

Earth Day should encourage us to reflect on what we are doing to make our planet a more sustainable and livable place.

Scott Peters

WHAT ON EARTH ARE YOU DOING FOR EARTH DAY?

This Earth Day, homeowners, businesses and municipalities from all across Central New York are working to improve and protect water quality by slowing down, cleaning up and reducing the amount of stormwater runoff from their properties.

What is Stormwater Runoff?

Stormwater runoff is rain and snowmelt that doesn't soak into the ground. As it flows across developed surfaces such as roads, parking lots and rooftops, it collects and transports pollutants including sediment, fertilizers, pesticides, bacteria, motor oil and litter directly into our lakes and streams. Contaminated stormwater runoff makes our waters unfit for drinking, fishing, swimming and other water based recreation. Stormwater runoff also contributes to flooding and can lead to expensive infrastructure and property repairs for municipalities and homeowners.

What Are the Sources of Stormwater Pollution?

Stormwater pollution originates from a variety of land uses and day-to-day activities. For example, agriculture and gardening practices can result in the flow of pesticides, herbicides and fertilizers (especially phosphorus) from lawns, gardens and fields to local waters. Pathogens and bacteria can originate from animal waste, poorly maintained septic systems, and illegal connections to storm sewer systems. Oil and grease from poorly maintained vehicles, and sediment from construction activities can also contaminate stormwater runoff.

April 22, 2020



Why is Stormwater Runoff a Problem in Central New York?

In many of our urban and suburban communities, forests, wetlands and fields have been replaced by impervious surfaces such as buildings, roads, sidewalks and parking lots. This increases the amount of stormwater flowing directly into our lakes and streams instead of soaking into the soil where many pollutants can be filtered out or broken down by natural processes. Impervious surfaces within a typical city block can generate five times more stormwater runoff than a forested area of the same size.

You Can Help by Making a Personal Commitment to Water Quality Protection.

Protecting water quality is everyone's responsibility. Although runoff from a single property may not be substantial, the combined effect of runoff from an entire neighborhood can have a significant impact on the quality of our local lakes and streams. There are many things that we can all do to reduce the volume and improve the quality of stormwater runoff from our homes, neighborhoods and communities. This flyer will help get you started. Stand up for clean water and make everyday Earth Day, because clean, fresh water is not only essential for human health, it adds to the high quality of life that we enjoy here in Central New York.



The US Environmental Protection Agency has identified stormwater runoff as the primary source of pollution to rivers, streams and lakes throughout the nation. Regulations designed to control and improve stormwater runoff have been instituted in all 50 states. Meeting state and federal stormwater regulations is challenging and can be costly for municipalities. Working together, we can cut costs and protect the environment, one yard at a time.

Gardening for Water Quality Protection in Central New York



The CNY Stormwater Coalition is made up of 30 municipalities in Onondaga, Oswego and Madison Counties that are working together to reduce stormwater runoff and improve water quality in Central New York. To learn more about the Coalition and how you can get involved, visit the CNY stormwater website at CNYRPDB.ORG/STH20

The Benefits of an Attractive Yard Go Beyond Impressing the Neighbors

Healthy lawns and landscaping can make your yard look attractive while improving the value of your property, but did you know that home improvement projects, garden maintenance activities, and poorly maintained landscapes can contribute to water pollution in Central New York?

When it rains, stormwater runoff from roofs, driveways and other hard surfaces around our homes washes exposed soil, lawn and garden chemicals such as fertilizers and pesticides, and other yard wastes from our properties into storm drains. Eventually, these storm drains empty into nearby lakes and streams. Lawn and garden contaminants carried in stormwater runoff contribute to decreased water clarity and oxygen levels, increased algal blooms,

and the destruction of aquatic habitat that supports fish, plants and macroinvertebrate populations in our local streams and lakes. Beach closures, restrictions on fish consumption and restrictions on other water-based recreation can result.

Fortunately, there are many low-cost and simple measures we can take to maintain healthy lawns and gardens that also reduce stormwater runoff and protect water quality. Start by walking the perimeter of your property during or shortly after a heavy rain. Look for areas where stormwater is leaving your property. Trace the flow path back to the source and take steps to slow, spread or soak that flow into the ground before it reaches your property line by using one or more of the following practices.

Collect roof runoff in a rain barrel. Attach a soaker hose and use the captured rain to water flower beds and shrubs in dry periods between storms.



Redirect downspouts away from hard-paved surfaces and toward vegetated areas to promote infiltration and reduce runoff.



Mow your lawn at regular intervals and leave the clippings in place to return organic matter and phosphorus to the lawn and reduce the need for fertilizer this summer.



Plan ahead and schedule grading and excavation projects for dry weather. Never apply fertilizer or other chemicals when rain is in the forecast.



Plant a rain garden to collect and use rain water. Rain gardens allow up to 30% more stormwater to soak into the ground than a traditional lawn.



Use native plants and grasses to fill bare spots and hold soil in place. Use native mulch and stone to protect soil and slow stormwater flows.



Use mulch, paving stones or other porous materials for walkways and patios to spread out and infiltrate stormwater.



Create a border using plants and groundcovers to filter and infiltrate any stormwater that does make its way to your property line.



Too Much of a Good Thing

Phosphorus is an essential element for plant growth but high levels can be harmful to the health of lakes, streams and ponds. Rain storms and melting snow transport phosphorus from lawns, gardens and agricultural fields to ponds, rivers, lakes and streams. High phosphorus levels in surface water can lead to excessive aquatic plant growth which can block waterways and impact swimming, boating and fishing. Nutrients such as phosphorus also contribute to harmful algal blooms and other conditions that reduce oxygen levels to below what fish and other aquatic life need to survive. More than 100 waterbodies in New York State cannot be used for drinking, fishing or swimming because they contain

too much phosphorus.

According to the EPA, phosphorus and nitrogen are among the top water pollutants in the country, degrading over 100,000 river and stream miles and over 3.5 million acres of lakes, reservoirs and ponds.

Pollutants such as phosphorus and nitrogen can also harm local economies through high treatment costs for drinking water, reduced income from recreation and tourism, and lower property values along polluted waterways. The most cost effective way to address water pollution is to attack it at its source. Small changes around the home and garden can save you money and protect our water.

When Buying Fertilizer, Remember to Look for the Zero!

If you need to buy fertilizer, look for the three numbers on the bag. They refer to the percentage of nitrogen, phosphorus and potassium. Select the fertilizer with a “0” in the middle. This means that it’s phosphorus-free.

Zero phosphorus means:

- **Zero pollution** - Phosphorus is one of the leading causes of water pollution. Even if you live far from a water body, excess phosphorus from your lawn can wash off and pollute lakes and streams, harming fish and ruining boating and swimming.
- **Zero waste** - Why pay for a chemical that your lawn doesn’t need? Generally, only newly established lawns or those with poor soil need phosphorus. Phosphorus applied to a lawn that doesn’t need it won’t be used and can cause water pollution.
- **Zero hassle** - You don’t need to fertilize as often. It’s against the law to use phosphorus on lawns that don’t need it. Be sure to check state and local laws that include information on selling and using lawn fertilizers.

Planning to Fertilize Your Lawn this Spring?

NYS Law Restricts the Use of Lawn Fertilizers Containing Phosphorus

In New York State, it is illegal to use phosphorus fertilizer on lawns that don’t need it. The NYS Dishwasher Detergent and Nutrient Runoff Law is designed to improve water quality by reducing the amount of phosphorus entering the state’s waters.

The law sets restrictions on the use of phosphorus fertilizer on lawns or non-agricultural turf. Only lawn fertilizer with less than 0.67% phosphate content is permitted. Additionally, the law states:

- Application of any fertilizer containing nitrogen, phosphorus or potassium on lawns or non-agricultural turf is prohibited between December 1 and April 1.
- Application of any fertilizer on lawns or non-agricultural turf within 20 feet of a water body or on paved surfaces is restricted.
- Retailers must display phosphorus fertilizer separately from phosphorus-free fertilizer and must post signs notifying customers of the terms of the law.

Purchase phosphorus-free fertilizer for your lawn!

The first number on a fertilizer bag refers to the percent nitrogen (N), the second is percent phosphorus (P) and the third is the percent potassium (K). A product labeled 22-0-15 contains 22% nitrogen, 0% phosphorus, and 15% potassium.





We Need Your Help

The CNY Stormwater Coalition believes that everyone has a role in keeping our surface waters clean and healthy. As an organization, we are committed to providing information that supports water protection through informed personal choices. To be effective, we need to hear from you. Please take a few minutes to complete our online survey. Your responses will help us deliver useful and interesting information in a format that meets your lifestyle and addresses your interests. The

survey takes approximately 5 minutes to complete but will help us shape our education program for years to come. Thank you in advance for participating in our survey.

To participate, go to CNYRPDB.ORG/Stormwater and click on SURVEY in the blue box, or scan this QR code.



Municipal Partners in Stormwater Management

The CNY Stormwater Coalition was established to advance a regional approach for managing stormwater and protecting water resources. The Coalition is made up of 30 Municipal Separate Storm Sewer System (MS4) operators. Through the Coalition, members are working together to meet regulatory requirements, share resources and expertise, and improve water quality in Central New York.

2020 Coalition Members

- | | |
|----------------|------------------------|
| Camillus Town | Baldwinsville Village |
| Cicero Town | Camillus Village |
| Clay Town | Central Square Village |
| DeWitt Town | East Syracuse Village |
| Geddes Town | Fayetteville Village |
| Hastings Town | Liverpool Village |
| LaFayette Town | Manlius Village |
| Lysander Town | Marcellus Village |
| Manlius Town | Minoa Village |
| Marcellus Town | North Syracuse Village |
| Onondaga Town | Phoenix Village |
| Pompey Town | Solvay Village |
| Salina Town | Onondaga County |
| Sullivan Town | NYS Fairgrounds |
| Van Buren Town | |
| Syracuse City | |

Gardens and Gutters - Your Local Stormwater Connection

Gardens and Gutters is the electronic newsletter of the CNY Stormwater Coalition. Distributed by e-mail just four times a year, each edition is filled with informative articles, seasonal stormwater management tips, upcoming events, and links to useful tools and resources you might not be aware of.

To subscribe, send an e-mail to stormwater@cnyrpdb.org with the word "subscribe" in the subject line. If you are not satisfied with the content, simply respond to the unsubscribe link that is part of every edition.

Hurry! The Spring edition will be out soon!



See Something? Say Something!

The direct discharge of anything other than stormwater to a storm drain is called an illicit discharge. Illicit discharges to storm sewers are a problem because the waste generally flows directly to local waterways without any treatment.

A **Stormwater Pollution Hotline** has been established for reporting illicit discharges to storm sewer systems in Onondaga County. If you suspect someone has discharged contaminants such as chemicals, construction materials, paint, motor oil and lawn waste into a storm sewer, please contact the Onondaga County Stormwater Pollution Hotline at 315-435-3157. The hotline is staffed 24 hours a day, seven days a week by the Onondaga County Office of Water Environment Protection.

What is an MS4?

An MS4 is a municipally owned and operated storm sewer drainage system consisting of inlets, pipes and ditches that help prevent flooding by directing rain water away from paved areas and into nearby waterbodies such as streams, lakes and wetlands. Unlike a sanitary sewer drainage system that treats sewage water before discharging it, a municipal storm drain system does not provide any treatment. Storm sewer drainage systems simply channel water. This is why it's so important to make sure that nothing goes into the storm drain except rain water and snow melt.