

DIRECTOR'S NOTE

As spring arrives and the Albemarle-Pamlico watershed returns to life, we will begin to see the birth of a wide array of new initiatives funded by APNEP. In this issue of Soundings, we highlight seven grant recipients who are beginning new work to protect and restore the sounds. We are also pleased that some prior projects have come to fruition, including the release of our Climate Ready Estuaries report and the completion of submerged aquatic vegetation mapping on the North Carolina coast. In both cases, completion of these efforts lays the foundation for future APNEP efforts in the region.

Meanwhile, we continue to press forward on the development of our new ecosystem-based Comprehensive Conservation and Management Plan. APNEP staff has begun the process of consulting with a wide array of agency, university and nongovernmental experts to develop and implement <u>SMART</u> management actions throughout the watershed. As our current actions are developed and refined, we will continue to seek guidance from our advisory committees and the public.

Cheers,

Bill Crowell, APNEP Director

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An osprey nest in Bogue Sound

2011 Environmental Enhancement Projects Underway

This winter, four environmental enhancement and demonstration projects were selected for funding by the AP-NEP Citizens' Advisory Committee. These worthy projects promise to showcase modern solutions to environmental problems while also engaging their local communities in conservation and education efforts. These projects include:

Recycled Fishing Gear

Researchers from the <u>University of North Carolina's</u> <u>Institute of Marine Sciences</u> are seeking a silver lining regarding the problem of derelict fishing gear. Lost crab pots can cause serious environmental problems, including "ghost fishing" and the entrapment of sea turtles. Further, thousands of pots are collected, crushed and discarded each year by the North Carolina Division of Marine Fisheries. In this project, lost crab pots will be reconfigured and placed to provide oyster habitat. This project will engage scientists, fishermen, conservation groups and middle school students to alter, place and

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ENVIRONMENTAL EDUCATION AND AWARENESS CAMPAIGNS APPROVED FOR 2011

In January, the Executive Committee of APNEP's <u>Policy</u> <u>Board</u> selected three environmental education and awareness campaigns to support in 2011. Competition for these awards was keen, reflecting current economic realities and the demand for quality environmental programming throughout the region.

Estuary Essentials

<u>The North Carolina Aquarium Society</u> was awarded funds to conduct an "Estuary Essentials" program for libraries throughout northeastern North Carolina. "Estuary Essentials" is a one-hour presentation to introduce library patrons to the critical components of a healthy Albemarle-Pamlico estuarine system. This project will be completed in partnership with the <u>North</u> <u>Carolina Aquarium on Roanoke Island.</u>

Estuarine Stewardship

The <u>North Carolina Coastal Reserve and National Estua-</u> <u>rine Research Reserve</u> was awarded funds to conduct a multi-faceted campaign to promote stewardship of the region's estuarine habitats and shorelines. This effort will reach a variety of audiences, including K-12 teachers and students, coastal decision-makers and estuarine-front property owners. The campaign also includes workshops for marine contractors and local decision-makers, development of a curriculum targeting children in third, fourth and fifth grades and public field experiences throughout the region.

Bookmark Contest

North Carolina's Division of Soil and Water Conservation will organize a region wide bookmark contest. The theme of the contest: the importance of estuaries, their significance in eastern North Carolina and the challenges these estuaries face in our changing world. This campaign is projected to reach more than 4,000 fifth-grade students and 8,000 adults in the Albemarle-Pamlico Estuary watershed. Winning bookmarks will be distributed in local libraries throughout the region.

GRANTS

Did you know that APNEP maintains a list of grants available throughout the region? Click <u>here</u> to see what grant opportunities are currently available.

SAV MAPPING COMPLETE

Submerged aquatic vegetation, or SAV, is one of our coast's most valuable natural resources. SAV provides a nursery area for most fish and crustacean species found along the coast, which bolsters regional commercial fishing and tourism industries. APNEP staff, working with North Carolina's <u>SAV Partnership</u>, have recently concluded a four-year effort to map North Carolina's SAV. This effort included airplane flights over the entire North Carolina Coast using highly specialized digital mapping cameras. In total, more than 137,000 acres of SAV were mapped along the North Carolina coast. While the information is undergoing scientific review,

detailed maps and other results of this work are expected to be available on APNEP's website in May. APNEP continues to work with other members of the SAV Partnership to develop and refine longterm SAV monitoring strategies through a grant funded by the Coastal Recreational Fishing License.

SCIENTISTS...

On our website, you can now find every scientific presentation given at our STAC meetings, dating back to 2004. Here's the <u>link</u>.

ALBEMARLE-PAMLICO ESTUARY DESIGNATED ONE OF AMERICA'S GREAT WATERS

The Albemarle-Pamlico Estuary was recently selected as one of America's "Great Waters" by the National Wildlife Federation's <u>Great Waters Coalition</u>. The <u>North Carolina Coastal Federation</u> and the Albemarle-Pamlico National Estuary Program applied for this designation. With its selection, the Albemarle-Pamlico Estuary joins other notable national waters including the Great Lakes, Puget Sound, Chesapeake Bay and the Everglades.

Selection as a "Great Water" is dependent on a number of factors. As the second largest estuarine system in America, the selection committee noted the Albemarle-



A soundside sunset

Pamlico estuary's significant size, uniqueness and productivity. It also recognized the system's importance to society and its sensitivity to national and interstate policy. The presence of several comprehensive restoration plans for the region was highlighted, including APNEP's Comprehensive Conservation and Management Plan. Finally, sustained cooperation on restoration activities throughout the region by dozens of stakeholder groups was a key factor in the selection.

"We are very pleased to receive this designation," said Bill Crowell, APNEP's director. "While we've always appreciated the significance and beauty of this estuary, it's s nice to again receive recognition at the national level."

The Albemarle-Pamlico estuary was also recognized as an "estuary of national significance" in 1987 by the United States Congress. This designation led to the creation of the Albemarle-Pamlico National Estuary Program.

CAC PROJECTS

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monitor the reused crab pots.

Living Shorelines in Bogue Sound

The <u>North Carolina Coastal Federation</u> will continue its tradition of habitat restoration by engaging volunteers to plant marsh grass on an eroding bank at Bogue Sound in Carteret County. By replacing sandbags with native grasses, stormwater from the nearby college campus will be purified and valuable estuarine habitat will be created.

Meet "BOB"

"BOB" is a Basic Observation Buoy, which can be used to collect information about water quality in the region's rivers and sounds. <u>The North Carolina Coastal</u> <u>Studies Institute</u> will partner with government agencies and students to build, deploy and monitor BOB units in the region as part of an environmental education curriculum. Information from these buoys will supplement other data collection efforts in the region, including information collected by APNEP's <u>Citizens'</u> <u>Monitoring Network</u>.

ECMS Stormwater Wetland

Students at Elizabeth City Middle School will benefit from the reconfiguration of its stormwater system to support an educational and functional wetland habitat on school grounds. The new wetland will filter stormwater runoff before it enters adjacent natural wetlands and the Pasquotank River. It will also serve as an outdoor classroom for ECMS students, as well as a potential learning site for the adjacent elementary and high schools.

CONNECT WITH APNEP

As you may have noticed, APNEP is in the final stages of an "electronic facelift." Our redesigned <u>website</u> and increased social media options are designed to facilitate communication with our partners. Here are a few of the many ways you can connect with APNEP:

APNEP maintains a Facebook page, which can be found here. On this page, we post program-specific information no more than a few times per week. in APNEP has a group page on Linkedin, a professional networking website. As a friend of the program, we invite you to join our group and begin connecting with others in our network. 🔟 RSS. You can subscribe to our daily news clips through our RSS feed. You can sign up for our feeds using this link, or feel free to just visit our home page for daily updates. 🕒 Follow us on Twitter (<u>@APSounds</u>) for partner news items, interesting science stories and occasional live feeds at events attended by APNEP staff. 🖾 Subscribers to our mailing list receive occasional program announcements, requests for grant proposals and our quarterly newsletter. You can subscribe by sending an e-mail with the word "Subscribe" in the subject line to apnep@ncdenr.gov. 🧕 APNEP maintains a calendar of events occurring throughout the region, from local volunteer opportunities to international conferences on issues we care about.

Our Mission: To identify, protect and restore the significant resources of the Albemarle-Pamlico estuarine system..

CLIMATE READY ESTUARIES REPORT AVAILABLE

APNEP teamed with Duke's <u>Nicholas</u> <u>Institute for Environmental Policy</u> <u>Solutions</u> to develop the report <u>"Climate Ready Estuaries: A blue-</u> <u>print for change</u>." This report contains information designed to promote the region's economic, social and environmental resilience to climate change impacts.

This multi-faceted report provides educational material for decisionmakers and the public. It also provides scientific and management references integral to the design and implementation of sea level rise adaptation strategies. Finally, the report is based on extensive conversations with local government officials and residents throughout the region. As such, it provides important insights regarding the local considerations inherent in the development of climate ready strategies.

Ultimately, this document is likely to outline key engagement and management strategies for APNEP and its partners in the years to come. We invite you to peruse the report and give us your thoughts.



A trumpeter swan grazing in a North Carolina wetland habitat.



The constructed wetland at J.H. Rose High School

POLICY BOARD VISITS J.H. ROSE DEMONSTRATION PROJECT

Board members, staff and guests at APNEP's February Policy Board meeting visited J.H. Rose High School in Greenville to see the results of a demonstration project funded by APNEP's Citizens' Advisory Committee in 2010. Project Coordinator David Hodges at the Mid-East RC&D Council described the numerous benefits of the wetland for the school and community. The new wetland filters runoff from 65 acres of land, which previously flowed directly into a tributary of the Tar River. Also, the area has served as an excellent outdoor classroom space, particularly for Rose's environmental science and advanced placement biology students. Finally, Rose's athletic community has benefited from a new athletic field, which was created from the fill material removed during the construction of the wetland.

