# Soundings

Newsletter of the Albemarle-Pamlico National Estuary Program

In this Issue:	Page
<b>Recent Accomplishments</b>	2
Soundings Spotlight	2
Progress Report	3
Feature Project	3
<b>APNEP</b> News in Brief	4
Soundings Spotlight Progress Report Feature Project	2 2 3

#### **Director's Note**

**Greetings!** 

Much has been happening within the Albemarle-Pamlico National Estuary Program since we last published. We are pleased to announce our newest staff member, Community Specialist Lori Brinn, who joined us in early October.

APNEP has been involved with a variety of activities this year. Among these activities are developing indicators of estuarine health, rewriting our CCMP, coordinating SAV mapping, conducting our 2008 teacher institute, and completing schoolyard demonstration projects. I hope you find reading about these activities as interesting and informative as we did in undertaking them.

Because the APNEP is a volunteer program that brings communities together to improve our estuary, it's important to us that you're kept abreast of all we do. Please visit our Web site www.apnep.org for updates in the coming months. Email us your suggestions. We value your involvement!

-Bill

#### **Did You Know?**

**G**ardening and landscaping using plants that are native to your area can reduce the need for watering and fertilizing. This is a great way to save money, conserve precious water resources, and reduce *runoff pollution* – this issue's Soundings Spotlight.

#### **Upcoming Events**

#### November

Saturdays – Early Bird Canoe Trip, Roosevelt Natural Area (PKS)

4-9 – Wings Over Water Festival (12<sup>th</sup> Annual) N.C. Outer Banks

5-6 - NC Erosion & Sedimentation Control Workshop, New Bern, N.C.

6 – Sand, Sea, & EENC Conference, Fort Caswell

8 – Bennett's Creek Paddle Trip, Edenton, N.C.

14-15 – ECU Workshop: Climate, Weather and Tourism in N.C.

15 – Oyster Roast, Pamlico-Tar River Foundation

17 - NEP/EPA Annual Meeting

18 – N.C. Public Hearing on Draft River Herring Amendment Elizabeth City, N.C.



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

# **Recent Accomplishments:** Highlights from the 2008 Teacher Institute



The theme of this year's teacher institute was "Environment and Health: Making Connections through Water Quality Investigations." This weeklong teacher institute, held in Salter Path, NC, was designed to provide teachers with an in-depth investigation of the diverse environmental science, health, and civics issues related to water quality in North Carolina and to give them access to resources and support. By using an interdisciplinary approach, educators learned how to address important water quality issues, including nonpoint source pollution and hazardous waste, with their students both in the classroom and in outdoor wetland environments. Enrollment was

high this year, with 33 of the 34 possible spaces filled. Participants came from the mountain, piedmont, and coastal plain regions of North Carolina. Fifty-three percent were high school teachers, 28 percent middle school teachers, and 19 percent nonformal educators working with a wide variety of grade levels (K-12). Collectively, these teachers will have the opportunity to reach more than 3,000 students in the 2008-09 school year!

Every teacher gave the institute an overall evaluation of "Very Good" or "Excellent". The content of the activities and materials directly fit into a wide range of science subject areas and every teacher was able to find a way to fit something they learned this week into their

curriculum for this year. Several teachers mentioned in writing or verbally how much they enjoyed learning from a variety of different perspectives within the group. All participants indicated that the training was effective at increasing their content knowledge and their confidence level in teaching science, environmental education and water quality issues.



#### **Soundings Spotlight: Runoff Pollution**

Everyone lives in a river basin. Even if we don't live near the water, we live on land that drains into a river, estuary, or lake and our actions on that land impact water quality and quantity far downstream. Stormwater runoff is rainfall or melted snow that runs off the ground or buildings, roads, parking lots and driveways. and drains into natural or manmade drainage ways. When rain falls hard on an impervious surface, it cannot flow naturally or be soaked into soil or vegetation. Instead, it runs across the surfaces of roads, parking lots, sidewalks, rooftops – collecting litter, motor oil, lubricants, antifreeze, pet waste, excess fertilizer and soap. Water that flows into storm drains, carrying along those materials. Unlike the water we flush in the toilet or down the drain into our sinks, stormwater systems do not treat the water before it reaches surface waters. What you see going into that stormwater drain will wind up in our creeks, streams and rivers.





YOU POUR!

APNEP *Soundings* November 2008

# **Progress Report: SAV Mapping**

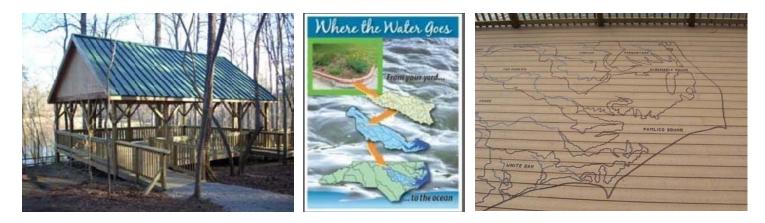
APNEP is involved in a cooperative project to map submerged aquatic vegetation, or SAV, using remotely sensed data and extensive ground-truth field surveys to develop a spatial (Geographic Information System) database of this vital habitat in the estuaries and coastal rivers of North Carolina and southeastern Virginia, update existing spatial data for this region, and examine differences in SAV habitat area over time. The result will be used by state and federal resource management agencies to better protect, conserve and enhance this vital fisheries and wildlife habitat. Acquisition of aerial imagery is complete as a result of multi-agency effort. We have completed aerial photo acquisition, and datasets will be available soon.

If you have questions about obtaining SAV Data, contact Dean Carpenter at dean.carpenter@ncmail.net



#### Feature Project: Water Quality Classroom & River Basin Deck

**A** Water Quality Classroom and River Basin Deck were constructed at Clemmons Educational State Forest in Clayton, NC as part of a larger water quality education project which includes a river basin activity book for students, a brochure for forest visitors and more than two dozen trailside interpretive signs designed to educate the public about non-point source pollution prevention. The River Basin Deck features a 40-foot map of North Carolina with the major rivers and river basins painted on its surface. The Water Quality Classroom, located on the hill overlooking the pond, is an open air facility used for the 'Water Investigation' classes offered at the forest. These exhibits and teaching aids are targeted at the 6,000 students who visit Clemmons Educational State Forest each year for natural resource programs and the 45,000 visitors who frequent the forest for learning, hiking, picnicking and recreation.



Visit your nearest educational state forest today! More information is available at: www.ncesf.org

# **APNEP News in Brief:**

## **Climate Change**

APNEP will receive a grant from the U.S. Environmental Protection Agency to pilot a program addressing climate issues in the Albemarle-Pamlico region. We will be working with the Duke University Nicholas Institute for Environmental Policy Solutions and others on this project.

## **River Herring**

APNEP has contracted with the N.C. Division of Marine Fisheries to monitor water quality parameters for river herring in the Albemarle Sound.

## **Restoration Efforts**

APNEP has identified a stream segment in the upper tar basin support for restoration of degraded waters and is working towards removing this segment from the federal 303-d impaired water listing.

#### **Chowan Estuary**

APNEP continues to collaborate with the Environmental Defense fund to develop a comprehensive assessment methodology for wetland functionality in the Chowan estuary of Western Albemarle Sound, as the basis for setting goals for wetland extent and condition, developing programs to achieve these goals, and tracking progress. This work will include the establishment of a core wetland reserve and implementation of pilot programs in one or two key watersheds.

# **Coming soon...**



# **CCMP Updates**

We are hard at work updating our Comprehensive Conservation & Management Plan. Thanks to our steering committees and participating partners for their efforts thus far.

#### **Ecosystem Indicators**

**C**ontinued work is underway to finalize ecosystem indicators. Our wetland resources group met in late October, and the Science and Technical Advisory Committee held their quarterly meeting.

# **Congratulations Lucy!**

We are happy to report that Lucy Henry (Watershed Management Coordinator) has given birth to a healthy baby boy. Ellis John Henry was born in September.

# **New Staff Member**

**P**lease join us in welcoming aboard our new staff member, Community Specialist Lori Brinn. Lori is a North Carolina native and comes to us with GIS and public relations experience and a master's degree in interdisciplinary ecology.

# **APNEP in the News**

In partnership with NCNERR, we produced a *Newspaper in Education* insert for the News & Observer in Raleigh in November 2007 about estuaries and coastal fish habitat. About 170,000 inserts have been distributed throughout the state.

Look out for updates and enhanced features on our Web site http://www.apnep.org over the next few months! Have an idea or suggestion?

#### Email lori.brinn@ncmail.net