

Point Source and Non Point Source Pollution... *What's the Difference?*

Point Source Pollution is water pollution that typically comes from wastewater discharge pipes at factories, power plants and sewage treatment plants. Point Source Pollution is regulated by state and federal laws and agencies. Non Point Source Pollution (NPS) is water pollution that comes from many different sources—like roads, highways, sidewalks, parking lots, lawns, gardens, farm fields and leaking septic systems. NPS is triggered when rainwater washes road salts, vehicle fluids, fertilizer, herbicides, pesticides, manure, litter and soil off the land and into waterways. As surface runoff moves over land, it picks up and moves these pollutants into our streams, rivers, lakes and wetlands—and even into our reservoirs and groundwater drinking supplies. NPS is the biggest source of pollution to Lehigh Valley streams and rivers.

Because there are so many sources of NPS, it's difficult to regulate. Therefore, it's up to each of us to do our part to keep our water clean for our use, as well as for the plants and animals that also depend on water for their survival. Northampton County's drinking water, whether from private wells or municipal water supplies, comes from the rain that falls on our watersheds. What happens to this rainwater from the time it hits the ground to the time it's poured into a glass, is mostly up to each of us as individuals. We all contribute to Non Point Source Pollution in our daily lives. But there are ways we can make changes to reduce our impacts to our water resources, and minimize our contributions to Non Point Source Pollution.



To learn more about these and other watershed conservation practices, visit the Watershed Program page on the Northampton County Conservation District website at

www.northamptoncd.org

Check Out This Offer

Adopt a 30-day trial of green habits that help protect your drinking water. Select some habits from this list. You'll find that in addition to protecting your drinking water, they also save you time and money.

Inside your home

1. Avoid using your garbage disposal. It adds potentially damaging grease and solids to your plumbing and septic system. Instead, make or buy a compost bin to dispose of food scraps and let nature recycle it into soil for you.
2. Avoid using chemical-based cleaning products. They can kill essential bacteria in your septic system and are difficult to remove in wastewater treatment plants. Instead, consider using chemical-free products for housecleaning.
3. Buy laundry and dishwashing detergents that are phosphorous-free. Phosphorous is a nutrient that can cause excessive algae blooms that suck oxygen out of the water and cause toxins to be released into streams and lakes, putting fish at risk.
4. Reduce the amount of water you use. No need to keep the spigot running the whole time you're washing your fruits and vegetables, or brushing your teeth.

Outside your home

1. Avoid using fertilizers, herbicides and pesticides on your lawn. Instead, leave grass clippings on your lawn to allow nutrients to cycle into the soil.
2. Harvest rainwater using rain barrels and rain gardens for watering plants. Contact your community watershed organization for information on building rain barrels and creating rain gardens.
3. Plant native trees, shrubs and wildflowers. The roots of plants absorb and remove pollutants from water and bind soil together to keep it from washing off the land when it rains.

The Northampton County Conservation District

provides the public with a coordinated program of quality natural resource education and conservation, and encourages residents and businesses to value the county's natural resources, protect its environments and engage in conservation practices. The District's Watershed Program Goals are to support and participate in watershed planning, water quality improvement projects, watershed education activities and more. For more information on the District's Watershed Program, log onto www.northamptoncd.org or contact Jim Wilson, Conservation District Watershed Specialist, at 610-746-1971 or at james-wilson@northamptoncd.org.

Celebrate Northampton County's Two Rivers!

June is Rivers Month and Northampton County has two rivers—the *Delaware* and *Lehigh*—that you can celebrate this month with the Delaware River Basin Commission and the Wildlands Conservancy. Both organizations are sponsoring river sojourns—educational and recreational canoe and kayak adventures that you can participate in for one or more days at a time. For information on the *Delaware River Sojourn (June 20-26)*, contact Kate O'Hara with the Delaware River Basin Commission at 609-883-9500. For information on the *Lehigh River Sojourn (June 25-28)*, contact Elizabeth McKinney with the Wildlands Conservancy at 610-965-4397.

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celebrate the watersheds and rivers of northampton county rivers month | june 2010

of Watersheds and rivers

we all know what a river is, but what's a watershed?

A watershed is simply an area of land that drains into a body of water. And every area of land does just that—drains or “sheds” rain and surface water into a particular stream, lake or river as water moves across the landscape. Watersheds come in all shapes and sizes. The largest ones are commonly called river basins, which themselves are made up of smaller watersheds, often called sub-basins. The smallest watersheds drain into larger watersheds that eventually drain into rivers that ultimately empty into oceans.

Here in Northampton County, we all live in the greater Delaware River Watershed. Most of the county drains directly into the Delaware River via streams like Slateford, Jacoby, Martins and Bushkill creeks. The western end and most of the southern tier of the county first drains into the Lehigh River, via streams like Hokendauqua, Catasauqua, Monocacy and Saucon creeks, before entering the Delaware in the City of Easton. From there, our water flows to the Delaware Bay and the Atlantic Ocean.

The natural components of watersheds, like soils and plants, biologically treat and filter water as it moves over and through the land. These free biological services help provide us with clean, safe drinking water. The manmade components of watersheds, like towns, cities, highways and shopping malls, can contribute pollution to stormwater runoff, and tax the ability of soils and plants to effectively clean the water we all depend on. What we do on the land and in our homes, schools and workplaces can affect our water. The greener we live our lives, the cleaner our water will be. Each of us can help prevent water pollution and ensure that there's enough safe, clean drinking water for everyone who lives, works and plays in Northampton County.



Northampton County
Conservation District



pennsylvania
DEPARTMENT OF CONSERVATION
AND NATURAL RESOURCES



inside:

In which watershed do you live?

- What community watershed organization looks after your watershed?
- How can you become involved?
- What simple changes can you make to prevent water pollution?
- Take a river sojourn!

A publication of the Northampton County Conservation District, DLNHC and PA DCNR. Cover photo of Slateford Creek, Upper Mount Bethel Township, courtesy of Keri Maxfield.



Bertsch-Hokendauqua-Catasauqua Watershed Association

BHCWA strives to promote stewardship of, protect, enhance and restore watersheds that are tributary to the Lehigh River from the east, between Catasauqua Borough and Lehigh Gap. In partnership with the Northampton County Conservation District, BHCWA is currently helping develop the Hokendauqua Creek Coldwater Conservation Plan for protecting water resources throughout the Hokendauqua Creek Watershed.



The Bertsch-Hokendauqua-Catasauqua Creek Watershed Region encompasses 80 square miles drained by the Bertsch, Hokendauqua and Catasauqua creeks and adjacent streams in the lower Lehigh River Basin. The region includes the boroughs of Catasauqua, North Catasauqua, Northampton and Walnutport, and the townships of Allen, East Allen, Lehigh and Moore, in both Northampton and Lehigh counties.

For more information, log onto www.bhcwa.org

Bushkill Stream Conservancy

BSC strives to enhance and protect the Bushkill Creek Watershed, including its historical, cultural, environmental, recreational and scenic attributes, and to educate the public with regard to the same. BSC recently completed a constructed wetland project at Sullivan Park in Easton, and is currently developing a meadow maintenance guide.

The Bushkill Creek Watershed drains 80 square miles in the heart of Northampton County, including the boroughs of Wind Gap, Stockertown, Nazareth, Tatamy and Wilson, the City of Easton, and the townships of Plainfield, Bushkill, Moore, Upper Nazareth, Lower Nazareth, Bethlehem, Palmer and Forks. Bushkill Creek is designated a High Quality Coldwater Fishery and drains into the Delaware River in the City of Easton. Major tributaries include Little Bushkill Creek, Schoeneck Creek and Sober's Run.



For more information, log onto www.bushkill.org

Fry's Run Watershed Association

FRWA strives to protect, preserve and improve the quality of land and water resources in the Fry's Run Watershed through education, outreach, scientific research and strategic partnerships. In partnership with the Northampton County Conservation District, FRWA is currently helping implement the Fry's Run Coldwater Conservation Plan for protecting and preserving water quality throughout the watershed.

The Fry's Run Watershed drains six square miles in the Northampton Highlands of Williams Township. Fry's Run is designated a High Quality Coldwater Fishery and drains the southeastern corner of Northampton County, coursing through Fry's Run County Park before draining under the Delaware Canal at Delaware Canal State Park, and into the Delaware River.



For more information, log onto www.frysrn.org

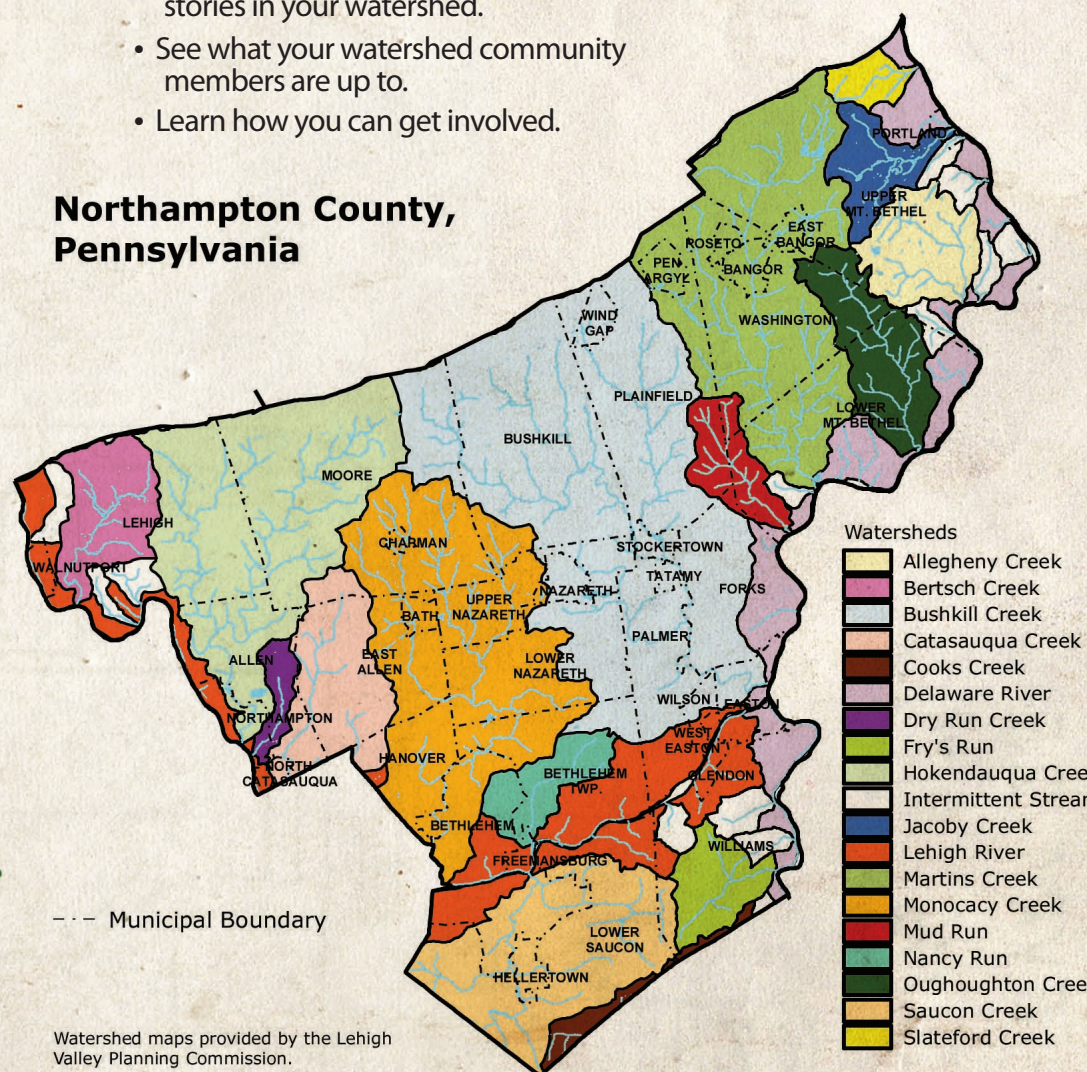
Meet Your Watershed...

And Your Community Watershed Organization!

Follow these steps to learn more:

1. Locate where you live on the map to identify the watershed in which you live.
2. Read about your community watershed organization.
3. Visit your community watershed organization's website to...
 - Learn about plans, projects, opportunities & success stories in your watershed.
 - See what your watershed community members are up to.
 - Learn how you can get involved.

Northampton County, Pennsylvania



Did You Know?

About 536 miles of streams and rivers drain Northampton County's 380 square miles of land.
(US Geological Survey, National Hydrography Dataset)



Did You Know?

Streams protected by forested buffers break down and remove up to 800% more nitrogen pollution than streams with no buffers.
(Stroud Water Research Center)



Martins-Jacoby Watershed Association

MJWA strives to develop and promote stewardship for the protection and preservation of the high quality land and water resources throughout northeastern Northampton County. MJWA recently helped construct an environmental education and municipal welcome center, and is currently working with the Bangor Area School District on a model agricultural project.



The Martins-Jacoby Watershed Region encompasses 102 square miles in eastern and northeastern Northampton County, all of which drains directly into the Delaware River. The region includes the boroughs of Pen Argyl, Roseto, Bangor, East Bangor and Portland, the City of Easton, and the townships of Upper Mount Bethel, Lower Mount Bethel, Plainfield, Washington and Forks. Major tributaries in this reach of the Delaware include Slateford, Jacoby, Allegheny and Martins creeks.

For more information, log onto www.mjwa.org

Monocacy Creek Watershed Association

MCWA functions to protect the Monocacy Creek and promote its uses as educational and recreational assets for the Lehigh Valley. MCWA is a member of the Illick's Mill Partnership for Environmental Education, which recently won the President's Environmental Youth Award. MCWA is currently involved in a stream restoration project at Monocacy Park, in the City of Bethlehem.

The Monocacy Creek Watershed drains 49 square miles in the lower Lehigh River Basin, including the boroughs of Chapman, Bath and Nazareth, the City of Bethlehem, and the townships of Moore, East Allen, Hanover, Upper Nazareth, Lower Nazareth and Bethlehem, in both Northampton and Lehigh counties. Monocacy Creek is designated a High Quality Coldwater Fishery and drains into the Lehigh River in the City of Bethlehem. The only named major tributary is East Branch.

For more information, log onto www.pipeline.com/~rlfreed/monoc.html



Saucon Creek Watershed Association

SCWA strives to protect and preserve the Saucon Creek and its watershed through science and advocacy. SCWA regularly sponsors rain barrel workshops, and in partnership with both the Lehigh and Northampton County Conservation districts, SCWA is currently helping implement the Saucon Creek Watershed Conservation Management Plan, which it was an instrumental partner in helping develop.

The Saucon Creek Watershed drains 58 square miles in the lower Lehigh River Basin, including the boroughs of Hellertown and Coopersburg, the City of Bethlehem, and the townships of Williams, Lower Saucon, Upper Saucon, Lower Milford, Upper Milford, Salisbury and Springfield, in Northampton, Lehigh and Bucks counties. Saucon Creek is designated a High Quality Coldwater Fishery and drains into the Lehigh River in the City of Bethlehem. Major tributaries include Black River, Silver Creek and Polk Valley Run.

For more information, log onto www.sauconcreekwatershed.org

