# THE LINK FROM LAWN TO LAKE

## **STORMWATER-SMART LAWN CARE**

Understanding the connection between your lawn care habits and the health of local ponds, lakes, streams and rivers



A GUIDE TO STORMWATER-FRIENDLY LAWN CARE FOR HAVERHILL RESIDENTS AND BUSINESSES

#### Grass clippings and leaves can be major stormwater pollutants, as well as potential safety hazards

Yard debris, including leaves and other plant material like shrubbery trimmings and grass clippings, are a significant source of stormwater pollution.

When yard debris ends up in our city's streets and sidewalks, it flows down our storm drains. From there, it goes directly to our local streams, rivers, ponds and lakes, where it acts as a major pollutant by increasing nitrogen and phosphorous levels. These excess nutrients create harmful algae blooms, deplete oxygen levels, and make the water unsafe, or even toxic, for fish and other aquatic life.

The amount of phosphorous in grass clippings from mowing your lawn just once can produce up to 100 pounds of unwanted algae if it ends up in our local waters.

Leaf litter and landscape waste account for 56% of phosphorous in urban stormwater, not to mention clogging storm drains, causing potential flooding and increasing debris in our waterways. It can also pose a safety hazard to people using streets and sidewalks.



Most stormwater pollution is caused by the actions of uninformed people. Share what you know with your family, friends & neighbors and help protect our local water bodies.

# **BE STORMWATER-SMART ABOUT LAWN CARE**

#### HELP PROTECT HAVERHILL'S WATER BODIES FROM POLLUTION CAUSED BY YARD DEBRIS

#### Set mower height to 3 inches or higher

Taller grass slows the rate of stormwater runoff and produces a deeper and denser root system. Denser roots will absorb more water, reducing lawn runoff and preventing erosion. Deeper roots have access to more water stored in the ground and can reduce irrigation need during droughts. Denser roots can also suppress weeds from growing up around them.

#### Consider keeping grass clippings and chopped leaves on-site as mulch

A mulch-mower is ideal for retaining and spreading clippings on your lawn. The clippings decompose guickly, provide important nutrients for your lawn, and settle to create an organic layer on the soil that encourages stormwater infiltration. This technique can significantly reduce or eliminate the need and cost of nitrogen fertilizers.

#### Keep clippings and chopped leaves out of streams, off the street, and out of storm drains

If mulching is not possible, bag the clippings and either store them in a compost area where the organic material can be used as a fertilizer at a later date, or dispose of them properly. Blowing them onto a street or into a storm drain sends the clippings directly to local waterways, where they decompose and act as major pollutants by increasing nitrogen and phosphorous to unsafe levels for fish and other aquatic life.

#### What you SHOULD DO with leaves and grass clippings:

- Leave them on your lawn
- Compost them
- Bag and dispose of properly. For information about Haverhill's yard waste drop-off program, as well as annual curbside leaf pickups, visit CityofHaverhill.com

#### What you SHOULDN'T DO with leaves and grass clippings:

Intentionally blowing or placing lawn waste in the street is a VIOLATION of local regulations, enacted to protect our local waterways and maintain public safety.

#### Do you use a yard care service? —

It is still up to you, the homeowner, to make sure that your landscaper does not contribute to stormwater pollution. Make sure they clean up stray clippings and dispose of them properly, instead of leaving them on the street.

### **CONTACT INFORMATION**

#### Lawn fertilizer: Does your lawn really need it?



Many lawns do not need fertilizer, either due to the existing soil fertility, or by carrying out alternative practices. Using no fertilizer is ideal for the health of our waters, but if your lawn is thin or has bare spots, you should consider fertilizing it, because a thick, dense lawn is the most "stormwater friendly" lawn.

#### Use less fertilizer on your lawn

Many lawns need as little as half the amount of fertilizer indicated on the packaging. Have your soil tested at a local nursery. By using less fertilizer, you'll reduce pollution and still keep your lawn green and healthy.

Over-fertilizing by just one excess pound, for the average size lawn, can result in 34 pounds of excess algae growth in local waters.

To prevent fertilizer washing into storm drains, avoid fertilizing before a heavy rain. It is also best to use slow-release or phosphoruous-free fertilizer.

#### **Reduce stormwater runoff**

Consider directing downspouts onto lawns, instead of paved surfaces, to further reduce runoff.

For additional stormwater information ...........Stormwater Program Coordinator: 978-374-2383, or visit www.cityofhaverhill.com/departments/storm\_water\_program

# **Stormwater Management**

The City of Haverhill strives to maintain a strong, effective stormwater program that will aid in protecting properties and keep a safe, healthy environment for the city's residents. To remain effective, stormwater infrastructure needs to be maintained and updated, just like the city's roads, water lines and sewer lines.

Historically, stormwater management has focused primarily on flood control. But today's state and federal regulations require a more stringent, comprehensive approach to stormwater management—one that addresses both water quality and water quantity. This includes new federally mandated (but unfunded) responsibilities to manage the City's drainage system more closely, study the contents of stormwater runoff, seek and eliminate illicit discharges and illegal dumping, and educate the public about ways to reduce stormwater pollution and protect our community's waters.

To aid the City of Haverhill in meeting these stormwater management requirements, the City is exploring the possibility of establishing a Stormwater Utility. A Stormwater Utility is similar to a water or sewer utility, providing a dependable financial resource for funding continued operation, maintenance, construction (or reconstruction) of a municipality's stormwater-related infrastructure, such as culverts, storm drains, pipes, catch basins, ditches, curbs, gutters and detention ponds. A Stormwater Utility can also be used as a fund to pay for costs a municipality must bear for stormwater management programs.



City of Haverhill Wastewater Department **STORMWATER PROGRAM** 40 South Porter Street, Haverhill, MA 01835 978-374-2383 www.cityofhaverhill.com/departments/storm\_water\_program