



How residents can reduce runoff pollution

Some Pennsylvanians live in town, some Pennsylvanians live in the country, but all Pennsylvanians live 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 Frie.



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 Residents Can Reduce Runoff Pollution

- **1. Take a more natural approach to your yard.** Use less lawn fertilizer and plant a raingarden with native plants to reduce the amount of stormwater running off your property. For these tips and many others, check out: www.stormwaterguide.org/static/HomeownersGuide.pdf
- 2. If there's a stream on your property, plant trees and shrubs on the banks. Don't mow to the edge of the stream.

- 3. Never pour chemicals or other wastes into storm drains in the street. and river projects.
- **4. Contact community organizations to volunteer on local stream and river projects.** It's a great way to get outdoors and make a difference! Here are a few organizations to look online for, and there are many others.
 - Penn State Extension Master Watershed Stewards program
 - Audubon Society county chapters
 - Local watershed associations
 - Middle and Lower Susquehanna Riverkeeper Associations
 - Chesapeake Bay Foundation
 - Alliance for Chesapeake Bay
- **5.** Check in with your county, city, township, or borough office. Your stormwater runoff reduction successes may count toward countywide pollutant reduction goals, and you may be able to join neighbors in a storm drain, neighborhood rain garden, or other project.

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 you

Taking a more natural approach to your yard cuts maintenance costs. And think of the time you gain! Trees provide shade that keeps your home cooler in the summer. Keeping your local stream healthy helps keep your neighborhood property values healthy, too, as more people look to live near green spaces and healthy waters.

Lightening the Load: Tom Smith, York County

Tom turned his one-acre suburban yard into rain gardens and a vegetated basin so that stormwater soaks into the ground instead of running off the surface. The basin now pulls runoff from surrounding properties, too. Tom's saved \$4,000 in mowing costs over the years. The trees and shrubs keep his home cooler on hot days, and he likes the privacy and beauty they provide.

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 by531 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/ches apeakebay/phase3





Rain gardens in Tom Smith's yard in York County.