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The City of Raleigh

URBAN WATERSHEDS



Looking Ahead:

*Fall Stormwater Volunteer
Stream Monitoring Workshop*

*Foster-a-Stream Cleanup &
Other Volunteer Opportunities*

StormwaterVolunteer@raleighnc.gov
or 919-996-3940

Stormwater PSA Video Winners & City of Raleigh Environmental Awards

On April 21, the City held the Ninth Annual Environmental Awards Event recognizing individuals, groups, students, and organizations for their outstanding stewardship in protecting and preserving our environment.

For the third year, the Stormwater Division sponsored a high school public service announcement competition. This year, the PSA competition had an outstanding number of registrants, receiving 22 video entries. Students were tasked to create a 60-second video to educate the public on water quality issues found in our community. Raleigh, like so many other communities, faces many issues impacting the quality of water in our streams, lakes, and waterways. Some of those issues result from increased runoff volumes from development. Increases in illegal discharges into our stormwater drainage system directly impact our streams, creeks, and lakes.

All 22 entries met the competition criteria and were reviewed by a panel of judges. Three videos were chosen to receive awards, one first place winning video and two second place winning videos (tie).

And the winners are:

- First Place - Graham Lowder, Jessie Collier, Rachel Williams, and Tobias the Guinea Pig: Law & Order: Special Runoff Unit
- Second Place - Marideth Batchelor: Stormwater PSA Doodle
- Second Place - Elizabeth Durand and Sarah Volpert: What is Stormwater Runoff?

The City of Raleigh extends a special thank you to all the students who submitted videos and for their dedication and efforts to protect and preserve our water and the environment.

Congratulations to all!

Hurricane Season and Flooding

June marks the start of many things, including vacations, warmer temperatures, and overall fun in the sun. Unfortunately, it also marks the beginning of hurricane season, which runs from June 1 through November 1 for our region. In Raleigh, the main concern about hurricanes is flooding from streams, although wind is a serious concern as well.



If you live next to a large creek or river, you have probably experienced flooding. Raleigh has two types of flood zones: Federally-regulated and City-regulated. The Federal Emergency Management Agency (FEMA) regulates larger floodplains around creeks and rivers, and Raleigh regulates smaller streams.

The first thing to know is whether you live in a designated flood zone. If you are in a FEMA flood zone, you probably know it because FEMA requires flood insurance for all structures within one of its flood zones. You can verify if you are in a flood zone by calling the City's Stormwater Management staff at (919) 996-3940, or you can look up your property at www.ncfloodmaps.com. Paper flood maps can be viewed at the Olivia Raney Local History Library. The flood maps also show flood risk for our overall community. Any land area susceptible to inundation from flooding is shown on these maps.

Also, FEMA is updating the flood maps for Raleigh. These new maps are not yet in effect, but you can view them in comparison to the current maps at <http://maps.wakegov.com/femacompare/index.html>.

National Flood Insurance Program (NFIP) was created by the federal government in 1968 to provide reasonably priced flood insurance since normal homeowner's insurance does not cover flooding. Separate policies can be obtained for single family homes, condominiums, mobile homes on foundation, and commercial buildings. You do not have to be in a flood zone to obtain flood insurance, but if you are in flood zone, it is required for any federally-backed mortgage. Your local insurance agent should be able to give you quotes for flood insurance. Be advised that there is a 30-day waiting period for flood insurance.

Once you know if your property is in a flood zone, it is time to get prepared for a storm. Prepare an emergency kit that can help you get through the after-effects of a storm. A kit should include; a three-to-five day supply of nonperishable food and water, can opener, three-to-five day supply of all medicines, flashlight or lanterns, battery-powered radio or television, first-aid kit, special items for infants or children and any items needed for pets. More detailed information for the emergency kits can be found at www.ready.gov/build-a-kit. These kits are invaluable for getting you and your family through a large storm event.

Staying informed about weather events in our area is another way to prepare. The City provides updates on local radio and television stations if a hurricane is approaching. You also can track weather on the National Weather Service site for Raleigh at www.weather.gov and search for Raleigh. You can sign up for email alerts from the City through our website, follow the City on twitter @RaleighGov, or follow the National Weather Service @NWSRaleigh.

Getting informed about your property, being prepared for emergency events, and staying informed with these events will help you and your family enjoy the fun parts of this summer and safely navigate through hurricane season. _____

It's never too late to get involved

The Volunteer Water Monitoring Workshop and the Foster-A-Stream cleanup may be over for the spring season, but opportunities go on. No matter the season, the Stormwater Division has a volunteer opportunity to fit your interest.

For the past 10 years the Stormwater Quality Section of the City's Stormwater Division has offered opportunities to engage in activities to improve water quality in streams, creeks and lakes around Raleigh. Our stormwater is not transported to a treatment facility, it's released directly into our waterways. What we do on the land directly affects our water.

Nearly all Raleighites live near a stream, so our stream monitoring program might be a good fit and convenient. Before engaging in this program, you'll need to participate in a workshop and learn how to use the water monitoring kit we provide and what pollutants are of concern. You'll get to wade into a nearby stream to use the kit and get a short lesson in identifying macroinvertebrates, critters that inhabit most streams. The diversity and number of critters you find is directly related to the quality of water in the stream. Your stream monitoring will help City staff address unusual water quality or potential illegal discharges in a timely manner.

Our Storm Drain Marking program is great fun for all ages. We provide materials needed to place "No Dumping-Drains to the Neuse" disks on the top of the storm drain lids. This program is easy, fun, and one of the most helpful activities to discourage would-be violators from disposing of yard waste, chemicals, and other pollutants directly into the City's stormwater drainage system. This can be a one-time activity or something you and your organization or family participates in regularly.

Do you like hiking near or canoeing in one of our many lakes and streams? Then our Adopt-a-Stream program might be a good fit. Why not take a trash bag or several on your next outing and pick up trash? You might have noticed our signs around Raleigh showing where companies, organizations and families have formally adopted a stream section for regular cleanup. You could have one too! Contact our Stormwater Volunteer Coordinator for locations in need.

And if you really want to help, but you can't commit on a regular basis, then our Foster-A-Stream program is for you. This is a drop-in activity, a couple of hours out of your day with no long-term commitment. You can join in once or as often as you want. The Foster-a-Stream cleanup is organized by Stormwater staff and scheduled twice a year, once in the spring and once in the fall. It is an opportunity for stormwater staff to participate side by side with citizens in a much-needed cleanup of a stream that has yet to be formally adopted. Locations vary, but it is always within the City. You just need to register, so that we have enough supplies, and show up on the day at the designated time and location. It's that easy.

Here's a sampling of recent outings to pique your interest...

The Spring Stream Monitoring Workshop and Foster-A-Stream were both well attended. The monitoring workshop was a full house on March 19. The group of 12 prospective stream monitors received classroom instruction on the program and the use of equipment needed for monitoring. Then attendees suited up for the "in stream" portion of the workshop. Waterproof boots, gloves, and jackets were needed on the rather cool, overcast day. Before entering the stream, the group was divided into two, one focused on using monitoring equipment and the other group used nets to locate and identify macroinvertebrates that inhabit the stream.



On April 23, in conjunction with Earth Day, Stormwater staff held the spring Foster-A-Stream outing. This staff-initiated and organized program is very popular with citizens and organizations. A total of 40 volunteers collected trash from a stretch of stream located adjacent to a section of the Apollo Park greenway trail. The volunteers collected 40 bags of trash, two bicycles, and one tire. This is a large amount of trash for a two-hour volunteer outing. Thanks to our many volunteers for making this a great success!

Come and join us, help keep our streams, creeks, and lakes clean. Contact RaleighVolunteer@raleighnc.gov for more information or call 919-996-3940

Earth Day, Students, Education and Fun! - It's a Winning Combination



What could be better than a national day set aside for celebrating environmental awareness, and protecting Mother Earth? The obvious answer is one that includes water, students and fun activities!

Several members from the Stormwater Division were busy with these activities in April. On April 21, staff visited two schools in Raleigh, using our Enviroscape, a hands-on activity with fourth grade classes. The Enviroscape model combines rain, stormwater runoff, and children, which equals fun! The watershed model has various types of development: single family subdivision, farm and farm land, a factory, forested area, and roadways, all draining to one point or waterbody. After discussing what a watershed is and identifying different types of pollutants, several surrogates of those pollutants were placed on the watershed model: pet waste, motor oil, fertilizer, pesticides, and trash. Groups of seven students then had the opportunity to make it rain over the watershed, using spray bottles to create stormwater runoff. As the water flowed down our watershed the students got to witness how pollutants enter waterbodies and harm macroinvertebrates that live there and the people and animals that rely on it for drinking water.

Protecting our water is crucial for our future. Contact us anytime for an Enviroscape presentation: 919-996-3940 or RaleighStormwater@raleighnc.gov

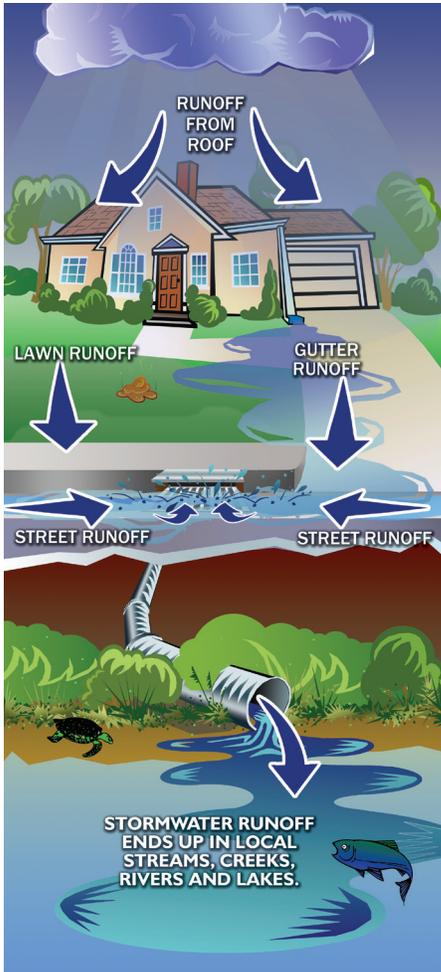
Stormwater Division Participates in Pilot Program: "What Works Cities"

With leadership and support from Mayor McFarlane and City Council, Raleigh's Stormwater Division was selected in March to collaborate with the City's Budget and Information Technology Departments to serve as the City's pilot program for the innovative What Works Cities initiative. Launched in April of 2015 by Bloomberg Philanthropies, What Works Cities is a national initiative working with cities across the country to enhance their use of data and evidence to engage residents, make government more effective, and improve lives. Through world-class partners, this initiative provides technical assistance to cities with populations between 100,000 and 1 million that are committed to improving the way they use data. Importantly, the initiative will support the City's strategy for delivering highly beneficial results and outcomes for residents and the community.



Through the What Works Cities initiative, the City's team is developing a wide range of key performance indicators along with a catalog of data that will be regularly updated, reported on the City's website, and utilized for tracking the success of local services, programs, and projects. Key performance measures and open data for the Stormwater Division will be highlighted and made available on the City's website beginning this summer. Citizens will readily find up to date information on local stormwater services and projects that benefit quality of life within the Raleigh community by reducing flooding hazards, protecting and improving natural streams and surface water quality, and maintaining public stormwater infrastructure.

For more information please visit the City's Stormwater Division at Raleighnc.gov- Keyword: Stormwater Management.



Stormwater Division Contacts

Stormwater Staff
 Stormwater Fee Inquiries
 Illicit Discharge Response
 Sedimentation and Erosion Control
 Floodplain Inquiries
 Drainage Concerns on Private Property
 Drainage Concerns in the Street
 Volunteer Opportunities

919-996-3940

StormwaterFees@raleighnc.gov

Pete Duffy

Lauren Witherspoon

Ben Brown

Chris Stanley

919-996-6446

StormwaterVolunteers@raleighnc.gov

Raleigh's Stormwater Website Resources

City of Raleigh
 Stormwater Management Division
 Adopt-A-Stream Volunteer Program
 Storm Drain Marking Volunteer Program
 Stream Monitoring Volunteer Program
 Water Pollution
 Flood Information

www.raleighnc.gov

keyword search "stormwater division"

keyword search "adopt a stream"

keyword search "drain marking"

keyword search "volunteer stream monitoring"

keyword search "water pollution helpline"

keyword search "flooding"

Additional Educational & Volunteer Resources

Clean Water Education Partnership
 North Carolina Stormwater and Runoff Pollution
 North Carolina Watershed Stewardship Network
 Sound Rivers (Neuse Riverkeepers)
 River Guardian Foundation

www.nccleanwater.org

www.ncstormwater.org

www.ncwatershednetwork.org

soundrivers.org

www.riverguardfdn.org

THE STORMWATER MANAGEMENT MISSION

Manage stormwater to preserve and protect life, support healthy natural resources, and complement sustainable growth within a vibrant community.

ISSUE 18 SUMMER 2016

A STORMWATER MANAGEMENT DIVISION PUBLICATION

MORE INFO

raleighnc.gov

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