CNY Stormwater Coalition

Gardens and Gutters

A Central New Yorker's Guide to Managing Stormwater Runoff

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Autumn Leaves

Autumn leaves are beautiful but they can also cause problems if they aren't collected and properly disposed of. When leaves and yard clippings are raked into the street or ditches, the vegetative debris can clog storm drains. During heavy rains, blocked storm drains and ditches can cause flooding. Leaves and grass clippings that make their way to local streams and rivers release nutrients that contribute to the accelerated growth of algae. This can be harmful to fish and other aquatic wildlife. By taking the following steps we can reduce the threat of flooding and nutrient loading to local waterbodies.

***Mulch*:** An easy and beneficial way to deal with leaves is by mulching them back onto your lawn. Simply mow the leaves and leave them on the lawn. The mower will chop the leaves into small pieces that will decompose and provide valuable nutrients to the soil.

***Compost*:** Add autumn leaves to a compost pile or place them in planting beds or gardens to provide an inexpensive and nutrient rich fertilizer for your garden. Composting is nature's truest form of recycling.

Rake: If leaves cannot be disposed of on your property, check with your municipality to find out if a leaf collection service is available and follow the pickup schedule for your neighborhood. Leaves can be placed on the curb for pick-up and delivery to municipal compost sites in most cities, towns and villages. Some municipalities require that you bag the leaves in paper for pick up and others have placement requirements for leaf piles. Either way, leaves should never be placed in the storm drain, gutter or street. Prepare the leaves by placing them in piles on your lawn that are parallel to the road.

Go Pervious!

Replacing your walkway or driveway with river stone, pervious pavers or other porous material will allow water to soak into the ground instead of becoming runoff. Permeable interlocking concrete (concrete pavers separated by joints), pervious concrete, and porous asphalt have many advantages during the winter months when compared to conventional pavements.

- Snow melts faster on pervious pavements than on conventional pavements.
- Pervious pavements immediately drain the melted snow, reducing the risk of ice formation and hazards.
- Permeable interlocking concrete and porous asphalt are resistant to freeze-thaw cycles and require smaller amounts of de-icing materials.
- Pervious surfaces help reduce polluted stormwater runoff and erosion.

Winter Rain Garden Protection

Even though your plants are dormant throughout the winter months, avoid shoveling snow onto the rain garden. When the snow melts in the spring, the excess water can saturate the soil and harm your plants. Normal snow accumulation won't create a problem but when shoveling your driveway or walkway, place the snow on the uphill side of the rain garden. The garden will absorb the excess runoff when the snow melts in the spring.

Household Hazardous Waste Drop-off Programs

Many items in our homes should never be poured down the drain or into the trash because of health and environmental hazards. Onondaga County residents can conveniently drop off toxic household materials year-round by making an appointment with OCRRA. This program is free and convenient and appointments are available from Monday through Friday from 6:30AM to 6:00PM. Appointments must be made five business days in advance of your drop-off date. Only toxic materials from households within the OCRRA service area will be accepted for free through this program. Household toxic material includes automotive products, cleaning supplies, garden supplies, pesticides, painting supplies, and miscellaneous products such as fluorescent light bulbs and pool chemicals. Additional information about the OCRRA program is available at this website.

Oswego County residents can dispose of household hazardous waste between May through September at the Bristol Hill Landfill in Fulton. Check the Oswego County Department of Solid Waste website for collection dates and times.

Protect Water Quality While Winterizing Your Swimming Pool

An average swimming pool holds 19,000 gallons of water that may contain chlorine, biocides, algaecides, and other chemicals. When swimming pool water is drained for the winter or for in-season cleaning and maintenance, these chemicals can be toxic to plants and animals in nearby lakes, streams, and wetlands. The following recommendations will help to protect local water resources.

- Before draining the pool, use a test kit to check the water quality. Allow the pool water to sit for several days after the last addition of chlorine or bromine or wait until the levels are below 0.1 mg/l. The pH of the water must be between 6.5 and 8.5 before it is discharged.

- Do not discharge the pool water into the environment if algaecides such as copper or silver have recently been used. These chemicals can harm algae and rooted plants in nearby waterbodies.

- The pool water should not appear murky. Allow time for suspended particles to settle before water is discharged. The settled material at the bottom of the pool should not be discharged to the environment.

- 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 the pool discharge over a vegetated land surface to promote soil infiltration and control the flow rate to minimize erosion. Avoid draining the pool during or after a rainstorm when the ground is saturated.

- When the swimming pool filter system is cleaned, dispose of the sludge as solid waste and prevent leaching of the material into the environment.

- Store all swimming pool chemicals in a tight container to prevent leaks and spills and avoid exposure to stormwater.

Additional information about swimming pool maintenance and the discharge of chlorinated water is available at this website. Also check with your municipal office for local restrictions or guidelines.

Onondaga County Stormwater Pollution Hotline

Any discharge into a storm drain system that is not composed entirely of stormwater is called an illicit discharge. Illicit discharges to storm drain systems are a problem because, unlike sanitary sewer systems which flow to a wastewater treatment plant, storm sewers flow directly to waterways without any additional treatment. Illicit discharges often include pathogens, nutrients, and various toxic pollutants.

If you suspect someone has discharged contaminants such as chemicals, construction materials, paint, or petroleum products to a storm sewer, catch basin, or roadway, please contact the Onondaga County Stormwater Pollution Hotline at 435-3157. The hotline is manned 24-hours a day, seven days a week.

Winter Maintenance Tips

- Shovel or plow your driveway and sidewalk before spreading deicer. Deicer won't work on deep piles of snow and shoveling doesn't require the use of chemicals that can harm water resources.
- When possible, limit the amount of salt applications on sidewalks and driveways in order to reduce the amount of polluted stormwater washing into our waterways. Calcium magnesium acetate is a deicing alternative that has fewer adverse environmental impacts than salt and it doesn't cause corrosion. It's a bit more expensive than rock salt, but is recommended for environmentally sensitive areas.
- Only use sand for traction. Kitty litter and ash become clumpy and are difficult to clean up after use.
- Pets can be harmed by some deicers. Wipe your pet's paws if they walk on any salts or chemicals to help prevent ingestion and damage to their paws.
- After the snow melts, be sure to sweep up the excess salt, sand, or other materials from the pavement. This will prevent the material from entering local lakes and streams.
- Once the spring arrives, your bushes and trees will help to reduce the flow of stormwater runoff. A break in the snow cover during the winter months is a good time to prune dead or broken branches. Cut back the perennials and grasses to a height of around 4 to 12" and remove any winter weeds in preparation for spring growth.
- Check this link for the cost, environmental impacts, and effectiveness of deicing products.

Winter Storage of Your Rain Barrel

Winter is several weeks away but now is the time to prepare your rain barrel for winter storage. If you have the space, unhook the rain barrel from the downspout and store it in a garage or shed. If space isn't available, you can leave the rain barrel outdoors during the winter if you prepare it for the elements.

First, completely drain the rain barrel to avoid freezing or cracking. Then remove the spigots, screen, and hose and store them in a place where you can find them easily in the spring. You may also want to rinse out the rain barrel in order to remove any sediment. If you are storing the rain barrel outside, turn it upside down to keep out the rain, ice and snow. If possible, weight it down or secure it to keep it from blowing away. After you've prepped the rain barrel for winter storage, consider redirecting the downspout so that melting snow and ice flows away from the foundation of your home. Attach another piece of downspout if necessary.

Autumn Composting Tips

Seize the moment! Autumn is the season to gather materials for composting. The wealth of carbon-rich matter will benefit your compost all year long.

The key to successful composting is maintaining a balance between carbon and nitrogen materials in the compost bin. A healthy compost pile should have about two-thirds carbon (brown) materials and one-third nitrogen (green) materials. The carbon-rich materials provide aeration to speed up the composting process, eliminate foul odors and help produce a light, fluffy finished compost.

Families who maintain backyard composters usually have plenty of nitrogen materials to add throughout the year - kitchen scraps, fruit and vegetable peelings, coffee grounds, grass clippings and other fresh materials. However, the carbon-based materials are more difficult to gather during the winter, spring and summer months. These include leaves, vines, shrub prunings, straw, dried garden waste and other items which are plentiful in autumn but less available the rest of the year.

The following tips will help you make the most of autumn's offerings. These simple practices will keep you in steady supply of compost all year, and by starting now you'll have finished compost for early spring gardening.

~ Gather leaves and grass clippings

Leaves are one of the most valued compost materials because they are carbon-rich and small enough to be easily incorporated into the compost. Deciduous leaves are best; do not use evergreen leaves such as holly, laurel and conifers. Wait until the leaves start turning brown before raking them up. (Some leaves can be left under trees and shrubs where they will compost themselves. This helps to reduce the amount of new mulch needed to cover the areas surrounding your trees and shrubbery.)

Fresh grass clippings are nitrogen rich and serve as compost activators. Add grass clippings to your compost in thin layers to prevent matting. Then add twice the volume in brown materials to balance the carbon-nitrogen ratio.

~ Too many leaves? Try 'leaf composting'

If you have too many leaves to incorporate into the compost bin, you can simply compost the pile of leaves by itself. The leaf pile should be at least 4' in diameter and 3' in height.

This article is adapted from eartheasy.com. Click here to read more…

Winter Stormwater Management

Another Central New York winter is just around the corner. The manner in which we deal with snow and ice accumulation during the winter months has a significant impact on the water quality in lakes and streams. Controlling stormwater pollution is a year-round concern, one that matters in winter just as much as other seasons of the year.

The flow of rain and melting snow over the land surface can create water quality problems by washing exposed soil and pollutants such as fertilizer, oil and litter into nearby lakes and streams. During the winter months, snow and ice accumulation don't present much of a flow problem. The story is much different in the spring, however, as melting snow can lead to flooding and water quality problems in nearby waterbodies. The substances that we apply during in the winter to keep our roads and driveways clear of snow and ice eventually are carried into our waterways when the snow melts. Traditional rock salt (sodium chloride), for example, corrodes concrete and steel in bridges and cars. It can also affect fish spawning and can harm vegetation if allowed to accumulate in the soil. In high concentrations, chloride can contaminate drinking water wells.

Deicers

The rule of thumb throughout the winter can be summed up in one word: balance! The first line of defense against snow and ice should simply be to shovel sidewalks and pathways to keep them clear and to prevent ice from forming. Remember, salt and deicers are not effective when more than 3 inches of snow have accumulated. If you do spread rock salt on your own driveway, don't apply more than you need. If you do, you may be simply flushing chlorides (and your money) down the storm drain.

Consider using a non-toxic, biodegradable ice-melt product in place of rock salt. Although these products are more expensive, they are less harmful to the environment and often have residual effects that prevent new ice from forming on sidewalks and driveways. As a result, you may not need to use the product as frequently as rock salt.

Sand

Many homeowners use sand to provide traction on their walkways. Although effective, wind and melt water can transport sand and grit into nearby storm drains and surface waters. Sand and grit reduces habitat for fish and aquatic insects and create a substrate for unwanted plant and weed growth. If you do use sand to create traction around the exterior of your home, remember to sweep and collect it as soon as weather conditions allow.

Windshield Washer Fluids

Winter driving conditions on snow and ice require extra precaution. Unfortunately, most windshield washer fluids contain toxic methanol and phosphates which contribute to algal blooms in lakes and ponds. A single spray to clear the windshield may not add a lot of chemicals to the environment but the cumulative impact from a whole community can have an effect because the fluid eventually ends up in local waterbodies. The next time you reach for a gallon of traditional windshield washer fluid, consider the wide range of biodegradable alternatives such as tablets and concentrated liquids. They are just as effective and may be less expensive than what you are currently using.

Even in winter, vehicle fluids such as motor oil and antifreeze must be maintained. When it's time for routine car maintenance, remember that service stations are required by law to accept used oil. Other automotive fluids can also be brought in for recycling during county-wide household hazardous waste days. Never discharge used vehicle fluids directly on the ground or into a storm drain or catch basin. Whatever flows into the storm system will flow directly to a stream where it will impact wildlife habitat and recreational uses such as boating, fishing, and perhaps, swimming.

We'll soon be enjoying all that a Central New York spring and summer have to offer. In the meantime, please be mindful of everything we can do to protect our water resources now and throughout the winter months.

The CNY Stormwater Coalition

The CNY Stormwater Coalition was formed in order to establish a regional approach to stormwater management and water resources protection. The Coalition is made up of 27 cities, towns, villages and counties that operate Municipal Separate Storm Sewer Systems (MS4s). Through the Coalition, municipalities are working together to meet regulatory requirements while improving water quality in Central New York.

CNY STORMWATER COALITION MEMBERS

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

The CNY Stormwater Coalition is staffed and coordinated by the Central New York Regional Planning & Development Board. For more information, visit the CNY Stormwater website at www.cnyrpdb.org/stormwater or call 315-422-8276.

Evy Kennwood of Syracuse was the lucky winner of a free rain barrel at the CNY Stormwater Coalition's raffle that was held at the Westcott Street Cultural Fair in September. The rain barrel was donated by Onondaga County's Save the Rain program.

Calendar of Events

Save the Rain Bike Tour
Bring your friends for a guided ride to explore green streets, rain gardens, bioswales, and porous parking lots in Syracuse!
Saturday, October 26th, 10AM – 12PM Sign-in starts at 9:15AM
Meet at the Syracuse Center of Excellence Parking Lot | 727 E Washington St, Syracuse
Self supported helmets mandatory; registration is required.
Approximate Distance: 10 Miles
Difficulty: Moderate. Contact Amy Samuels at asamuels@oei2.org or 443-1757 with questions. http://savetherain.us/event/save-the-rain-bike-tour/

Green on Top: A Tour of Green Roofs in Syracuse
Join the Onondaga Environmental Institute and Syracuse CoE for a tour of green roofs in Syracuse!
Friday, November 2, 2012 8:30am-12:30pm at the Syracuse Center of Excellence, 727 E Washington St. Syracuse, NY
Cost: $16.52 with service fee
Registration is through Brown Paper tickets: http://www.brownpapertickets.com/event/290377. The tour is geared for architects, engineers, landscape architects and other green professionals. For more information contact Amy Samuels, 315 443-1757

CNY Stormwater Coalition meeting
1:00PM on November 12 at the Camillus Town Hall, 4600 W. Genesee Street, Syracuse. Additional information is available at www.cnyrpdb.org/stormwater or call 315-422-8276.

Central New York Regional Planning & Development Board