Pollution Prevention: A Guide to Yard Waste and Lawn Care

Lawn maintenance can make your house and yard more beautiful. But what we do to maintain our lawns can affect the environment around us. When it rains, water flows off our yards, streets and parking lots directly to our creeks and lakes without ever being cleaned. As it flows to storm drains, storm water can pick up anything in its path including things like oil, dirt, litter, pet waste and yard chemicals.

Fertilizers

Fertilizers are essentially nutrients used by plants to live. Most fertilizers contain nitrogen, phosphorus and potassium but can contain other elements as well. Just like humans, plants can only use so much food. Fertilizer not used by the plant is available to mix with rain and becomes storm water pollution.

- Apply fertilizers exactly where you want them.
- Improve the health of your soil by adding compost and using organic mulches.

- Use fertilizers sparingly.
- Leave grass clippings on your lawn as a natural fertilizer.
- Store fertilizers in areas that are covered to avoid mixing them with rain.

Yard Waste

Not only does yard waste cause blockages to the drainage system which leads to localized flooding, it can also quickly super-fertilize streams and lakes which leads to algae blooms and fish kills.

- Sweep up yard debris from streets and sidewalks instead of washing it away.
- Blow leaves and grass clippings back into your yard instead of leaving them in the street to wash down the storm drain.
- Never dump grass clippings and other yard waste into storm drains or on creek banks.
- Curb bagged yard waste or compost it.

For more information, visit **http://stormwater.charmeck.org**.



To report pollution or drainage problems, call 3-1-1.



Storm Water Services 600 E. Fourth Street Charlotte, NC 28202





Charlotte-Mecklenburg Floodplain Maps Updated

Storm Water Services is updating local floodplain maps. New maps for the Little Sugar Creek and Briar Creek Watersheds are now available in draft format.

Public meetings about the draft maps were held from late September through early November.



Floodplain maps for Little Sugar and Briar Watersheds are expected to remain in draft status until early 2011. The Mecklenburg Board of County Commissioners and the Federal Emergency Management Agency (FEMA) must approve the maps before they take effect. The approval process is expected to continue into 2012.

Floodplain maps for other Charlotte-Mecklenburg watersheds will be revised in the future.

Flood risks change because of:

- Development
- Population changes
- Local projects to manage storm water

Mapping technology has improved since the last maps were drawn ten years ago. Those advancements allow Storm Water Services to more accurately predict where floodwater is likely to flow. The new maps will also calculate how deep floodwater is likely to get.

For more information, visit http://stormwater. charmeck.org and go to Storm Water news.

GIS Benefits Citizens

Storm Water Services division uses multiple GIS (geographic information system) data layers daily. Here is a sample of data collected and how it benefits the citizens of Charlotte:

• Infrastructure Inventory – Not only does this inventory give staff a visual representation of the infrastructure, but the attribute data stored in the inventory layers help staff do the following:

- Determine flood-prone areas
- Perform calculations when planning and designing new systems
- Identify and prioritize maintenance needs on existing systems
- Fulfill Clean Water Act requirements

• **Requests for Service** – Citizens file requests for service through the City's 311 call system. Storm

Water Services converts the requests into point files, so staff can easily visualize the number of requests in a drainage area. This data is important for prioritizing maintenance work and planning



for large-scale improvements such as a capital improvement project (CIP).

• Storm Water Project Areas – Large-scale projects such as CIPs and Stream Restoration are created as polygons for visual representation. The areas are used when sending project mailings to affected citizens and *(GIS continues on inside right)*

LITTLE SUGAR CREEK CHANGES FROM 'GRAY WAY' TO GREENWAY

It's the most prominent section of Charlotte's most prominent creek. And the Little Sugar Creek stream restoration and greenway project from Charlottetowne Avenue to Morehead street was completed in August.

The project has been in the works for more than a decade, starting with Mecklenburg County's purchase of more than a dozen businesses located in the floodplain in the late 1990s and early 2000s. For nearly 50 years, that part of Little Sugar Creek was hidden under a shopping center parking lot that stretched the length of three football fields.

The parking lot was removed in 2007, "daylighting" the longneglected stream. Charlotte-Mecklenburg Storm Water Services restored the creek's natural curving path and added pollutionremoving wetlands and lush native plants to the newly-stabilized and sculptured banks. Stream restoration improves water quality in the creek.

Mecklenburg County Park and Recreation built more than 3,150 feet of paved trail along the restored stream. Graceful fountains surrounded by rounded plazas, a visitors kiosk and an elegant clock tower are special features of the new greenway. Park benches, an arched pedestrian bridge and granite carvings make this promenade a great place to relax, to connect with nature or to access Center City.

"Little Sugar Creek flows through the heart of Charlotte, and this signature spot will become the heartbeat of our community," said Dave Canaan





with Charlotte-Mecklenburg Storm Water Services. "This project proves it's not too late to fix the problems caused by years of pollution, neglect and unwise development."

"Creating a community treasure" is how Gwen Cook of Park and Recreation describes the stream restoration and greenway project. "We've gone from a gray way to a greenway." The Little Sugar Creek Greenway trail links neighborhoods, schools, CPCC, a hospital, parks and Park Road and Carolina Place shopping areas. Eventually, the trail will extend 15 miles along Little Sugar Creek from above NoDa in north Charlotte through the Midtown Square area to the South Carolina line in Pineville.

(GIS continued from front page) are also posted on the Storm Water website.

• Easement Tracking

– This is a point file that shows which parcels contain temporary or permanent easements for construction and/or maintenance purposes

• Impervious Surface – Billing is based on the amount of impervious surface per tax parcel. This layer is digitized from satellite imagery to ensure the most accurate calculations for citizens.



Soil testing kits are free. A soil test report gives you precise nutrient requirements for the soil type and plant type in your situation. Soil testing takes the guesswork out of lime and fertilizer purchases.

Soil test your yard before applying lime or fertilizer. Visit **www**. mecklenburgconservation. **com** to request a free soil testing kit.



BIG SWEEP REMOVES 16,670 POUNDS OF TRASH FROM LOCAL WATERWAYS

A little elbow grease goes a long way to clean up local creeks and lakes. More than 500 people took part in Charlotte-Mecklenburg's annual "Big Sweep" cleanup on October 2, 2010. The volunteers removed 16,670 pounds of trash from Charlotte-Mecklenburg waterways. That is eight tons of trash consisting mostly of bottles, cans, food wrappers and other litter.

Sweepers hauled in:

- A dog house
- decoration!

Charlotte-Mecklenburg Storm Water Services organized the day-long cleanup at ten staffed locations. Volunteers could also



In addition to removing 707 bags of garbage and 27 tires, the Big • A baby training potty • A giant candy cane yard

select any creek convenient to them and report their Big Sweep collection results online.

"I love this event," says Erin Oliverio, Big Sweep coordinator. "It is wonderful to see so many people come out to clean-up our creeks and lakes."

Trash in creeks and lakes is not just ugly. It can threaten wildlife and impact our drinking water supply.

A huge thank you to the 500 volunteers, including two scuba divers. Our creeks, lakes and river are cleaner thanks to you!

Please keep our waterways clean throughout the year, get involved by visiting **http://stormwater**. charmeck.org and click on Volunteer/Get Involved.