



## CNY Stormwater Coalition

# *Gardens and Gutters*

## *A Central New Yorker's Guide to Managing Stormwater Runoff*

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### IT'S GETTING HOT OUT THERE (So rethink all your hose!)

#### Inside this issue:

Up for a Swim?	2
It's the Law! Fertilize with Care!	2
Swimming Pool Maintenance for Water Quality	3
Stormwater Coalition	4
Hazardous Algal Blooms	4

As July heats up and August inches ever closer, Central New York gardeners can take a breath knowing that planting season is over until fall. Of course, that doesn't mean that work in the garden is also on hold. Late summer is a busy time in the garden. CNY residents are encouraged to be mindful of water quality by practicing natural lawn and garden care and implementing green infrastructure projects to reduce pollutants reaching our surface waters and to conserve water resources. Stormwater pollutants include fertilizer and pesticides, car oils, pet waste and litter. Once mixed in with stormwater runoff, they drain directly into streams and storm sewers from impervious surfaces, such as roadways, sidewalks and roofs. If done properly, lawn and garden routines and maintenance activities can help to improve surface water quality by minimizing the volume and variety of pollutants in stormwater runoff.

If your soil lacks nutrients, consider using compost instead of a harmful fertilizer. Eliminate pesticide use by hand pulling weeds. Although you're not mowing as often, summer is a great time to begin composting lawn clippings, leaves and other natural materials.

Don't let the rain that falls run down the street. The larger your garden, the more rain will soak in. Consider setting up rain barrels under your downspouts to feed rain gardens—gardens with especially thirsty plants that act as sponges during spring and other wetter periods. Even a light shower (one-tenth of an inch) on 1000 square feet of roof will fill a 60-gallon barrel. Put your barrels up on blocks to increase water pressure, then attach soaker hoses and wind them through nearby beds. This works best on level ground or beds with a slight downhill slope.

During dry periods you may want to set up sprinklers to minimize plant stress. If not prohibited by local conditions, set your sprinklers in the early morning. Watering during the heat of the afternoon is less efficient as water will evaporate before reaching your plants which significantly increases the difficulty and the amount of water needed to attain a deep root watering of approximately 6 inches below the soil surface. Soil that dries out can be very difficult to moisten. Set sprinklers on low and turn them off at the first sign of runoff. Strive to water deeply rather than frequently.

Adding compost helps to improve soil structure and increase its water-holding capacity. A 2-inch layer of mulch will help cool the soil and slow evaporation.

Permeable pavers and porous concrete are the best options if you are considering installing new walkways or driveways this summer. These allow stormwater to infiltrate the soil surface where pollutants can be filtered out naturally. If this isn't an option, try to avoid coal tar-based sealants, which can be toxic to surrounding plants, groundwater and humans.

Our average CNY's annual average rainfall is about 40 inches. Even so, hot, dry winds and extreme weather events can take their toll during the summer months when rainfall can be sporadic. Water conservation is key to sustainable gardening and good stormwater management.





### UP FOR A SWIM?

Grab a beach towel and head for the closest... storm drain?

That's right! Your favorite swimming hole begins right on your street. Look along the curb and find a storm drain. It's a direct connection to your local lake or stream.

Storm drains are designed to prevent flooding. Large volumes of water from heavy rains and snowmelt wash over streets and into the drains. Underground pipes transport the water rapidly into area streams, rivers and lakes.

There's a downside to storm drain efficiency. When water washes into the drains, pollutants are carried along for the ride. Litter, pet waste, dirt, fertilizers, antifreeze and motor oil are just a few examples of contaminants that enter our waterways through storm drains. No filters, no treatment.

**Be a water quality champion.  
Only rain down the drain.**

### It's the Law! Fertilize with Care!

The New York State Dishwasher Detergent and Nutrient Runoff Law restricts the use of phosphorus containing detergents and lawn fertilizers. While phosphorus is a nutrient that is essential for plant growth, in high levels it can degrade water quality. In many areas of NYS the soils naturally contain a sufficient amount of phosphorus to support the growth of turf grass without the need for additional fertilizer.

The law does not ban the use of phosphorus fertilizer, but for an established lawn it does require that a soil test be conducted to indicate that the soil is lacking in phosphorus. To ensure accurate test results, the NYS Department of Environmental Conservation recommends using a reliable laboratory over a home soil test kit.

If the soil is lacking phosphorus, an organic fertilizer can be applied. If the soil is not lacking, only fertilizer that contains .67% or less phosphorus, which the law defines as phosphorous-free, can be applied.

Phosphorus fertilizer can also be applied if you are establishing a new lawn with seed or sod. The law does not impact the use of agricultural fertilizer or fertilizer for gardens.

Retailers are required to display phosphorus containing fertilizer separately from non-phosphorus fertilizers, and to post an educational sign where the phosphorus fertilizers are displayed.

Other things to keep in mind:

- Fertilizers containing phosphorus, nitrogen or potassium are prohibited between December 1st and April 1st

## It's the Law! Fertilize With Care!

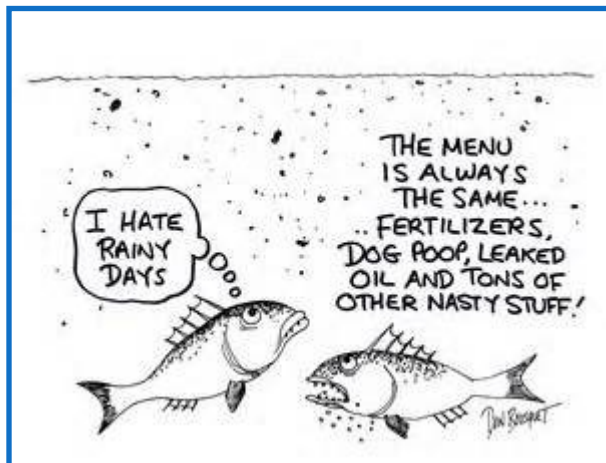
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- Phosphorus containing fertilizer may not be applied within 20 feet of any surface water unless there is a vegetative buffer of at least 10 feet
- Fertilizer application on any impervious surface is prohibited; any fertilizer accidentally spilled or spread on an impervious surface must be picked up

Organic V. Synthetic Fertilizer: Organic fertilizers are derived from plant and animal nitrogen sources and always contain some phosphorus. In contrast, non-organic, or "synthetic" fertilizers can be manufactured without phosphorus.

The synthetic fertilizer industry now produces phosphorus free fertilizers. All organic products will naturally contain phosphorus, as it is found in all living creatures. This includes compost derived from the breakdown of leaves in our yards or at town compost facilities. Leaf compost typically has low amounts of phosphorus in it and can be used to top dress established lawns.

By reducing phosphorus use in lawn fertilizer we can create a healthier aquatic environment for people, fish and wildlife.



## Swimming Pool Maintenance for Water Quality Protection

An average swimming pool contains 19,000 gallons of water that may contain chlorine, biocides, algaecides, and other chemicals. When swimming pool water is drained for cleaning or maintenance, these chemicals can be toxic to plants and animals in nearby lakes, streams, and wetlands. The following swimming pool recommendations are designed to protect local water resources throughout the swim season through closing.

- Before draining the pool, use a test kit to check the water quality. Wait until chlorine levels are below 0.1mg/l. The pH must be between 6.5 and 8.5 before it is discharged.
- Don't discharge if algaecides have been recently used.
- Pool water should not appear murky. Allow time for suspended particles to settle before discharging water.
- Never discharge pool water onto paved surfaces, directly into the storm sewer system, or in areas where it can flow directly to rivers, lakes, streams or wetlands. Direct pool discharge over a vegetated area to promote soil infiltration and control the flow rate to minimize erosion. Avoid draining the pool after a rainstorm when the ground is saturated.
- When the pool filtering system is cleaned, dispose of the sludge as solid waste and prevent leaching of the material into the environment.



## CNY Stormwater Coalition

The CNY Stormwater Coalition was formalized in 2011 in order to establish a regional approach to stormwater management and water resources protection. The Coalition is made up of 29 Municipal Separate Storm Sewer System (MS4s) owner/operators. Through the Coalition, MS4s are working together to meet regulatory requirements while improving water quality in Central New York.

### CNY STORMWATER COALITION MEMBERS

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

The CNY Stormwater Coalition meets quarterly throughout the year. All meetings are open to the public. Please verify the date and location one day in advance by visiting the [CNY Stormwater Coalition Website](#)



The CNY Stormwater Coalition is staffed and coordinated by the Central New York Regional Planning & Development Board. For more information, visit the [CNY Stormwater Coalition Website](#) or call 315-422-8276 Ext. 211.



## HAZARDOUS ALGAL BLOOMS

### KNOW IT! AVOID IT! REPORT IT!

The summer season is in full bloom and soon, so will be the Harmful Algae Blooms (HABs) season. HABs have been identified in lakes throughout New York State in recent years. Exposure to surface water during these outbreaks can cause health problems for people, pets and wildlife. HAB outbreaks are caused by cyanobacteria and the blooms generally occur during extended periods of warm weather with high nutrient levels in the lake. There are several ways in which the public can help to reduce the threat of HABs in local water resources.

- Limit lawn and garden fertilization (especially phosphorus)
- Pump your septic tanks every three years
- Plant rain gardens and vegetative buffers to reduce nutrient runoff and to control soil erosion from your property.

### Important things to know about HABs

If you see it - avoid it and report it! People, pets and livestock should avoid contact with water that is discolored or has algae scums on the surface. Colors can include shades of green, blue-green, yellow, brown or red. If contact does occur, rinse thoroughly with clean water to remove algae.

Never drink untreated surface water, whether or not algae blooms are present. Untreated surface water may contain other bacteria, parasites or viruses, as well as cyanotoxins that could cause illness if consumed. People not on public water supplies should not drink surface water during an algal bloom. In-home treatments such as boiling, disinfecting water with chlorine or ultraviolet light, and water filtration units do not protect people from HAB toxins.

Stop using water and seek medical attention immediately if symptoms such as vomiting, nausea, diarrhea, skin, eye or throat irritation, allergic reactions or breathing difficulties occur after drinking or having contact with blooms or untreated surface water.

Report any health symptoms to your physician and the NYS Department of Health ([harmfulalgae@health.ny.gov](mailto:harmfulalgae@health.ny.gov)) or contact your local health department.

For weekly updates about the location and status of HABs from spring through fall, sign up for DEC's email newsletter, *MakingWaves* at [www.dec.ny.gov/about/661.html](http://www.dec.ny.gov/about/661.html) or visit [www.dec.ny.gov/chemical/83310.html](http://www.dec.ny.gov/chemical/83310.html)

