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Who We Are

Inspired by a shared vision of agriculture as a valued component of the landscape, NRCS works in partnership with farmers, ranchers and many others to improve, restore and protect the Nation's natural resources.

Side-by-side with these partners, we work to sustain and improve the quality of our soil, water, air and wildlife habitat, and we develop conservation plans that work for the land and for farmers and ranchers. Farm Bill programs help with the cost of putting conservation on the ground, which benefits the farm, the watershed and the community. Conservation easement programs, also in the Farm Bill, help to protect the agricultural and natural resource of the land over the long-term.

With our help, West Virginia is balancing economic goals with a high quality environment—ensuring productive lands to supply food, fiber, forest and energy products for the Nation and the world.



The Elkwater Fork Dam's 54 acre reservoir's primary purpose is water supply.

Photo: T.J. Burr, NRCS

Upper Tygart Valley Watershed Project Provides a Community Water Supply and Recreation

The Elkwater Fork Dam's 54 acre reservoir's primary purpose is water supply. It is estimated 27,803 residents will benefit from the improvement made to the Upper Tygart Valley municipal water system. Dam construction began in May 2006 and was completed in June 2009.

In 1993, several towns in Upper Tygart Valley Watershed experienced a dangerous shortage of water. At a critical point, the one water plant was within 72 hours of complete depletion of water. As a result of this event, several stakeholders began working towards a solution to avoid future water shortages. An agreement was signed between three primary partners: the NRCS, the Tygart Valley Conservation District, and the West Virginia Conservation Agency.

During the planning phase engineers determined that roller-compacted concrete (RCC) could be used to construct the dam. RCC has three key properties that make it uniquely suited for dams: economy, performance, and high-speed construction. It has the strength and durability of conventional concrete, but at a half the cost.

As a condition of permitting under the Clean Water Act, on-site activities to mitigate for impacts had to be completed before the Elkwater Fork Dam could begin. Environmental mitigation work was required to compensate for the resources impacted by the Elkwater Fork water supply dam construction. The off-site component includes the use of natural-stream restoration methods to improve aquatic habitat on about four and a-half miles of trout stream including enhancement or creation of pools, adding riparian vegetation, narrowing over-widened sections, and creating woody fish habitat. Fish habitat improvements will improve the conditions in the Shavers Fork River to support a naturally sustainable brook trout population. Randolph County is a recreation destination. The mitigation projects supplement recreational opportunities.

The Upper Tygart Valley Watershed Project improves health and human safety by providing needed water supply for communities in the Upper Tygart Valley River

Upper Tygart Valley Watershed Project Continued from page 1.

Watershed. The 54-acre water supply impoundment also provides recreational opportunities. A safety boom improves boater safety since the water flows over the dam, not through a pipe spillway. A paved accessible fishing area below the dam, provides an area for those with physical impairments to fish in the stilling basin.

On November 23, 2011, water started flowing over the The Elkwater Fork Dam, in the Upper Tygart Valley Watershed.



J-hook rock vanes structures installed in the Upper Shavers Fork River encourages the stream to maintain a narrow channel during low flow and creates a self-sustaining fish pool on the downstream side. Deep pools are vital to trout populations during hot and dry times because they provide cooler water and cover.

Reducing Acid Mine Drainage

Most of the abandoned deep mines along Deckers Creek produce acid mine drainage.

Degraded water quality caused by acid mine drainage (AMD) is a concern at many WV abandon mine sites. Coal is often found in rock with sulfide minerals. When sulfides in the rock are exposed to water and air during mining, they form sulfuric acid. This acid lowers the pH of the creek and dissolves harmful metals in the surrounding rock. The environmental conditions caused by AMD are toxic to most wildlife.

In 2011, the Deckers Creek Acid Mine Drainage Remediation Project was completed. The project included four treatment sites. Using passive treatment measures such as open limestone channels, limestone ponds, and settling ponds to neutralize the pH of the water, Deckers Creek will again be able to support aquatic life. Improving the water quality in Deckers Creek will increase the recreational revenue for the communities along its reaches and reduce public health problems related to people contacting the water.



An open limestone channel is a passive treatment measure to increase the pH of the mine drainage and aerate it as it flows through the limestone. These processes cause the metals in solution to precipitate from the water.

Rewarding Land Stewardship

Encouraging land stewards to improve their conservation performance.

Linger Farms Inc. is a family-owned operation located in Randolph County, WV. The Lingers are recognized by USDA's Natural Resources Conservation Service (NRCS) as a stewardship leader for their outstanding conservation efforts, both on their own and through participation in the Conservation Stewardship Program (CSP). The Lingers are maintaining their current conservation practices and adopting new activities that improve soil health and protect the environment. Cropland activities include:

- using nitrogen stabilizers for air emissions control;
- using drift reducing nozzles, low pressures, lower boom height, and adjuvants to reduce pesticide drift;
- harvesting hay/forage in a manner that allows wildlife to flush and escape;
- recycling 100% of farm lubricants.



With numerous cropland acres, the Lingers have seen benefits from the various cropland activities they are participating in—from their crops better utilizing nutrients to less odors from manure.

Conservation Technical Assistance (CTA)

is simply about helping people help the land. NRCS has used CTA successfully for more than 75 years to reach out to American farmers, ranchers, and other private landowners and managers.

America's farmers and ranchers invest in conservation with help from CTA to care for the more than 70 percent of our land, water and other natural resources that are in their hands. In FY2011 West Virginia received \$5,814,000 million in CTA funds.

NRCS employees work with customers to identify natural resource problems, inventory resources, develop conservation alternatives and help individual farmers, ranchers, Tribes, local governments and urban landowners with their conservation decisions. This prepares the way for using Farm Bill and other conservation funding.

Environmental Improvement:

Environmental Quality Incentives Program (EQIP)—promotes agricultural production, forest management and environmental quality as compatible goals.

Wildlife Habitat Incentive Program (WHIP)—improves wildlife habitat on private agricultural, forest and Tribal lands.

Chesapeake Bay Watershed Initiative (CBWI)—encourages long-term conservation to improve water quality in the Chesapeake Bay.

Agricultural Management Assistance (AMA)—encourages agricultural producers to address water management, water quality, and erosion control by incorporating conservation into their farming operations.

Conservation Easements:

Farm and Ranch Lands Protection Program (FRPP)—helps keep farm and ranch land in agriculture.

Wetlands Reserve Program (WRP)—restores wetlands and wetland habitat on marginal agricultural land

Grassland Reserve Program (GRP)—restores and protects grassland, rangeland and pastureland, and helps maintain viable ranching operations.

Stewardship:

Conservation Stewardship Program (CSP)—encourages long-term comprehensive conservation by maintaining and improving existing conservation measures.

Watershed and Communities:

Emergency Watershed Protection Program (EWP)—undertakes emergency measures in watersheds where there are imminent threats to life and property resulting from fire, flood and other natural disasters.

West Virginia in The National Landscape

Conservation Partnerships

The 2008 Farm Bill increased the emphasis on providing both technical and financial assistance for conservation issues. These demands created a need for increased technical expertise in NRCS field offices. To address this need, contribution agreements between WV-NRCS and non-federal partners were developed in FY2011 that resulted in seven additional field positions stationed throughout West Virginia for a total of 14 shared positions.

For example, the West Virginia Division of Forestry hired several foresters who are located in NRCS offices. This partnership accelerates forestland technical assistance to customers. The forestry placements are expected to double the forest management plans and farm bill related contracts.

Recently, the Two Chiefs' Partnership Award recognized this collaborative effort to support conservation and forest stewardship. The award acknowledged the West Virginia Forest Stewardship Partnership for its teamwork to protect and manage West Virginia forests.

2011 Farm Bill Program Funding*

NRCS Program	Number of Contracts	Financial Assistance to Producers
Agricultural Management Assistance (AMA)	22	\$360,000
Chesapeake Bay Watershed Initiative (CBWI)	130	\$4,873,000
Conservation Stewardship Program (CSP)	247	\$676,000
Environmental Quality Incentives Program (EQIP)	386	\$7,095,000
Farm and Ranch Lands Protection Program (FRPP)	16	\$2,463,000
Grassland Reserve Program (GRP)	1	\$589,000
Wetlands Reserve Program (WRP)	5	\$532,000
Wildlife Habitat Incentive Program (WHIP)	88	\$931,000

*Financial Assistance (FA) is provided directly to producers. Conservation Technical Assistance (CTA) funding is used for professional planning and expertise to help carry out conservation activities. For GRP easements, the NRCS and the Farm Service Agency financial assistance dollars are combined. Data source: Foundation Financial Information System Status of Funds Report October 2011, revised.

Big Impacts on Conservation

- Record year for Farm Bill obligations—\$18.7 million—869 new contracts (CSP, EQIP, WHIP, CBWI, AMA)
- 2276 customers received \$5,814,000 in Conservation Technical Assistance.
- 27 new easements closed (excluding the Dunloup Creek Watershed project.
- 10,017 acres currently closed under easement in WV (that's about 15.7 square miles)

New Creek Site 14 is under construction. The dam rehabilitation brings the existing structure into compliance with current design criteria and performance standards and maintains the current level of flood protection to the municipal water supply.

Dunloup Creek purpose is to reduce flood-related damage to property within a 100 year floodplain of Dunloup Creek and to protect the health and safety of the people who live there. In 2011, 27 properties were purchased.

Four Deckers Creek Acid Mine sites were completed. When the acid mine drainage is neutralized, the creek will again be able to support aquatic life.

Appalachian Plant Materials Center

The Appalachian Plant Materials Center serves 11 states in the Appalachian Region from Pennsylvania to Georgia and Alabama.

Alderson is located in the heart of Appalachia, approximately 20 miles Southeast of Lewisburg, West Virginia. The Plant Materials Center serves Appalachia by evaluating plants for their ability to solve specific conservation problems related to climate, the rugged topography, soil limitations, various land uses, fish and wildlife needs and desires of the landowners. The center provides a place for conducting systematic observations and evaluations of plants needed to protect our natural resources. New techniques are developed for the propagation, establishment, management and use for new or improved species of grasses, legumes, shrubs and trees.

Of the 116 conservation practices available to farmers in West Virginia in 2010, the top five practices were .

1. *Fence*
2. *Pipeline*
3. *Trough or Tank*
4. *Forest Stand Improvement*
5. *Nutrient Management*
6. *Prescribed Grazing*