

Mission Statement

The West Virginia Department of Agriculture's Environmental Program serves the citizens of West Virginia by encouraging the farm community to continue to produce food and fiber for global distribution while preserving the surrounding natural resources for the generations of the future. A strong program for maintaining high water and air quality is achieved through the efforts of a professional staff. Participation in cooperative projects with other state agencies, national programs, and producer associations results in the West Virginia Department of Agriculture maintaining an innovative role in agriculture conservation.



60B Moorefield Industrial Park Road
Moorefield, WV 26836

Phone: 304.538.2397
Fax: 304.538.7088
www.wvagriculture.org



**West Virginia
Department of
Agriculture**

Regulatory and Environmental
Affairs Division

**Moorefield
Environmental
Programs**



Preserving Agriculture
and the Environment

Gus R. Douglass, Commissioner

Moorefield Environmental Programs

Water Quality Monitoring

The West Virginia Department of Agriculture's (WVDA) Moorefield Laboratory began operations in late 1993 in response to concerns about the



effect the booming poultry industry was having on the environment. In 1996, segments of seven rivers within West Virginia's Potomac watershed (Lost

River, South Branch of the Potomac, North Fork of the South Branch, South Fork of the South Branch, Mill Creek, Lunice Creek and Anderson Run) were placed on West Virginia's 303(d) list of impaired water bodies due to fecal coliform bacteria. Out of concern that the listing of these waters was based on insufficient data, in 1998 the West Virginia Department of Agriculture began a water quality monitoring program in these watersheds to collect additional data that would more accurately establish the condition of these streams. Since the inception of the program, more than 18,000 samples have been collected and the program has expanded to include 12 employees that work in the following programs: Nutrient Management Lab, Bacterial Source Tracking (DNA), Chesapeake Bay, Ohio River Sub Basin, Poultry Issues, and other environmental issues related to agriculture.



Measuring Stream Flow

Nutrient Management Lab

The Nutrient Management Laboratory tests poultry litter, other manures, and composted materials for nitrogen, phosphorous, ammonia, copper, potassium, calcium, and magnesium. These tests are part of the nutrient management plans being

implemented with farmers and landowners by the WVU Extension Service, NRCS Programs, FSA, and the Potomac Water Quality Office. Participants in the USDA's PL-534 Land Treatment Project



are required to submit manure and soil samples to be analyzed annually for land application of animal wastes. The Best Management Practices (BMPs) of the PL-534 program are installed to protect surface waters from the potential impacts associated with poultry and livestock operations. The Nutrient Management and Water Quality Laboratory participates in an annual laboratory certification and performance audit as mandated by the West Virginia Department of Environmental Protection.

Bacterial Source Tracking (DNA)

In January of 1998, The West Virginia Department of Agriculture, in cooperation with Marshall University, developed a program to identify potential sources of fecal coliform contamination. The program was designed to compare the DNA profiles of bacteria from known animal sources to DNA found in local water systems. Following completion of this program, the WVDA entered into a cooperative project with USGS to compare Polymerase Chain Reaction (PCR) source tracking methods.

Poultry and Environmental Specialist



The Poultry/Environmental Specialist is a major link between the poultry industry and the citizens of West Virginia. Outreach and education to the general public, the poultry growers, the poultry integrators, and government agencies are the primary efforts of this position. This endeavor includes answering questions regarding backyard flocks, commercial poultry, and the impacts of commercial agriculture production on the economy and the environment. The Poultry/Environmental Specialist is involved in Chesapeake Bay Program efforts, serves as the agency liaison to the West Virginia Poultry Association, and assists state and federal agencies with preparations for possible poultry disease outbreaks and eradication procedures.

Chesapeake Bay Program



In June 2002 Governor Bob Wise signed the Chesapeake Bay Program Water Quality Initiative Memorandum of Understanding.

By signing this memo, West Virginia has agreed to develop goals and objectives to reduce stream nutrient and sediment loads. Reductions of 33% for nitrogen, 35% for phosphorus, and 6% for sediment are needed between 2002 and 2010. These reductions are anticipated to come from a variety of sectors including point sources such as municipal wastewater treatment plants and industry, and nonpoint sources such as agriculture, forestry, urban, suburban, and mixed open land uses. The plan for meeting these reductions is in West Virginia's Potomac Tributary Strategy. Fourteen percent (14%) of West Virginia drains into the Potomac River and on to the Chesapeake Bay. The West Virginia Department of Agriculture is supporting this program in multiple ways such as contributing water quality monitoring data, outreach and education and participating in committees, subcommittees and workgroups.

Ohio River Sub Basin



The Ohio River Sub Basin Program utilizes a whole watershed approach to achieve the nutrient reductions set forth by the Action Plan for Reducing, Mitigating, and Controlling Hypoxia in the Northern Gulf of Mexico. It is envisioned that the efforts of the Ohio River Sub Basin Committee will facilitate a cooperative effort across the Ohio River Basin resulting in a multifaceted strategy to reduce in stream nutrient loads. By using innovative tools, such as a trading program, it is hoped that these reductions can be reached more quickly, and at a lower cost, than traditionally would be possible. While this program is still in its infancy, West Virginia became involved early in the process to lend guidance and support to the program as it develops and grows.