



City of High Point Stormwater Education & Outreach Program

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City of High Point

Prohibido botar basura y líquidos porque desaguan en el alcantarillado

City of High Point – NPDES Phase II Permit

- ▶ Our office:
 - ▶ Operations Analyst
 - ▶ 2 Stormwater Specialists
 - ▶ GIS Analyst

Phase II Program Components

1. Public Outreach & Education

- Conduct public outreach activities.
- Distribute educational materials to the community.
- Inform the public on steps they can take to reduce or prevent stormwater pollution.
- Raise public awareness on the causes and impacts of stormwater pollution.

- ▶ Goals and Objectives based on three high priority, community wide issues:
 - ▶ Reduction of pollutants that discharge into the stormwater drainage system.
 - ▶ Promote techniques used to reduce the pollutants that enter into the stormwater drainage system.
 - ▶ Reduce the amount of floatables from litter/debris.

Educational Tools

Catch Basin Model

- ▶ Tabletop visual
- ▶ Easy mobility
- ▶ Quick or detailed interactions



Educational Tools

Enviroscape

- ▶ Demonstrates concepts of
 - ▶ watersheds
 - ▶ non-point source and point source pollution
 - ▶ different origins of common stormwater pollutants
- ▶ Better for longer, engaged audiences (most often school groups)



Educational Tools

Macroinvertebrates

- ▶ Tabletop Visuals for indoor/outdoor activities



Educational Tools

Prize Wheel and Banner

- ▶ Eye catching
- ▶ Noise making
- ▶ Engaging



Printed Materials and Giveaways

General information for preventing stormwater pollution.

TYPES OF POLLUTION

Automotive Washing

- Wash your vehicle in the grass. The wash water will be treated by the soil, and the grass will benefit from the water.
- An alternative is to wash your vehicle at a commercial car wash facility. By doing this, dirty wash water can enter the sanitary sewer system where it can be treated before being released back into the local stream.



Effects: When vehicles are washed in driveways and parking lots, the dirty wash water finds its way into the stormwater system and ultimately back into local waterways. Wash water contains pollutants such as oils and grease, phosphates (from the soap), and heavy metals. All of these have negative effects on our local water quality.

Automotive Maintenance

- Remove the oil from your vehicle into the appropriate container (drip pans) and be sure not to spill any on the ground.
- Do not mix used motor oil with any other substance, like anti-freeze, solvents, or paint.
- Recycle your oil by taking it to a service station or other locations that collect used chemical materials.



Effects: If disposed of improperly, used motor oil can contaminate our water supply. One quart of motor oil can contaminate 250,000 gallons of water. It should never be dumped into a storm drain.

Keeping our water free of pollution
is everyone's responsibility!



For more information about water
pollution, illicit discharges, and
stormwater, please visit:

www.highpointnc.gov



Public Services Department

Stormwater Division

P.O. Box 230

High Point, NC 27261

Phone: (336) 883-3111



**PROTECTING
WATER QUALITY**

WHAT YOU CAN DO TO HELP



Public Services Department
Stormwater Division

Printed Materials and Giveaways

General information for preventing stormwater pollution.

STORMWATER

Defined by the Environmental Protection Agency as:

Rainwater and melted snow that runs off streets, lawns, farms, construction, and industrial sites and into surface water.



Surface Water

- Streams
- Rivers
- Lakes
- Ponds
- Refers to any natural or man-made body of water



When water flows over land, it collects pollutants and carries them into our waterways.

Even if your house is not near a stream or lake, the runoff can flow down the street, into a ditch, storm drain, and eventually empty into a body of water, along with the pollutants collected during the runoff.

By making wise decisions in our communities, we can prevent pollutants from reaching our lakes, rivers, and streams. Read on to find out how!

TYPES OF POLLUTION

Pet Waste

- Be sure to fully and immediately clean up after pets on any public property (streets, sidewalks, right of ways, storm drains, creeks, etc.).
- Carry a clean-up device (bag or scooper) when taking a pet on a walk.
- Dispose of pet waste in a closed trash receptacle or refuse container.



Effects: Pet waste can be a serious water quality and public health issue. Stormwater runoff can carry bacteria, parasites, viruses, and nutrients directly into local waterways.

Yard Waste

- Do not rake, sweep, blow, or place any debris into the storm drainage system (catch basins, grate inlets, etc.).
- Property owners should keep all ditches, drains, swales, and other drainage ways on their property free from obstructions, which can impede the flow of water.



Effects: Debris can be defined as any yard waste (*grass, clippings, leaves, pine straw, etc.*), sediment, trash, litter, etc. Debris can cause significant water quality and infra-structural problems when it is directed into the storm drainage system.

Sediment

This is the #1 pollutant of water in the country! This can be caused by building and construction activities that remove the plants that keep the soil in place.



TYPES OF POLLUTION

Effects: Excessive sediment blocks sunlight needed by aquatic plants and animals, increases water temperature, and impairs feeding, vision, and breathing capabilities of these animals.



Pesticides & Fertilizers

- Use fertilizer and pesticides sparingly.
- Keep fertilizer off paved surfaces. Sweep it back into the grass if it spreads to pavement.
- Do not fertilize before a rainstorm. This could wash material into storm drains.



Effects: Improper use of chemicals can impair water quality when it runs off into surface water. Test your soil to determine lawn nutrient needs. Test kits are available through your county's cooperative extension office.

Fats, Oils & Grease (FOG)

- Generated from kitchens, vehicles, and machinery.
- When fats, oils, and grease get into the sewer or storm system, they stick to the inside of pipes. Over time, FOG will build up in the pipe and create a blockage, which can cause an overflow.
- Dispose of FOG in the trash or a designated container.
- Do not dump FOG down a sink or drain.



Effects: The untreated sewage from an overflow can pollute our waters with bacteria, nutrients, and many other water quality contaminants.

Printed Materials and Giveaways

- Banner pens
- Magnets



Printed Materials and Giveaways

Volunteer Opportunities Stormwater Division



Storm Drain Marking

Help the City of High Point spread the word that **only rain should go down the drain!** If you would like to volunteer to mark storm drains you will need at least one other person (adult) or a group to join you. You will get to use a stencil and spray paint to mark storm drains.



Adopt-A-Stream

The Adopt-A-Stream program gives groups the opportunity to make a difference by cleaning up a stream behind their neighborhood, school, church, or anywhere else in the city. All supplies are included and a sign will be placed in honor of the adoptive organization!



Annual Clean-up Events

Each year the Keep High Point Beautiful initiative hosts The Big Sweep and The Great American Cleanup. These are state-wide and nation-wide events that any individual or group can sign up to attend. All supplies and lunch are provided.



NORTH CAROLINA'S INTERNATIONAL CITY™

For more information: Please contact the Stormwater Division at 336.883.3455 or visit highpointnc.gov/pubsrv/stormwater

Printed Materials and Giveaways

- ▶ Pet waste trifold
- ▶ “Scoop the Poop” Baggies



What You Can Do to Help

If you live in multi-family housing:

- Make sure there are readily available pet waste stations equipped with doggy bags and receptacles.
- If you do not have these where you live, ask your property management if they could install them.

If you walk your dog in public places:

- Always carry a plastic bag with you to pick up after your pet.
- Carry extras so you don't run out, or you can help someone in need.

If you live in a home where your pet uses the yard:

- Regularly pick up after your pet, or bury the waste. Burying the waste will prevent immediate runoff when it rains.
- Aerate your soil to improve absorption and minimize runoff.

Please do your part and pick up after your pet.
They can't pick up after themselves!



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is everyone's responsibility!



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**WATER QUALITY
& PET WASTE**

WHAT YOU CAN DO TO HELP



**Public Services Department
Stormwater Division**

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Stormwater: What is it?

Defined by the United States Environmental Protection Agency as:

Rainwater and melted snow that runs off streets, lawns, farms, construction, and industrial sites and into surface water.

Surface Water

- Streams
- Rivers
- Lakes
- Ponds
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How can pet waste from my yard make it all the way to a river or lake?

Sometimes it is hard to imagine how pollutants in your yard can be harmful to a lake or a river miles from where you live.

Stormwater pipes and ditches do not go to a facility that treats the water. Instead, they connect to other pipes that eventually empty directly into a stream, river, or lake.

Any pollutants picked up along the way are emptied into that body of water.



Stormwater pipes transfer water from the street directly into streams.

When pet waste isn't cleaned up, it won't take long for rain to carry it to a stormwater drain or ditch, and make its way to our water.

High Point Pet Waste Statistics

- Approximately 37% of households own dogs.
- This would equal approximately 15,540 dogs in High Point.
- The average dog produces 274 pounds of waste per year.
- That is over 4.2 million pounds of pet waste that could make it into our streams, rivers, and lakes each year!



What is the difference between my pet's waste and wild animal waste?

Answer: Concentration and Location

Domestic pets spend their time in areas where their waste will quickly runoff into a storm drain. They typically use the same yard, park, or walking route which means high concentration of contaminants.

Wild animals spend their time in areas where waste will be absorbed into the ground and decompose. They have a greater land use range which means a lower concentration of contaminants into the water.

Why is Pet Waste Bad?

In addition to being a public nuisance in our parks and neighborhoods, pet waste is also a health risk to humans and animals.

Whether it's in your yard or on the street, when it rains, pet waste runs into storm drains and ends up in streams, rivers, and lakes.



Pet waste contains roundworms, E. coli and Giardia. If contact is made with these contaminants while fishing or swimming in a lake or stream, this could pose serious health risks to humans.



Effects of excess nutrients at a water quality pond.

Pet waste transfers excess nutrients to our waterways. Excess nutrients can cause algal blooms which block sunlight and deprive the water of oxygen. Fish, salamanders, tadpoles, and other aquatic organisms need that oxygen to survive.

The Value of Partnerships

- ▶ Within the City of High Point:
 - ▶ Keep High Point Beautiful
 - ▶ The Public Library
 - ▶ High Point Farmer's Market
 - ▶ Parks and Recreation
 - ▶ Environmental Services
 - ▶ Planning and Development
- ▶ Outside of the City of High Point:
 - ▶ Guilford Creek Week Committee
 - ▶ Triad Water Stewards



The Value of Partnerships



guilfordcreekweek.org @guilfordcreekweek @guilfordcreekweek



**GUILFORD
CREEK WEEK**

Join us for our 2nd annual
Guilford Creek Week!
March 23-30, 2019

SATURDAY, MARCH 23

Creek Week Kickoff Party Gibson Park • 5207 W. Wendover Ave. • Jamestown • 10 am to 2 pm.

Nature Walk with T. Gilbert Audubon Society Tankersley Drive behind Moses Cone Hospital • 10 am.

Creek Week Lake Shore Trail Walk Piedmont Environmental Center • 1220 Penny Rd. • High Point • 10 am - 11:30 am. *Must register by March 21. \$3 per person.*

Kids Water-themed Art Class Wine and Design Jamestown • 121 E. Main St. • Jamestown • 11 am • *\$25 per person.*

Pit Trail Hike at Haw River State Park Iron Ore Belt Access • 6068 Church St. • Greensboro • 2-3:30 pm.

Water, Water Everywhere Glenwood Library • 1901 W. Florida St. • Greensboro • 3-4 pm.

Fun with STEAM: Water Wonders Vance Chavis Library • 900 S. Benbow Rd. • Greensboro • 3-4 pm.

Water-themed Art Class Wine and Design Jamestown • 121 E. Main St. • Jamestown • 6:30 pm • *\$35 per person.*

Current Projects

- CARP (Catchment and Retrieval Project)
- Litter catchment and data collection



Questions or
Comments?

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