



## Federal Agencies Committee Meeting Highlights

A Federal Agencies Committee (FAC) meeting was held on May 22, 1997, at the Chesapeake Bay Program Office (CBPO) in Annapolis, Md. Announcements and highlights from this meeting included:

- The National Oceanic and Atmospheric Administration's (NOAA's) Coastal America Program is establishing a coastal learning center in Baltimore.
- The Monitoring Subcommittee is developing a Basinwide Monitoring Strategy to determine the effects of various stress factors on the Bay's water quality.
- The Habitat Restoration Workgroup completed several projects in the spring of 1997 that included planting 50,000 units of beachgrass on a 3-acre dune restoration site at Patuxent Naval Air Station, initiating a 20-acre lagoon restoration site at Naval Base Norfolk, completing a 2-acre BayScaping demonstration site at National Naval Medical Center, and training Naval Academy personnel on submerged aquatic vegetation (SAV) monitoring. Contact Janmichael Graine, U.S. Army Environmental Center (USAEC), at (410) 671-1687 if you have a project idea.
- The Department of Energy (DOE) is encouraging federal facilities to implement its Cool Community Program to reduce the higher cooling costs, smog, and human health concerns associated with urbanization. The program's recommendations include the use of lighter colored building materials, reflective roof and pavement materials, and urban forestry.
- The Federal Highway Administration reported that only 20 percent of car use is work related. The Environmental Planning division of the administration has a number of environmental projects underway that include determining how to control growth, coordinating with other activities and agencies, researching the ecological effects of pavement, developing environmental awareness and enhancement projects, and encouraging less car use.

## Implementation Committee Meeting News

An Implementation Committee (IC) meeting was held on June 2, 1997, at the CBPO in Annapolis, Md. Announcements and highlights from this meeting included:

- A fish elevator has been established at the Safe Harbor and Holtwood hydroelectric dams on the Pennsylvania portion of the Susquehanna River that is passing over 16,000 American shad a day. The York Haven dam, located just below Harrisburg, Pa., is the final fish impediment on the river. Passage over this dam is expected to be completed by the spring of 2000, restoring more than 400 miles of the river and major tributaries to migratory fish.
- The Local Government Advisory Committee (LGAC) reported that it has made progress on 80% of its commitments, which include broadening outreach efforts and improving communications, recognizing local government efforts, strengthening the voice of local governments in the development of Bay Program policy, providing technical and financial assistance to local governments, and providing scientific information to local governments.
- LGAC noted that 39 local governments applied for the Chesapeake Bay Partner Community Awards Program. Twelve Maryland, nine Pennsylvania, and nine Virginia communities achieved Bay Partner status.
- Progress has been made toward attaining the 2,010 mile Riparian Forest Buffer Goal by the year 2010. Federal agencies committed to establishing 200 miles of riparian forest buffer while Virginia signed up to establish 610 miles and Pennsylvania and Maryland committed to 600 miles each. The federal agency goal will result in buffers along 75% of all stream miles on federal lands.

## State of the Bay:

### *Pfiesteria*

A presentation on the biology and lifecycle of *Pfiesteria piscicida* was given at the IC meeting on June 2, 1997. According to Richard Lacouture, Academy of Natural Sciences, *Pfiesteria piscicida* is a dinoflagellate that emits a toxin into the water that kills fish.

The organism was first noted in North Carolina's Pamlico Sound in 1988 and has been attributed to over 50% of the state's fishkills from 1991-1993. The dinoflagellate exhibits ambush-predator type behavior that kills a wide variety of fish. It has a complex life cycle that can have over 20 life stages, including flagellated, ameoboid, and encysted forms.

Dan Terlizzi, NOAA CBPO, reported that the organism is stimulated by fish secretions, seems to require calcium in the water column, is not limited by salinity ranges, prefers warmer water, and also affects shellfish species.

Terlizzi presented documentation of occurrences of *Pfiesteria* in the Chesapeake. Four incidences have been noted, including Jenkins Creek off of the Choptank River (1992); Patuxent River near Benedict, Md., (1994); Patuxent River near St. Leonard Creek (1996); and Hydrock Fish Farm off the Manokin River (1996).

Research is underway to develop baseline data to determine when and under what conditions *Pfiesteria* occurs. Early indications link the organism to elevated phosphate and dissolved organic nitrogen levels. Terlizzi recommended that the Bay Program establish a team of *Pfiesteria* experts for the Bay; develop identification guidelines; increase monitoring activities; and review archived examples. The Maryland Department of the Environment has established a hotline to report fish lesions that might be associated with *Pfiesteria* (800-633-6101, x 3906).

# Fort Belvoir Hosts Site Assessment

Fort Belvoir recently participated in the Chesapeake Bay Program's (CBP's) Federal Facility Site Assessment Program. This program, established through the *1994 Agreement of Federal Agencies on Ecosystem Management in the Chesapeake Bay*, is a voluntary effort in which federal agencies agree to have a team of experts from local, state, and federal agencies make a 1-day visit to their site to evaluate designated areas of the facility and provide recommendations.

The program was initially created to assist in the CBP's nutrient reduction effort but has become far more encompassing. Its purpose has expanded to include analyzing areas that are selected by the installation and providing usable recommendations for improvement, promoting successes in nutrient reduction and other CBP goals, and raising awareness among all levels of facility management about their role in meeting federal commitments to reduce nutrient and pesticide use. The assessment team also assists with environmental planning, identifying community service opportunities, assisting with communication and educational products, and providing contacts for specialized technical assistance.

Fort Belvoir hosted its assessment on March 25, 1997. Twenty experts from various organizations and agencies participated in the assessment, including the Natural Resources Conservation Service (NRCS), the Virginia Department of Transportation, the U.S. Army Environmental Center, the U.S. Army Corps of Engineers (USACE), the CBP, the U.S. Forest Service, the local Soil and Water Conservation district, and the Fairfax County Department of Forestry.

After an initial overview of the Virginia installation, the team separated into three groups. The first group traveled to the post's golf course where they evaluated the installation's pesticide management program. Because the installation recently expanded its golf course from 18 to 36 holes, Fort Belvoir's certified staff have undertaken a number of Integrated Pest Management (IPM) initiatives to ensure that the increased acreage will have as minimal an increase on chemical use as possible. Some of these initiatives include monitoring, applying slow release fertilizers, planting drought and pest resistant grasses, installing 52 bluebird houses, communicating on-line with the local weather station to determine optimal spraying times, using a computerized weather station that connects with a computerized irrigation system to determine appropriate watering amounts, and employing an innovative technology called BioJet that releases fungus killing bacteria through the irrigation system to control the development of turf damaging fungi and reduce the need for fungicide application.

The other two site assessment teams were driven to sites around the post to review the installation's shoreline erosion challenges. In the process, the assessment team was introduced to a new technology at Panther Bridge on Accotink Creek. Here, Fort Belvoir is working with the USACE Waterways Experiment Station (WES) to install a series of Bendway Weirs in the creek. Bendway Weirs are low-level, upstream-angled

stone sills that are attached to the outer bank of the creek's bend. These weirs are being installed to redirect the stream flow away from the bridge's abutment where it is scouring the abutment and threatening the stability of the bridge. The weirs are also expected to decrease erosion on the outer banks of the bends, lesson current velocities in the stream, and create riffle and pool areas that will serve as habitat for the stream's aquatic life.

The teams were taken to one of the installation's housing areas where shoreline erosion has consumed a road and threatens the existence of some of the housing facilities. The housing area resides along the Potomac shoreline. Here, the 90-foot banks are composed of highly erodible soils. Wind and waves erode these banks, continually sheering off large amounts of soil and trees into the river. The assessment team made several recommendations at the site, including determining erosion amounts and rates by comparing old aerial photographs with current ones and planting trees and native vegetation along the shoreline to help stabilize the soil and provide wildlife habitat.

The Fort Belvoir staff ended the tour at Thompkin's Basin Marina where the installation plans to establish a new, larger marina for increased access to the Potomac River and the Chesapeake Bay. At the end of the tour, the assessment team walked along a nearby hiking trail and viewed bald eagles and ospreys that are a part of the post's resident birdlife.

Although the site assessment is designated as a 1-day visit, its effects are long-lasting. Currently, each member of the assessment team is developing and providing recommendations to the CBP who will compile the comments into a report for the installation. At Fort Belvoir's request, the CBP is developing a smaller, specialized assessment team to evaluate the installation's stormwater management program and help the post establish a more comprehensive, regional approach. One of the most important aspects of the assessment is the communication links that it establishes. This communication promotes understanding between agencies about each other's programs that often results in partnerships. One such partnership is already underway. Fort Belvoir and the local NRCS office are considering establishing a memorandum of understanding for NRCS to provide on-site technical support.



Assessment team reviews Fort Belvoir's stormwater management practices.



This newsletter is produced under Contract No. DACA65-94-D-0100 for USAEC. Please contact Janmichael Graine, USAEC, at (410) 671-1234, DSN 584-1234, or [jsgraine@aecl.apgea.army.mil](mailto:jsgraine@aecl.apgea.army.mil) with any questions, comments, or installation success stories.

The newsletter is distributed via e-mail or through the Army CBI homepage