NRCS Maryland FY08 Conservation Update

NRCS Soil Conservationist Eugene Jones II (right) reviews a Conservation Plan Map with Eddie Taylor, manager at Andelot Farm in Kent County. The field, along the Chesapeake Bay, is planted in warm season grasses for wildlife habitat.

MISSION GOALS

- **High Quality Productive Soils**
- **Clean and Abundant Water**
- **Healthy Plant and Animal Communities**
- **Clean Air**
- **Adequate Energy Supply**
- **Working Farm and Ranch Lands**

GUIDING PRINCIPLES

- **Service**
- **Partnership**
- **Technical Excellence**

Farm Bill Programs Provided $18 Million in Conservation Funds to Maryland Farmers

The 2002 Farm Bill recognized the need for locally led conservation programs and provided $18,048,136 in Fiscal Year 2008 conservation financial assistance funding in Maryland for the following USDA NRCS Conservation Programs.

Agricultural Management Assistance Program (AMA)

Provided $506,474 to protect 1,530 acres

Conservation Security Program (CSP)

Provided $461,530 to enroll 21,731 acres

Environmental Quality Incentives Program (EQIP)

Provided $8,870,270 enrolling 48,541 acres

Farm and Ranchland Protection Program (FRPP)

Provided $2,638,020 to land trust groups to preserve 515 acres

Wetlands Reserve Program (WRP)

Provided $4,645,023 to restore 2,011 acres

Wildlife Habitat Incentives Program (WHIP)

Provided $926,819 enrolling 429 acres

Conservation Technical Assistance (CTA)

NRCS and Conservation Partnership employees responded to more than 22,000 requests for brief conservation technical assistance to landowners that benefited approximately 350,000 acres of agricultural land. NRCS Maryland and partnership employees participated in almost 200 outreach events that provided information to approximately 28,000 farmers and landowners.

Soil Surveys

The National Soil Survey Program was restructured to improve consistency and economics in its program operations. Using the internet based Web Soil Survey, users can print up-to-date soil information for Anne Arundel, Calvert, Carroll, Charles, Dorchester, Frederick, Garrett, Harford, Howard, Kent, Montgomery, Queen Anne's, St. Mary's, Somerset, Washington, Wicomico, and Worcester Counties, in addition to Baltimore City and Washington, D.C. Updates for Allegany, Prince George's, Talbot and Cecil Counties are scheduled for 2009.

CIG Field Trials Remove Up to 99% of Phosphorus from Ag Ditch Water

The University of Maryland is conducting research on ways to treat water in agricultural drainage ditches to remove nutrients and improve water quality before the water enters the Chesapeake Bay. Agricultural drainage ditches, which are common on the DelMarVa Peninsula, can serve as a major transport pathway for nutrients, sediments, and other contaminants.

Through a 2007 Conservation Innovation Grant, NRCS awarded $999,683 to a team of researchers led by Dr. Joshua McGrath of the University's College of Agriculture and Natural Resources for a three year research project. "This CIG project has enormous potential," said Dr. McGrath. "The project will allow us to collect key data at a variety of sites, and will help us bridge obstacles to implementing this innovative technology that will ultimately curb the flow of phosphorus into the Bay."

At a field trial site on the lower Eastern Shore, a gypsum filter (brown filter cloth over gypsum material) absorbs phosphorus from farm runoff. The weir (white wall blocking ditch) temporarily slows and pools the ditch water allowing the phosphorus to be absorbed by the filter.

Researchers are evaluating the ditches as a possible intervention point where phosphorus (P) in runoff from farm soils can be prevented from entering the Bay. Researchers are testing the use of a phosphorus absorbing material placed within drainage ditches to act as a P "filter". This unique system captures and removes P from the ditch water and the materials can be potentially land applied. Field trials of the proposed conservation treatment system have shown a high likelihood of success, at times removing approximately 99% of the P from treated water. In addition to removing P from ditch water these treatment systems have the potential to remove nitrogen, sediment, and other contaminants.

Dig It! The Secret of Soil! NRCS Exhibit Opens at Smithsonian

A new exhibit, "Dig It! The Secrets of Soil" opened July 19, 2008, at the Smithsonian Museum of Natural History in Washington, DC. On loan from USDA are 54 designated state and territory soil monoliths (pictured upper right). Another component of the exhibition is a large map (pictured lower right) created by USDA's Natural Resources Conservation Service allowing visitors to learn more about soils around the world. Maryland's state soil, the Sassafras Soil Series, is featured in the exhibit.

Maryland NRCS soil scientists Jim Brewer, Dave Verdone and Eddie Earls are featured in another exhibit component. This exhibition will be on display at the museum for almost two years. It will then become a traveling exhibit and "go on the road" to other museums across the country. The exhibit was developed by the Museum of Natural History and supported by NRCS and the Soil Science Society of America. This 5,000-square-foot exhibit is a great educational tool.

MOO-ving Forward with Grazing Partnerships

Fiscal Year 2008 was a very active year for outreach activities conducted by NRCS, the Maryland Conservation Partnership and the Maryland – Delaware Grazing Lands Conservation Initiative (GLCI). Highlights include:

- Implementation of two grants on equine land management issues by the Maryland Department of Agriculture (MDA).
- NRCS-sponsored projects developed through local Soil Conservation Districts to accelerate assistance on pasture land.
- NRCS Conservation Innovation Grant to the University of Maryland's Equine Studies Program to develop a rotational grazing system demonstration project at the University of Maryland's Clarksville facility.
- The ongoing NRCS Conservation Innovation Grant on Conversion to Grassed Based Dairy Systems in West Central Maryland being developed by MDA, local Extension Agents and Soil Conservation District employees.

These outreach efforts and other partnership events held throughout the state produced the following results:

- 53 workshops, conferences and pasture walks concerning pasture management.
- 2,135 landowners who learned abut pasture management and land stewardship.
- 58 Educational Grazing Demonstrations which are being maintained in Maryland.

NRCS District Conservationist Jack King (right) shows producer Bobbie Reed how to measure pasture growth using a Grazing Stick. Reed uses rotational grazing practices to manage her cattle herd at Winterhawk Farm in Caroline County.

NRCS Grazing Specialist Elmer Dengler teaches a pasture management workshop to conservation partnership agency employees and farmers. Dengler has been recognized by conservation agencies as a leader and trusted authority in building locally led conservation and grazing partnerships and providing outreach to Maryland farmers.

2008 National USDA Earth Day Celebration on Baltimore County Farm

USDA Secretary Ed Schafer speaks at the national celebration. Other conservation partners participating in the event are (from left) MDA Secretary Roger Richardson, NRCS State Conservationist Jon Hall, and farmer Glenn Elseroad.

On Earth Day, Agriculture Secretary Ed Schafer announced that Maryland will receive $2.6 million to protect agricultural land through the federal Farm and Ranch Lands Protection Program (FRPP).

Maryland's FRPP funding was distributed to the Baltimore County Agricultural Land Preservation Program and the Eastern Shore Land Conservancy. The two FRPP agreements will protect 622 acres of farmland in Maryland. Baltimore County's $1.6 million will protect 341 acres on five farms. The scenic and historic Elseroad farm will be acquired through the Baltimore County agreement.

The Eastern Shore Land Conservancy agreement covers 281 acres on a family farm in Talbot County, the second phase of this agricultural land preservation project. FRPP is one of several federal conservation programs used by Maryland farmers to improve water quality in the Chesapeake Bay watershed.

Watershed Approach to Conservation

Helping Build a National Heritage Scenic Trail along The Potomac River

Southern Maryland Resource Conservation & Development Council (RC&D), in partnership with the National Park Service, has brought the Potomac Heritage National Scenic Trail to Charles and St. Mary's Counties. The 200-mile bicycling trail will follow existing facilities and will connect public, green and historic spaces along the Potomac River.

RC&D and county partners are excited about the potential for sustainable economic development in trail-adjacent communities as they develop site-based and heritage tourism. The Potomac Heritage National Scenic Trail currently extends from Prince George's County, Maryland to near Philadelphia, Pennsylvania. Other trail segments include Ohiopyle State Park, the C&O Canal and the Great Allegheny Passage.

Farmers Enhance Aquatic Habitat With Stream Bank Improvement

Replacing a culvert pipe with concrete slats in the streambed provides a fish-friendly livestock crossing.

NRCS and its conservation partners are restoring and creating new aquatic and wildlife habitat throughout the state using the Wildlife Habitat Incentives Program (WHIP). Farmers are using NRCS technical and financial assistance and partnership support to remove stream blockages and restore access to streams for migratory and resident fish in the Chesapeake Bay Watershed. Conservation agencies have worked with Maryland landowners to reopen more than 400 miles of streams.

A Stream Habitat Improvement Project on a Western Maryland farm removed a culvert pipe blocking a stream and installed concrete slats in the streambed to provide a stable and fish-friendly livestock crossing. The farmer also fenced cattle out of the stream to protect water quality and provide riparian habitat. This conservation project provides quality fish habitat for feeding and breeding, and supports efforts to reverse the historic decline in fish populations.

NRCS also provides assistance with improvement of stream habitat and restoration of streambanks and shorelines.

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