

## **The Health of Berks County Streams**

Do you ever wonder about the health of a nearby stream? The Berks County Conservation District addresses this question everyday while carrying out our various programs. Under the Federal 1972 Clean Water Act, states are required to develop lists of impaired waters. The PA Department of Environmental Protection (PA DEP) has an ongoing program to assess the quality of streams that are and are not attaining their *designated uses*. Designated uses are water quality terms and goals which can include supporting: aquatic life, fish consumption, recreation, and potable water supply.

The PA DEP then reports its findings in the *Pennsylvania Integrated Monitoring and Assessment Report Narrative*. This report lists the streams that are not attaining their designated use (or in other words are considered impaired) by surface water pollution. The list will also identify the reason for impairment. There are many different pollutants that can impair a stream. These impairments include sediment, nutrients, bacteria, and chemicals. After a stream has been determined to be impaired, the PA DEP or the U.S. Environmental Protection Agency (EPA) will determine the conditions that would return the water to a condition that meets its designated use.

Currently, 361 miles of streams are considered to be impaired in Berks County. That means that about 26% of Berks County Streams are not meeting their designated uses for one or more reasons. Once a stream is determined impaired a Total Maximum Daily Load is then allotted to the waterbody by the PA DEP. A Total Maximum Daily Load sets a standard of the maximum amount of a pollutant that a stream can receive and still meet its designated use.

There are many nonprofit, local government, and volunteer organizations that work in Berks County to aid in the protection and enhancement of our streams and rivers. These groups work together to plan projects that improve and/or prevent water pollution from entering Berks County streams, educate others about the importance of pollution prevention, and organize special tree planting or clean up days. To find out if there are volunteer opportunities in your neighborhood, contact the Berks County Conservation District at 610-372-4657 ext: 211.

Waterbody assessment and data evaluation are continuous processes. Changes on the land affect the health of Berks County streams. The Berks County Conservation District is here to assist the PA DEP in their efforts to monitor the streams of Berks County as well as assist you in addressing your questions and concerns about local streams. If you have a question about a stream near you, please contact the Berks County Conservation District at 610-372-4657.

## **You Can Make a Difference!**

### **In Your Community**

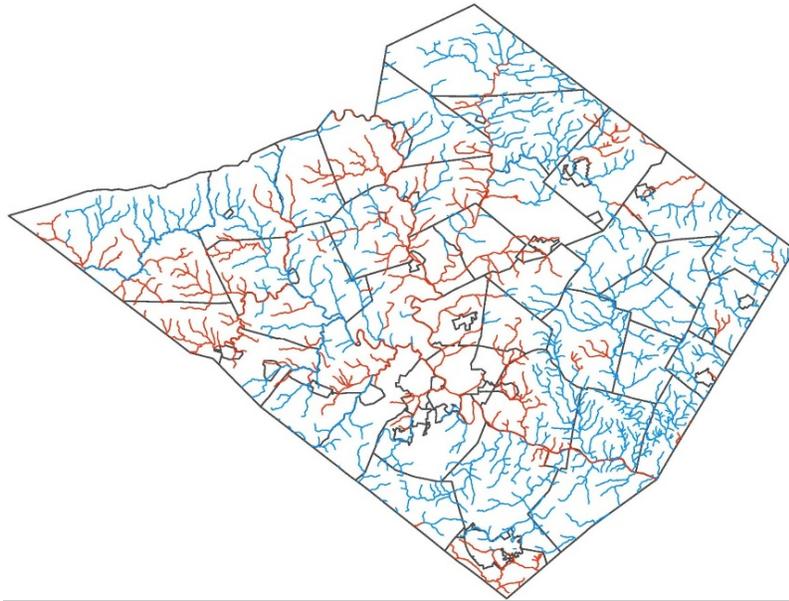
- Join local stream reforestation efforts. Forested streams, or also known as “riparian buffers,” do many things to help water quality. They help regulate the streams temperature, help decrease erosion and flooding, and they also filter out many pollutants that water runoff can carry with it.
- Join or organize a community tree planting. Reforesting vacant and community lots will help improve local water quality by filtering out pollutants before they reach the stream.

- Consider starting a backyard conservation project in your community. Any vacant lot or unused space is a candidate for improvement with native plants, rain gardens, or other natural habitat.
- Encourage public officials to practice backyard conservation in parks and other public property.
- Encourage schools and other local organizations to become involved in caring for and helping the local environment.

### **At Home**

- Do not discard or dump any trash, oil, or chemicals into storm drains. Storm drains lead directly into our waterways.
- Use a broom instead of a hose to clean sidewalks.
- Keep your grass two to three inches high to retain the soil's moisture.
- Use low pressure, perforated hoses for watering instead of sprinklers.
- Use mulch to reduce water evaporation from the soil.
- Water your lawn in the morning or evening to prevent excess evaporation.
- Be careful of watering your lawns in the summer months – Your grass needs only one inch of water every 5 to 7 days!
- Plant vegetation that is native. It will withstand drought conditions and require less watering than nonnative species.
- Consider using sand or regular kitty litter as a less toxic alternative to deicers in the winter
- Have routine maintenance of your car to prevent and identify potential leaks.
- Wash your car on your lawn instead of on your driveway. The water will drain into your lawn instead of flowing down a storm drains, which leads directly to local streams. Or take your car to a local car wash; they recycle the water that is used.
- Start a compost pile! Composting recycles yard waste, prevents weed growth and erosion, conserves soil moisture, and stabilizes soil temperature. Grass clippings, egg shells, wood chips, and tree bark work all well as compost.
- Place a rain barrel underneath rain spouts. The water can then be used for gardening needs.
- Clean up pet waste and dispose of either in the toilet or trash.
- Aim downspouts onto grassy areas of your yard that flow away from your house, not on driveways or walkways. This allows the ground to absorb the water instead of having the water be flushed into storm drains. A wooded or garden area absorbs more water than turf grass.
- Test your soil. Contact Penn State University's Cooperative Extension in Berks County to request a soil test at 610-378-1327 or visit <http://berks.extension.psu.edu/>
- If you do need to fertilize your lawn, never apply more than is recommended – too much can burn your lawn. Also, do not fertilize before a rain storm, and keep fertilizer off sidewalks and driveways where it can easily wash into storm drains
- Plant a rain garden. Rain gardens contain native plant species that retain stormwater runoff and allow the water to soak back into the ground at a natural rate. The native plants can withstand times of either drought or flood and offer an aesthetic quality to a yard as well as a much needed pollution prevention technique!

This article complements of the Berks County Conservation District/Berks County MS4 Cooperative Education Program



The map above shows the streams that flow through Berks County. The red lined streams are the streams that are considered impaired. The Blue lined streams are considered to be meeting their designated uses.



A rain garden, like the one at the Berks County Agricultural Center, catches rain water runoff and allows it to be absorbed into the ground where it can be used by native plants.