



**Shenandoah Resource Conservation and
Development (RC&D) Area
FY2010 - Current Projects
Updated: 7/12/10**

<i>Goal</i>	<i>Project</i>
GOAL 1: Promote managed growth and development, with an emphasis on protection of farm and forestland and open space.	<p>Green Infrastructure Workshop. The VARCDC, under the leadership of Shenandoah RC&D, in partnership with the Virginia Department of Forestry (DOF) and the National Park Service Rivers, Trails & Community Assistance Program (NPS-RTCA), developed and presented a series of comprehensive workshops addressing land protection and the Green Infrastructure (GI) approach to strategic natural resource conservation. The workshops served as a pilot to establish a consistent statewide network for GI outreach implemented on the regional and local level by the individual RC&Ds and the DOF. <i>(Statewide)</i></p> <p>Educating Shenandoah County Rural Landowners about Conservation Easements. Many rural landowners in Shenandoah County have expressed a desire to preserve their land. However, most landowners are unfamiliar with conservation easements. This effort will provide basic information, through two educational newsletters, about conservation easements to all Shenandoah County landowners who own parcels 20 acres in size or larger. These newsletters will also be posted on the internet and additional copies will be distributed as appropriate by Shenandoah County's Cooperative Extension, Office of Planning and Zoning and/or the Conservation Easement Authority. <i>(Shenandoah County but template will be available for other counties)</i></p>
GOAL 2: Promote a sustainable agricultural sector.	<p>On-Farm and Rural Production of Biodiesel – Heatwole Farm. This project will build a small scale biodiesel production by Fox Run Farms managed by Ian Heatwole. Mr. Heatwole's initiative to manufacture bio-fuels locally and use them on-farm will provide a critical model for local energy production and use. Fox Run Farms should be able to supply a more consistently-priced product by using locally-produced raw materials to manufacture fuel and reduce fuel-associated transportation costs. This project will allow local oil seed producers more marketing options and may allow more competitive pricing for this value-added product. A local processing facility also has the potential to generate more jobs in the local farm economy. In short, this project will help support the Valley's local agricultural economy and provide a critical source of biofuels. <i>(Augusta/Rockingham Counties)</i></p> <p>Organic Dairy Systems. This project will measure the costs and returns of transitioning to and then producing milk in a certified organic system. Both financial and environmental measures will be taken, with complete accounting on expenditures, income, and nutrient imports and exports from the farm. <i>(Area-wide)</i></p> <p>An Alternative Approach to Addressing Sustainable Agriculture. The Shenandoah RC&D Council provided funding and coordinate a visit to our RC&D Area by Todd Erling; appointments were arranged for Todd to meet with county officials, agricultural interests and others to explain the Hudson Valley approach, answer questions, and open discussions about using this cooperative, multi-county, approach to agricultural development (as opposed to each county 'doing its own thing'). A followup meeting has been held involving 5 counties that are considering starting a regional approach in the Valley. <i>(Area-wide)</i></p> <p>Biological Control: Invasive Species Land Reclamation and Management. A complimentary demonstration project/management program using high quality South African Boer goats to manage many of the worst invasive species in the Shenandoah on pasture, woodlands and even idle commercial property. Simultaneously, this project will also encourage the development of meat goat farming operations in the Valley utilizing invasive species as their primary forage base. <i>(Augusta County)</i></p> <p>Extension Community and Container Gardens. Help citizens learn garden skills. Provide garden fresh produce to low-income individuals through local social service agencies. <i>(Winchester/Frederick County)</i></p>

Goal	Project
GOAL 2: Promote a sustainable agricultural sector. (Cont.)	<p>Waynesboro Farmers Market – III. A group of citizens restarted the Waynesboro Farmers’ Market in 2008. This is the third year for the Market. The Market hopes to be self-sustaining after the 2010 season. This project supports their efforts to pay a market manager. The market manager will also recruit more vendors and do some public relations work. In order to supplement the grant the WFM Committee will solicit donations from local business in the Waynesboro area. Technical support will also be provided at the Market by the Administrative Assistant. <i>(Waynesboro)</i></p>
	<p>Technical Assistance to Shenandoah Valley Pure Water Forum. The Pure Water Forum has requested that the Shenandoah RC&D act as a fiscal agent for a grant from the VA Department of Conservation and Recreation to continue its role as the state’s premier roundtable. The goals are to manage DCR project funds for PWF for the coming year to allow them to reorganize their operations and to provide administrative support for basic PWF activities over the coming year. <i>(Shenandoah River Watershed)</i></p>
	<p>Shenandoah Valley Economic Study by Ken Meter. To strengthen regional agricultural economic development and build greater capacity for a local food economy in the Shenandoah Valley. Promote a home-grown economy that encourages community health and encourages the retention of local wealth through economic activities generated by a more focused community and place-based food system. The project goals are to compile solid quantitative farm production and consumer index data that can be used (a) as baseline data to understand the workings of the Shenandoah Valley regional farm and food economy; (b) to unify the work of diverse stakeholders who are and will be involved in strengthening local food systems, and (c) to assist local stakeholders in identifying strategic priorities for community and regional agricultural economic development and (d) to assess the economic impact of community-based food systems for the Shenandoah Valley, and (e) serve as a model for other bioregions of Virginia. <i>(Valley wide)</i></p>
	<p>Sustainable Shenandoah Market and Educational Garden. To showcase a variety of sustainable practices including permaculture and sell sustainably produced vegetables at the local farmers market. This project will offer education and outreach to the community through a variety of events at the garden, and helps fund a garden manager. <i>(Page County/Luray)</i></p>
GOAL 3: Promote community development and diverse rural economies.	<p>JMU Community and Student-Run Farm and RMH. This project will provide a “hands-on” experience for anyone who wishes to learn about sustainable agriculture at JMU. It will also sell produce to JMU, RMH and community members to aid them in healthier eating and living. It will be a place of learning and community, where students, families and patients alike can come together to learn. <i>(Harrisonburg)</i></p>
	<p>Muddy Bike Project - III. Will assist low-income families grow their own food in their neighborhoods and improve their nutrition, will include school gardens. Will employ low-income and homeless individuals in the production of organic produce at an urban sustainable living site in Harrisonburg, VA. The Project is designed to be primarily self-funded through building community shares and market sales. <i>(Harrisonburg)</i></p>
GOAL 4: Promote the conservation of natural resources, with an emphasis on improvement and protection of water and air quality.	<p>Pilot Research Project: Livestock Exclusion II. Livestock in streams in the Shenandoah Valley contribute to excess nutrient, bacteria and sediment inputs that are having a negative impact on waters in the Valley and, ultimately, the Chesapeake Bay. This project involves development and delivery of an adaptive livestock exclusion and pasture management program that is hoped to have a positive impact on water quality in the Shenandoah Valley and serves as a model for conserving resources in Chesapeake Bay watersheds. <i>(Area-wide)</i></p>

Goal	Project
<p>GOAL 4: Promote the conservation of natural resources, with an emphasis on improvement and protection of water and air quality. (Cont.)</p>	<p>Rolling and Crimping as a Low Input Tool for Managing Cover Crops in the Shenandoah Valley. This project conducts a first phase of on-farm research to demonstrate the effectiveness of a valley cover crop roller crimper. The objectives of this project are to: 1) determine the optimum timing and frequency of rolling/crimping for effective control of small grain, legume and small grain plus legume cover crops; 2) quantify the effects of rolling/crimping small grain, legume and small grain plus legume cover crops on soil moisture, soil temperature and soil nutrient cycling; 3) determine the effects of rolling/crimping on cash crop growth and performance following cover crop management. Cover crop management reduces tillage, inputs and builds and enhances soil quality. <i>(Area-wide)</i></p>
	<p>Promotion, Demonstration and Evaluating Cover Crop Roller-Crimper. The Shenandoah RC&D assisted with organizing three workshops and/or demonstrations in the Shenandoah RC&D Area within two years; assisted the SVSWCD and VCE with developing a pilot program to demonstrate the effectiveness of the equipment; helped promote the effectiveness of this equipment by preparing news releases and other promotional material; provided local oversight for the first two years of the pilot program; and is working to provide additional promotional material to get the word out about this cover crop management system that reduces or eliminates herbicide use and builds soil quality. <i>(Area-wide)</i></p>
	<p>Shenandoah Valley Sustainable Cropping Systems Research Study, Phase II, 2007 and 2008. A five-year cropping systems research study taking place on a dairy and crop farm in northern Augusta County, which is examining the effects of tillage and cover crop management on three very common crop rotations in the Shenandoah Valley. This is the second of a three-phase project. <i>(Augusta County)</i></p>
	<p>Advanced Soil Fertility Management: Beyond N, P and K. It is the goal of this project to provide growers with a comprehensive educational program to assist in making both financially and environmentally sound soil fertility management decisions. This project will also compliment other ongoing research efforts in the watershed examining the effects of continuous no-till production on nutrient and sediment loss. <i>(Area-wide)</i></p>
	<p>Energy Savings on-Farm: Outreach and Education. The goal of this project is broad-based education and outreach to provide farmers with specific detailed information that will allow them to save on on-farm energy costs. This will help foster energy efficiency, conservation, and renewable energy in Virginia's agricultural sector. By doing so, Commonwealth objectives regarding energy savings and carbon reductions will be promoted, the financial health of the Ag sector will be enhanced, and the demands on the rural electric power infrastructure will be moderated. The objectives is to assist area farmers in economic sustainability by saving energy costs on farm, which will also help protect farmland and working farms, and reduce energy use. <i>(Statewide)</i></p>
	<p>Smith Creek Watershed Initiative. This project will empower Smith Creek watershed landowners and residents to effectively apply restoration and conservation solutions for water quality and land use challenges in their community. To create a citizen-driven model that will support expanded conservation and restoration outcomes for the improvement of land and water resources in this targeted watershed. To empower citizens to undertake specific actions and projects that will restore and sustain the natural, economic, and cultural resources of the watershed and its communities. To improve water quality significantly; resulting in removal of Smith Creek from the impaired stream list. <i>Create and maintain website and obtain CCPI agreement for additional cost share in the watershed. (Shenandoah/Rockingham Counties)</i></p>

<i>Goal</i>	<i>Project</i>
GOAL 4: Promote the conservation of natural resources, with an emphasis on improvement and protection of water and air quality. (Cont.)	<p>Poague Run Watershed Demonstration and Education Site. The Poague Run Watershed is a 2,858.3 acre mixed agricultural/urban watershed situated along a highly travelled entrance corridor to the City of Staunton, the county seat of the second largest agricultural-producing county in Virginia. It is in the Chesapeake Bay Watershed. Poague Run is a tributary of Lewis Creek which is on the Virginia Department of Environmental Quality's Impaired Waters 303(d) TMDL Priority List for excessive bacteria and an inability to support aquatic life. This Project partners will take a two-pronged approach concentrating on both the urban and agricultural portions of the watershed. Partners will demonstrate that agriculture, riparian buffers, clean streams and trout, bird and pollinator habitat go together, while encouraging the urban residents of this watershed to do their part in keeping this watershed clean. We will use this project to encourage watershed rehabilitation and restoration in agricultural, residential, and commercial sites throughout the entire Poague Run watershed. <i>(Augusta County)</i></p>
	<p>Enhancing Large Animal Mortality Disposal in the Shenandoah Valley. This is a project for an on-farm disposal and composting of large animals. RC&D will fund the education/outreach portion. <i>(Area-wide)</i></p>
	<p>Upper South River Funding Network. Provide timely and accurate information on state, federal, and private grant opportunities to partners engaged in riparian restoration, creation of a trophy brook trout fishery, and establishment of The Center for Coldwaters Restoration in the upper South River (Shenandoah) watershed.</p>
	<p>Virginia Farm Energy Resource Center. The Shenandoah RC&D in conjunction with James Madison University's Dr. Maria Papadakis, funded by the Virginia Association of RC&D Councils, will create a new website for the Virginia Farm Energy Resource Center and prepare and print fact sheets on wind and solar energy on farm. VERC will provide a centralized source of information on energy efficiency, conservation, renewable energy, and alternative energy for Virginia farms. It will also provide some technical assistance, particularly in estimating the economic payback of different energy investments and guiding farmers to appropriate resources and technical experts. <i>(Statewide)</i></p>
	<p>Cooperative Conservation Partnership Initiative (CCPI). This project seeks to direct CCPI funds over three years to implement the practices that have already been recorded in the local field offices in the Shenandoah Valley and to target the thirty-two (32) poultry, eighteen (18) Grade A dairies, thirty (30) beef feedlots and the beef cow/calf operations identified in the Smith Creek Watershed. This figure represents 100 producer's implementing cropland and nutrient management "enhanced" practices on approximately 24,000 acres. One-third of the producers have already been identified and have requested funding. After meeting the immediate funding request, priority will be given to applications for cropland and nutrient management practices in the Smith Creek watershed.</p>
GOAL 5: Strengthen Council Operations	<p>T&E Meats/Central Appalachian Network (CAN) Grant. The Shenandoah RC&D will act as the fiscal agent for this grant to expand their operations in order to process and store more locally-produced meats. <i>(Region-wide)</i></p>