Welcome to the Albemarle-Pamlico National Estuary Program *E-Update* – a monthly summary of selected activities of the APNEP staff, committees and our partners…

As reported in last month's E-Update, this month we are continuing our focus on APNEP schoolyard, and other, demonstration projects. We're very proud of these projects because of the environmental impact they have on stormwater abatement, the educational and aesthetic contribution they make to their communities, and the partnerships forged through their accomplishment.

The JEJ Moore Middle School, Disputanta, VA: This $10,000 APNEP grant made possible community-wide involvement in a project that includes an outdoor classroom, kiosk, signage, and a pedestrian nature trail that accesses an existing natural area near the school. Eagle Scouts and Vo-tech students participated in the planning and building of the project. An observation platform is planned with separate funding.

John A. Holmes High School, Edenton, NC: Student participation in the design and installation of the two rain gardens on this site also includes the use of flow meters and water quality testing kits to chart the improvement of water quality going to a local stream. Its design includes a two-foot deep rock drainage system using popped rock – Carolina Solite – that has an absorption capacity 25% higher than crushed rock.

Northampton Outdoor Learning Center and Nature Trail, Jackson, NC: The clearing and resurfacing of a nature trail, construction of a teaching shelter and a handicapped-accessible boardwalk pier connecting the trail to an island in the natural 2-acre pond on site, educational signage, and enhanced access for elementary school students are all features of this project. A $24,250 APNEP grant combined with smaller grants from Adopt-A-Trail and the NC Foundation for Soil & Water Conservation, Inc. rounded out this truly collaborative project that promotes responsible stewardship, protection and conservation of natural area.

Washington Montessori School Bio-swale Project, Washington, NC: This project is part of an environmentally sensitive design of a recently completed Charter school in Beaufort County, NC. Designed to treat runoff from roofs and gravel parking areas (and future buildings) on a 28-acre campus, the project also features educational signage and tree plantings. The bio-swale consists of a layer of medium sand and peat with plants such as Arrow Arum, Pickerelweed, Yellow Flag, Blue Flag, and Bald Cypress and its use as a teaching tool is incorporated into existing curriculum.

Town of Winfall, Water Treatment Plant, Perquimans County, NC: Winfall's drinking water treatment plant had been exceeding water quality standards in their backwash waters since April 1998. Regular monitoring showed high levels of iron, manganese, magnesium, calcium, chlorides and sand. In order to remove the offending elements and otherwise treat the discharge, a constructed wetland system with salt and iron tolerant plants was installed adjacent to the plant. Two wetland cells were built using rock check dams and a third cell was built using logs for the check dam. Spadderdock and cattails were originally planted, with bulrush and spartina added later on. It should be noted an added benefit of this wetland system is its diversion of runoff (showing high levels of nitrogen and phosphorus) from an abandoned fertilizer plant across the road, and from school grounds, roads and parking lots adjacent to it. A boardwalk and observation platform at its center, also allows the wetland to be used as an outdoor environmental education classroom. An educational kiosk featuring pictures and educational information pertaining to the wetland's flora and fauna completes the project.

Student Wetland Plant Nursery, Newport, NC: This project offered classroom education to two middle school classes on the topics of wetlands, habitat and water quality. After cooperating teachers were identified, salt marsh ecology and the importance of its key plant *Spartina alterniflora* were held. Plant nurseries were constructed on school property and students conducted experiments (in their classrooms) in seed germination, determining whether different seed storage techniques were effective in replicating natural dormancy and germination processes. Data were collected for 90 days. The young grasses were transferred to the outdoor nurseries where they were observed for 8 weeks, following which transplantation to a restoration site was accomplished.

A Few Announcements:

The Back Bay Restoration Foundation will hold its Back Bay Forum 2007 on March 15, 2007 from 8:30 am to 5:00pm at the Tidewater Community College Advanced Technology Center in Virginia Beach. For more information go to: **www.bbrf.org**

The next APNEP Policy Board meeting will be held at the NC Aquarium on Roanoke Island on May 15, 2007 beginning at 10:00am.

The next APNEP Science & Technical Advisory Committee (STAC) meeting will be held on Monday, April 30, 2007 at the Pitt County Agricultural Center in Greenville, NC beginning at 10:00am.

The next APNEP Citizens' Advisory Committee meeting will be held on July 25, 2007 at a time and place to be arranged.

The next meeting of the APNEP SAV Partners' Group will be held on Wednesday, June 13, 2007 at a time and place to be arranged. Please mark your calendars.

Should you have an announcement or event you would like mentioned in a future issue of the *E-Update,* please submit information to Joan Giordano, APNEP Outreach Coordinator, at **joan.Giordano@ncmail.net** or by phone at: (252) 948-3825 by the 15th of the month, for publication in the next month's edition.

Editor's Note: My thanks to Kelly Williams for providing many of the photos used in this month's edition.

Until Next Time...

Joan Giordano
APNEP Outreach Coordinator

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