

Welcome

Welcome to our 8th installment of Changing Tides. This issue is packed with program updates, announcements and more! All of the programs that you read about are brought to your HOA, school, civic group, or organization free of charge. Our goal is to share with you the ways in which YOU can become a steward in your own back yard and in our community. If you want to get more involved please contact us for more details, we would love to hear from you. If you want to receive our newsletter by email, to help us reduce paper waste, email our staff at drharrison@nhcgov.com or eriley@nhcgov.com. Thank you for your interest in New Hanover Soil and Water Conservation District! Please recycle when you are done!



Changing Tides

PROJECT SPOTLIGHT: Outdoor Environmental Learning Centers (OELC)

We at NHSWCD strongly believe that our youth are a key component of a sustainable future, and we are huge advocates of educating them about our natural resources and environmental stewardship at a young age. New Hanover County Government has assisted us with our education efforts by allocating funds for OELCs to be installed at the four pre-K centers in the county. These OELCs will allow our young, budding environmentalists to go outside and be taught hands-on activities in an outdoor environment. This spring, we installed OELC pollinator gardens at Howe, Johnson, College Road Early Childhood Center, and Rachel Freeman. All pre-K students at each school helped with the plantings. The students loved getting their hands dirty and learning about roots, soil, and pollinators such as bees and butterflies. We are very thankful for the County's support on this project, and we look forward to installing other OELCs in the future.



Best Management Practices (BMP) 101

Stormwater Best Management Practices (BMPs) are control measures a landowner can take to reduce stormwater runoff and pollution from entering our waterways. A BMP can be an action, a structure, or a practice. Stormwater BMPs can significantly reduce the amount of polluted stormwater entering our waterways and environment. Within New Hanover County you can visit BMPs at: Tidal Creek Co-Op, Airlie Gardens, Bradley Creek Elementary, Alderman Elementary, or Anne McCrary Park. Some examples of BMPs you might see at these sites include: bio-retention areas, wetlands, cistern, marsh sill, rain garden and/or pet waste receptacle. We have currently installed over 25 BMPs through the Community Conservation Assistance Program (CCAP) and 'Heal Our Waterways' program.

Stormwater is created when rain cannot filter into the ground. When this rain falls on impermeable surfaces like driveways, roads, and roofs, the water will flow over the hard surface and pick up pollutants along



the way. These pollutants include: pet waste, sedimentation, fertilizers, pesticides, car fluids, and litter. To reduce the amount of pollutants entering our waterways we must consider personal, household and community wide efforts and behavioral changes to limit these non-point source pollutants. There are many things that individuals can do to reduce pollutants from entering our water. Cleaning up after your pets, diverting gutters to where they run into the ground and not the driveway, using natural and organic pesticides and fertilizers, and not littering are just a few of the many actions we can take to help protect our local waterways.

We look forward to installing additional BMPs throughout our community. If you are interested in installing a BMP in your backyard or place of business please contact NHSWCD at drharrison@nhcgov.com for more details, or visit our website.

Heal Our Waterways

Bradley and Hewletts Creek both suffer from polluted runoff, especially from improperly disposed of pet waste. It is a common misconception that sewage spills have polluted these creeks and caused shellfish harvest closures. Polluted runoff is the primary and ongoing source of poor water quality and shellfishing closures in these creeks. Through the Heal our Waterways program we work with the City of Wilmington and you and your community to install Best Management Practices (BMPs) that will capture water and naturally filter polluted runoff, which would otherwise drain directly to the creeks.

The BMPs we are offering to install include rain gardens & rerouting downspouts. When rerouting downspouts we look to redirect the rainwater flow onto a different surface instead of a driveway, sidewalk or any hard surfaces. These BMPs were typically installed between the home owners' roof and/or driveway, before the closest storm water storm drain and/ or street/ditch. Areas that typically pool with rainwater make prime locations for raingardens.

The costs and fees for these project are 100% covered by Heal our Waterways (HOW) program administered by City of Wilmington and New Hanover County Soil and Water Conservation District. In FY 2015-2016, we will be planning to install three BMPs within Hewletts and Bradley Creek watershed. These BMPs reduce volume and water treatment within the two creeks.

If you live within Bradley or Hewletts Creek watershed and you are interested in having a BMP installed free of charge, or helping reduce the amount of pollutants entering your local waterway please feel free to contact Dru Harrison: drharrison@nhcgov.com.



CONGRATULATIONS !!!

2016 was an outstanding year for our annual environmental education contests and competitions. We are very proud of our "We all live in a watershed" winners. Congratulate these students if you see them around!

- 3rd grade poster –Alex Bowers, Pine Valley E.S.
- 4th grade poster–Katie Harrell, Pine Valley E.S.
- 5th grade poster –Lily Walters, Pine Valley E.S.
- 6th grade poster –Norah Martin, Williston M.S.
- 6th grade essay –Delia Garguilo, Williston M.S.
- 6th grade PowerPoint –Kelsea Jacobs, Virgo M.S.
- 7th grade speech –Dondrea Hodge, Williston M.S.
- 8th grade speech –Jonny Morales-Moreno, Noble M.S.

Alex and Jonny also won at the Area level and received Honorable Mention at State.

First place finishers won:

- \$25 Barnes and Noble gift card from the District
- \$50 at Area level

Teachers also won the Area prize along with their students and will be recognized at the Fall Area VI meeting in October.

Congratulations to everyone and thanks for all of the amazing entries!



2017 Contest Theme. "Soil & Water: Yours for Life"

Entries are due in our office by *February 24th*. If you would like to schedule a speech contest for your 7th or 8th grade class,

contact us soon! For more information about our programs and contests, contact staff or visit our web site.



Education Spotlight

PROGRAM NUMBERS

NHSWCD offers educational opportunities for pre-K through 12th grade, plus adult programs. Lessons aim to increase awareness of natural resources while encouraging life-long stewardship of our environment. *Some* of the topics we cover include:

- Enviroscape™ (non-point source water pollution lesson aimed at 8th grade)
- Rocks & minerals
- Soils & plants
- Water quality
- Wildlife
- Forestry
- Weathering and erosion

In FY 2015-16, almost 3,000 students were reached directly through classroom visits. In addition, 14,500+ people were reached through interactive booths at local festivals and fairs like Earth Day, Striper Fest, Cape Fear Fair and Expo, and Paws in Park, or through volunteer events like stormdrain marking and TreeFest.

We experience continued increase in demand for our programs every year. The need for environmental education will never dissipate, and we will continue to offer as many programs as possible. As a result on increased demand, you will likely see interns conducting presentations to help keep our programs thriving.



TEACHER SPOTLIGHT

We would like to recognize the work of Elizabeth Moore at Williston Middle School for her excellence in environmental education. She has gone above and beyond to make sure environmental education is a priority in her classroom. Thanks to Elizabeth, many students in 6th and 7th grade are getting involved in the District education contests and presentations and therefore learning more about how they can protect our local environment. Elizabeth is fiercely dedicated to her students, and has taken measures to incorporate programs and contests that supplement and enrich the required science standards. Her students truly enjoy learning when in her class. This year, many of our education contest winners came from her class at Williston Middle School. Thank you, Ms. Moore, for all of your hard work and dedication to our youth!

Norah Martin, 6th grade poster winner and one of Ms. Moore's students.
Inset: Elizabeth Moore



Envirothon Competition



Hoggard H.S. Envirothon teams "The Human Beans", the "Recycled Trash Talkers", and the "EcoRaptors" participated in the Coastal Envirothon competition at Weyerhaeuser's Cool Springs Environmental Education Center in Craven County earlier this spring. The 'Eco Raptors' and 'Recycled Trash Talkers' advanced to the state level Envirothon that was held in April at Cedarock Park in Alamance County.

The teams represented New Hanover County well at the state level, and we are very proud of their accomplishments. Teachers and coaches extraordinaire, Ed Terzian and Shari Thompson, are an integral part of the Hoggard Envirothon team success, and NHSWCD appreciates their support of and participation in the competition.

The Envirothon is a hands-on, team-based, natural science competition offering students grades 5 through 12 an opportunity to test their knowledge in 5 areas; soils, aquatics, wildlife, forestry and current environmental issues. Middle School teams are 5th through 8th and High School are 9th through 12th. Students in New Hanover can compete at the Coastal Envirothon against 26 other counties and move on to States if they have a qualifying finish. We are eager to have a middle school team as well next year. If your school is interested in participating in this exciting, educational competition...let us know! NHSWCD staff would be happy to help you and your students prepare for success!!

NEW HANOVER SOIL & WATER CONSERVATION DISTRICT

Phone: (910) 798-7130
soilwater.nhcgov.com



Rain Barrels

This past year we sold 60 rain barrels which means that over 4240 gallons of rainwater is being collected in New Hanover County, thus significantly reducing stormwater runoff. It is well known that rain barrels help cut down on the water bill and that they help give plants the clean water that they need, but not too many people know how helpful they are to environment and local waterways as well. When you install a rain barrel you're also installing a Best Management Practice (BMPs) that reduces the amount of potentially polluted stormwater from entering our waterways. Do you know the top five reasons to harvest rainwater?

- 1. Protect our local waterways from stormwater runoff pollution**
- 2. Utilize natural water while reducing your water bill**
- 3. Simple way to grow healthier plants and flowers**
- 4. Conserve water during summer months and in times of drought**
- 5. Help reduce erosion and flooding caused by runoff**

The rain barrels that we sell are 60 gallons and 80 gallons from RainBarrelUSA made in Warsaw, NC. We sell these rain barrels the 2nd Thursday of every month at the Government Center West Atrium from 9am-5pm. Cash, Check and Credit Cards are all accepted. You may also call and set-up a time to purchase a barrel at 910-798-7130.

Follow Us:

If you love reading our yearly Changing Tides, and just cant wait until Volume 9 comes out, you should follow us on Facebook! We love to post updates on what we are up to, what events we will be at, and new programs! It is a great way to find out about some of the free classes we will be offering this year, education programs, or just about local events happening in New Hanover County.

<https://www.facebook.com/NHSWCD>



NHSWCD
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Our mission is to protect and enhance water quality in New Hanover County through land conservation, stormwater management, technical support to citizens and organizations, and conservation education and outreach activities.

Check out our website at:
soilwater.nhcgov.com