



City of Greenfield Storm Water Utility MS4 Program Property Owner's Responsibilities

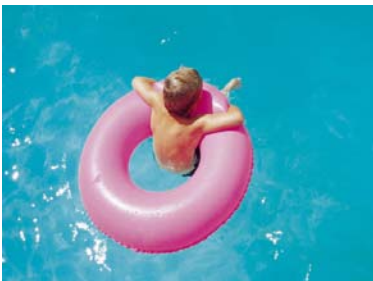
Grass Clippings

Did you know that grass clippings are considered a source of pollution when washed directly into storm drains or drainage ditches? Not only do they clog the storm drains, clippings can fill catch basins to capacity and created flooding during rain events. Dumping leaves and grass clippings into the stormwater system affects streams. The increase in nutrients associated with grass clippings can cause algae growth, which can kill fish and other aquatic life. Clippings also add organic material to the drainage system that can provide a breeding ground for bacteria and insects.



So, what do you do?

1. RETURN TO LAWN — Mulch the grass back into your yard as you mow. Contrary to some beliefs, this is beneficial to your lawn as long as you mow regularly and don't cut off too much of the grass at one time. Just remember when you're cleaning up afterward with the leaf blower, don't blow clippings into the gutter, blow them back up onto your lawn instead
2. GARDEN MULCH — Grass clippings can be used as garden mulch. Clippings can be dried in the sun for a day prior to being used in this way. Clippings can be spread on garden soil to prevent weed growth, reduce soil spattering and crusting, moderate soil temperatures, etc. As a precaution, do not use grass clippings from herbicide treated lawns until after two grass cuttings have been made.
3. CLIPPING DROP-OFF – the Greenfield Waste Water Treatment Plant serves as a collection point for grass clippings, leaves, Christmas trees and downed tree limbs. These materials are recycled by the department and converted to mulch or compost, which is available at no cost to residents for their use.



Cleaning Pools & Spas

The City of Greenfield is required by the State to eliminate illicit discharges into the storm water system. Discharge from a chlorinated or treated pool would be considered an illicit discharge. Swimming pools are a major source of chlorinated water, algacides, biocides and other pool chemicals that

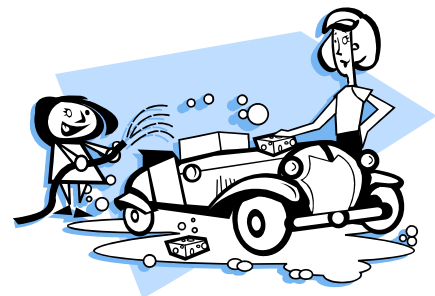
discharged into sanitary and storm sewer systems. Chlorinated water discharged to surface waters has an adverse effect on local water quality and is toxic to fish and other aquatic life. There are different options for draining your pool:

- Dechlorinate naturally by allowing the water to sit in the sun for 5-10 days without adding any chlorine. If you are unsure if the water is dechlorinated, use a pool test kit.
- Discharge the dechlorinated water to a grassy area. Of course, only drain it in any area that will not cause flooding or erosion.
- Contact your local sanitary sewer department about draining dechlorinated water to a sink or sanitary drain. Do NOT drain a pool to your septic system!

Refer to the [USEPA website](#) here for more information.

Car Washing

Outdoor car washing results in large amounts of nutrients, metals, and hydrocarbons flowing into waterways, as the detergent-rich water used to wash the grime off our cars flows down the street, into the storm drain and into streams. That polluted runoff is especially detrimental to streams during dry weather conditions. Commercial car-wash facilities are required to treat their wash water prior to discharging it to the sanitary sewer system where it receives additional treatment at the wastewater treatment plant before it is ultimately discharged to Brandywine Creek.



How can you help protect our waterways?

- Use commercial car-wash facilities.
- Wash the car on a pervious surface such as a lawn or vegetated area so the wash water can soak into the ground, where pollutants are filtered out through the soil.



Refer to the [USEPA website](#) for more information.

Pesticides, Herbicides and Fertilizers

Runoff from areas treated with pesticides can pollute streams, ponds, lakes, and wells. Pesticide residues in surface water can harm plants and animals and contaminate groundwater. Water contamination can affect livestock and crops downstream. Pesticide runoff can be reduced by:

- using minimum tillage techniques to reduce soil erosion
- grading surface to reduce slopes
- diking to contain runoff
- leaving border vegetation and plant cover to contain runoff

Pesticide losses from runoff are greatest when it rains heavily right after you apply. Reduce the chances of runoff by watching the weather forecast. If heavy rain is expected, delay application to avoid runoff. Irrigate according to label instructions. Always follow the instructions on the container label when handling and applying pesticides. When applying pesticides to the lawn or garden:

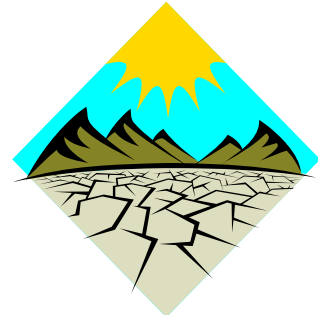
- Keep in mind vulnerable areas such as sandy soil, sinkholes, wells, streams, ponds or storm sewers, and avoid pesticide applications on sites near these areas.
- Be aware of potential access from sloping driveways or lawns into storm drains or backyard ponds.
- Observe the layout of the land. Sloping areas are far more prone to carrying storm water runoff to non-target areas than flatter areas, and areas with heavier vegetation may buffer non-target sites better than areas with little vegetation.
- You may be able to create buffer strips near sensitive areas to soak in runoff and decrease the potential for water contamination. Buffer strips are areas of vegetation installed/maintained near or around a water source that are designed to capture pollutants, sediments, etc. before they reach the water source.

Another possible way to “capture” storm water runoff and prevent it from going to non-target locations is to build a rain garden near vulnerable areas. A rain garden is a depressed, planted area that is designed to soak up excess rainwater. A strategically placed rain garden can greatly decrease the potential for contamination in other areas. Refer to the [USEPA website](#) for more information on pesticides.

Droughts and Landscaping

A lawn going through a drought is stressed. A drought is one of those times when it's best to just not do anything to your lawn. Mow as little as possible. Mow the grass high, 3-4 inches, or the highest setting on the mower. The added leaf blade tissue aids in storing water and photosynthesis. Don't fertilize, don't aerate, de-thatch, or topdress. Do not do anything to bring added stress to the plant, including aggressive lawn activities and foot traffic. Review these sites for more information.

[Lawn Care Techniques](#)
[IndyStar Article](#)
[Purdue Extension](#)



Pond and Ditch Erosion and Maintenance

Erosion occurs in ponds as a result of wave action, water currents from aerators, inadvertent damage from vehicles or other equipment, and rain impacting on bottoms, dams, and embankments of empty ponds.

Proper pond maintenance is very critical and aids in the prevention of many problems that may arise from having a poorly maintained storm water pond. Wildlife habitat destruction, flooding and erosion are issues that may occur due to a lack of maintenance. If your property is along a pond, routinely clean up litter that has collected, don't over use fertilizers and report any structural damage to your Home Owner's Association or the City.

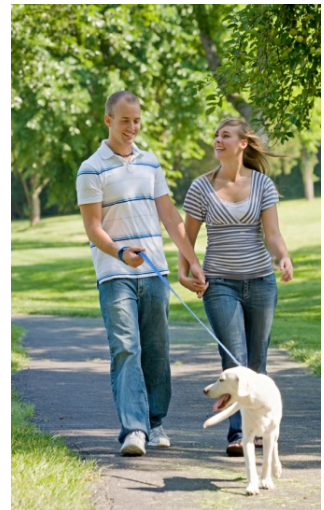
The [Storm Water Utility](#) is responsible for the inspection of ponds and storm water ditches. Please assist the City by reporting any soil erosion around ponds, streams or ditches to the Storm Water Hotline. The Storm Water Utility will accept Storm Water Hotline calls at (317) 325-1327 during normal business hours, Monday through Friday.

Pet Waste

Droppings from dogs, cats, and other commonly kept animals, such as exotic birds, rabbits, goats, and chickens, can be troublesome in two ways. First, pet wastes contain nutrients that can promote the growth of algae if wastes enter streams, lakes, and estuaries. Second, animal droppings contain bacteria that can cause disease.

The risk of storm water contamination increases if pet wastes are allowed to accumulate in animal pen areas or left on sidewalks, streets, driveways, or drainage ways from which they can be carried with storm water runoff to water bodies. Instead of allowing pet wastes to accumulate or sending them to a landfill, consider flushing the wastes down the toilet or burying them.

The City of Greenfield has provided bags for pet waste at several locations throughout the City parks. Please help keep the parks clean by cleaning up after your animal and placing the pet waste bags into the trash cans. If the bag dispenser is empty at your favorite park, contact the [Parks Department](#) at 477-4340. Refer to the [USEPA website](#) for more information on pet waste.



Autumn Leaves and Pollution

Source: Brian Hamilton, *Healthy Waters Blog* for EPA's Mid-Atlantic Region (November 3, 2011).

This time of year, most people are used to seeing leaves in yards ready for bagging, burning or to be raked into the street for pick-up. But what you don't know is how leaves affect your lakes and streams. Although leaves may seem harmless, and are biodegradable, excess leaves pose a threat to water quality. In large quantities, they block drains and contribute to localized flooding. In small quantities, the rain washes leaves down the storm water drains and they make their way into our lakes and streams. Once they get into the water, excess leaves shade aquatic life that need sun to live, decomposing leaves release nutrients that stimulate algae growth and algae blooms can lead to fish kills.



Did you know that there are some less labor intensive and environmentally-friendlier alternatives to raking or burning leaves? Simply use your lawn mower to mulch leaves directly on your lawn (set the height to around 3 inches). By shredding the leaves, you are using the leaves as a natural fertilizer returning nutrients to your lawn instead of decreasing water quality. Plus, by using the leaves, you will not have to use expensive chemicals or fertilizers on your lawns in the fall. If you prefer to bag your grass clippings and shredded leaves, empty them on your vegetable and flowerbeds or around your trees and shrubs to help suppress weeds. Compost your leaves and use them next year in your gardens.

Greenfield Leaf Pick-Up

Leaf pick-up is free within the City limits and starts every October. Leaves can be raked to the curbside or bagged leaves can be placed at curbside for pick-up on the same day if you call the Street Department before noon at 477-4380. Dates and times of availability and collection can be confirmed by contacting the [Street Department](#).

Rain Barrels and Rain Gardens



Rain water collected in a rain barrel is a free source of extra water that can be used for watering your plants and lawn, cleaning siding or washing the car. You can also use it to water your vegetables, but don't use rainwater within a couple of days of harvesting and always wash with tap water before eating. Refer to the [Indiana Association of Soil and Water Conservation District \(SWCD\)](#) website or the [Hancock County SWCD](#) for more information on purchasing or making a rain barrel.

Want to conserve more storm water?

Building a rain garden is one way you can help promote healthy creeks which sustain invertebrates, fish, frogs, birds and mammals. A rain garden is a garden in a shallow depression used to collect water that runs off from your roof, driveway and other paved areas. A rain garden filters storm water and allows it to slowly sink into the ground. It is created in a low spot in the landscape, and is intentionally designed to capture storm water and to become an attractive feature to your yard. Rain gardens also restore wildlife habitat by attracting birds and butterflies. Refer to the [Indiana Association SWCD website](#) or the [Hancock County SWCD](#) for more information on creating a rain garden.

The City of Greenfield has installed a rain garden south of the City Hall (10 S. State Street) to collect storm water runoff from the parking lot and roof runoff. Stop by and see it!

