves property value and local tax revenue, as people want to live near access to green space and healthy waters.

Green infrastructure: Benefits for municipalities

Stormwater management projects not only reduce runoff pollutants in local streams and rivers, but also help reduce flooding and raise property values and tax revenue, as more people want to live near access to green spaces and healthy waters.

Lightening the Load: Municipalities across the Watershed

Here are just a few ways that many Pennsylvania municipalities are developing Pollutant Reduction Plans and doing projects to reduce stormwater runoff pollution.

- Lemoyne, Cumberland County: Re-envisioned downtown with 13 raingardens.
- Jackson Township, York County: Building a new community park while re-naturalizing a stream, using DEP Growing Greener and DCNR Community Parks Grants.
- Lancaster, Lancaster County: Created Pennsylvania's first citywide green infrastructure plan.
- 32 municipalities in Luzerne County: Collaborating to reduce runoff pollutants—the Wyoming Valley Sanitary Authority Regional Stormwater Management Program

The Plan: Healthier Waters in Pennsylvania's Share of the Chesapeake Bay Watershed by 2025

Over 1,000 Pennsylvanians, along with DEP and the Departments of Agriculture and Conservation and Natural Resources, have developed a state plan to lower nutrient and sediment loads in streams and rivers in the watershed.

GOALS:

- Nitrogen load reduced by 34 million pounds/year
- Phosphorus load reduced by 0.765 million pounds/year
- Sediment load reduced by 531 million pounds/year

Community leaders and partners are working on each county's part of the state plan. Learn more about your Chesapeake Bay Watershed Plan Countywide Action Team and how you can help, too:

www.dep.pa.gov/chesapeakebay/phase3



Jackson Township Manager Bill Conn at restored section of Little Creek site of planned new park