

Soundings

Newsletter of the Albemarle-Pamlico National Estuary Program (APNEP)

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Director's Note

Greetings! We are very excited to have several projects recently completed and new initiatives on the horizon. Most recently, our program constructed a rain garden in partnership with the N.C. Division of Marine Fisheries, N.C. Coastal Federation and N.C. National Estuarine Research Reserve to celebrate National Estuaries Day 2009 (see article on page 2). Kitty Hawk Elementary and Pamlico County Schools have completed the most recent of our Demonstration Projects and I encourage you to visit them. The Pamlico County project features a rain water harvesting system that will be used to wash school buses while reducing stormwater runoff (see article on page 3).

Our program will be proud to host North Carolina's first Outdoor Classroom Symposium on Oct. 22-24, and will also be holding an Ocean Awareness Day teacher's workshop focused on climate change in November. Both of these events are currently on a wait list, and contact information is available on page 4.

-Bill Crowell, APNEP Director

EPA Speaker's Bureau

APNEP participated in this year's Environmental Protection Agency (EPA) Educational Outreach Workshop held in Research Triangle Park, N.C. The goal of the workshop was to recognize and encourage scientists in the EPA to join the EPA Educational Outreach Program and share their enthusiasm for environmental science with K-12 students in our community. Scientists in the program are available to share their expertise as speakers at school and community events. For more information or to request a speaker, visit:

<http://www.epa.gov/rtpspeak>

Fall 2009 Events

September

18 – World Water Monitoring Day,
www.worldwatermonitoringday.org

19 – International Coastal Cleanup,
www.coastalcleanup.org

26 – National Estuaries Day!

(See Article on Page 2)

National Public Lands Day,
www.publiclandsday.org

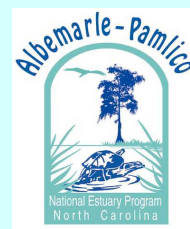
October

3 – N.C. Big Sweep,
www.ncbigssweep.org

14 – National Audubon Society Award
Presented to Willimston, N.C.

15 – APNEP Science & Technical Advisory
Committee Meeting, Washington, N.C.

22-24 – N.C. Outdoor Classroom
Symposium, Chapel Hill, N.C.



Visit the calendar at www.apnep.org for more detailed event information.

Rain Garden Planting in Celebration of National Estuaries Day 2009



On Saturday, Sept. 26, the APNEP partnered with the N.C. Coastal Federation, the N.C. Division of Marine Fisheries, the N.C. National Estuarine Research Reserve, and the N.C. Department of Environment and Natural Resources to plant a rain garden on the DMF office grounds in celebration of National Estuaries Day.

The rain garden, a shallow depression containing native plants, will capture stormwater from the parking lot, rooftop, sidewalks and other hard surfaces on site, soaking up water and filtering pollutants that could otherwise flow into nearby Bouge Sound. The site will be used to educate homeowners, landscapers, elected officials, planners, regulatory personnel and coastal managers throughout the year about the use of stormwater best management practices and in conjunction with N.C. NERR's Coastal Training Program.

National Estuaries Day is an annual event on the last Saturday in September to celebrate estuaries – where the rivers meet the sea – and the need to protect them. According to APNEP director Bill Crowell, construction of this rain garden provides a great opportunity for the community to become engaged in a small action that will greatly improve water quality at this site. Todd Miller, NCCF executive director and policy board member with APNEP, said it takes everybody doing their part to restore and protect our estuaries. “This project lets people know that there are simple things they can do that will make a big difference,” he said.

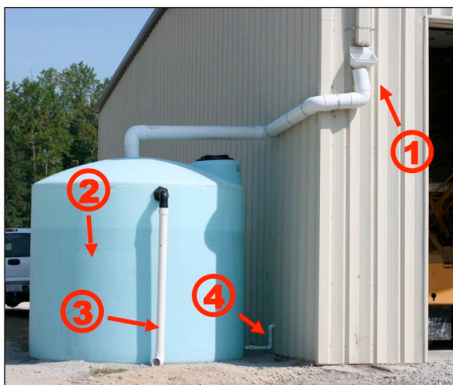


2009 PAMLICO COUNTY SCHOOLS RAINWATER HARVESTING SYSTEM DEMONSTRATION PROJECT

This project was a collaborative effort between Pamlico County Schools and Pamlico County Cooperative Extension, and was funded through the Albemarle-Pamlico National Estuary Program. This project demonstrates the importance of water resource protection through Best Management Practices like Rainwater Harvesting. This Rainwater Harvesting system utilizes a 2500-gallon cistern to capture rainwater, which is diverted from the rooftop to the tank by gutter. The captured water is then employed through pipe and pump to provide pressurized water for non-potable water usage (washing buses, irrigation, pressure washing, etc). By harvesting rainwater, municipal water consumption can be reduced thereby helping to reduce water cost and conserving valuable ground water. This project will also help protect nearby surface waters from uncontrolled stormwater runoff that may contain excess nutrients and pollutants.

Benefits of Rainwater Harvesting

- Conserve drinking water supply
- Reduce nutrients and pollutants from entering surface waters
- Reduce uncontrolled stormwater runoff
- Cost savings on water use



Four Components of a Rainwater Harvesting System:

1. The gutter system collects rain water from the rooftop and directs it into the cistern.
2. The Cistern stores this rain water for later use.
3. The overflow pipe allows excess rain water to leave the cistern in a controlled manner.
4. The outlet pipe, which is sometimes connected to a pump, draws water from the bottom of the cistern for use.





2009 North Carolina Outdoor Classroom Symposium

Create engaging outdoor
learning spaces at your school

North Carolina's first Outdoor Classroom Symposium will be held October 22 - 24, 2009 at the North Carolina Botanical Garden in Chapel Hill!

The symposium will focus on techniques for creating, maintaining and using outdoor classrooms and strategies for integrating outdoor learning into the curriculum. It will feature sessions on how to create specific types of school gardens and natural areas, how to start farm-to-school programs, and how to design and use your school grounds to enhance learning across the curriculum.

Sessions will be appropriate for educators who already have an outdoor classroom and for those who are just beginning to develop their schoolyard areas for outdoor environmental learning. Teachers can earn CEU credits and participants can earn credit towards their N.C. Environmental Education Certification. The symposium is a partnership between the N.C. Botanical Garden, the Albemarle-Pamlico National Estuary Program, the Environmental Education Fund and the N.C. Office of Environmental Education, and the Natural Learning Initiative, N.C. State University.

This will be a great opportunity for classroom teachers, teacher assistants, school administrators, parent volunteers, non-formal educators and those involved in design of outdoor play and learning areas from across the state!

Symposium registration is currently full, but a wait list is available.

Visit http://www.eenorthcarolina.org/outdoor_classrooms_about.htm for more information.

Ocean Awareness Day: Free Workshop for Teachers, Focus on Climate Change



APNEP, the Center for Ocean Sciences Education Excellence - Southeast, and the Rocky Mount Children's Museum & Science Center will be sponsoring a free workshop for middle and high school science teachers on November 11. The workshop will cover a variety of topics including the difference between weather and climate, climate change impacts in North Carolina, effects climate change could have on human health, activities to help teachers incorporate climate change into the curriculum, environmental education resources in North Carolina and getting the most out of your museum.

Workshop Features

- CEU credit *and* Criteria III credit towards the N.C. Office of Environmental Education's EE Certification
- Free classroom resources correlated to the N.C. Standard Course of Study
- Guest speakers, door prizes and giveaways
- Planetarium show
- Lunch provided

This workshop is currently full, but we hope to offer it again in the spring. Please contact Lori Brinn at Lori.Brinn@ncdenr.gov to be added to the wait list.



Regional News in Brief:

Walnut Creek Urban Wetlands Education Center Now Open in Raleigh

Phase One of the Walnut Creek Urban Wetland Educational Park in central Wake County is officially open. The park is transforming 49 acres of abused, polluted wetlands into a living, natural resource for the City of Raleigh. The park's mission is to promote understanding of and protection for an urban wetland, enhance community pride, and encourage economic development.

Phase one of the project is a "green" 7000-square-foot Environmental Education Center that houses a bookshop, conference room, small library, and a kitchen, as well as classrooms and a laboratory. The park is part of the Raleigh Parks & Recreation Department.

For detailed information on the entire plan, see www.naturalearning.org/docs/WalnutCreek.pdf.

Service Releases Climate Change Strategy for Public Review and Comment

As part of the Interior Department's commitment to building a coordinated strategy to respond to the impacts of accelerating climate change on the nation's natural resources and safeguard the nation's fish and wildlife, the U.S. Fish and Wildlife Service is releasing a draft strategic plan that will guide its efforts to respond to the unprecedented threat posed by global warming. When finalized, the plan will guide the Service's response to impacts such as changing wildlife migration patterns, the spread of invasive species, changing precipitation patterns and rising sea levels.

The Service requests substantive comments, factual information, and other constructive criticism to help improve the plan. After reviewing the plan, the public can submit comments electronically through November 23, 2009. To view the report, provide comments and find out more about Fish and Wildlife Service efforts to address climate change, visit <http://www.fws.gov/home/climatechange> or <http://www.fws.gov/southeast>.

Draft Vision and Goals for Long-Range Transportation Plan

The Hampton Roads Transportation Planning Organization (HRTPO) is currently coordinating the development of the next Long-Range Transportation Plan (2034 LRTP) for the region.

As a part of the development process, a draft Vision and Goals have been created, drawing upon a number of resources as input, among them a public survey conducted this past spring/summer, comprehensive plans, and Federal guidelines. The Draft Vision and Goals are located at:

http://www.hrtpo.org/TPO_PubNotice.asp
(click on Draft 2034 LRTP Vision and Goals).

Comments can be submitted to Andy Pickard, Principal Transportation Engineer at HRTPO, apickard@hrpdcva.gov until October 23. Call (757) 420-8300 for more information.

New items banned from N.C. Landfills

North Carolinians should think twice before tossing their plastic bottles into the trash. A new state law prohibits the disposal of plastic bottles, wooden pallets and motor vehicles filters in landfills.

"We encourage North Carolinians to help these disposal bans succeed by expanding and starting new recycling efforts," Dee Freeman, secretary of the N.C. DENR, said. "Recycling is a proven job creator in N.C. and if we do our best to recycle newly banned materials we will not only grow businesses in the state, but also protect disposal capacity, recover valuable resources, save energy and reduce greenhouse gas emissions." The addition of new items to the banned list is expected to help conserve energy and spur job creation.

Visit www.p2pays.org for more information.

As always, thank you for taking the time to read our newsletter. Please direct any questions or comments to Lori Brinn at: Lori.Brinn@ncdenr.gov.

