

North Fork Montour Run Passive Treatment System



The 37-square mile Montour Run Watershed was placed on the 303(d) list with 26.18 stream miles impaired by AMD due to low pH and high metals content. The Montour Run Watershed Association (MRWA) was founded in April of 2000 to formalize and extend the work of an informal coalition previously identified as the Montour Valley Alliance, which was concerned with protecting the Montour Run Watershed's natural values while promoting their related economic benefits.

In 2003, the *Abandoned Mine Drainage Cleanup Plan* was completed by BioMost, Inc. for the Montour Run Watershed. One of the priorities identified within the plan was the NFMU9 discharge, which issues from the abandoned Clinton No.1 underground mine.

During construction of the Pennsylvania Turnpike Commission's Southern Beltway Findlay Connector project, Clinton No. 1 mine workings were encountered upgradient of NFMU9 and other small, degraded discharges. To facilitate highway construction, a collection system and three treatment ponds were constructed in order to address the AMD during construction. A limited window of opportunity existed to work with the Pennsylvania Turnpike Commission (PTC), and the Allegheny County Airport Authority (ACAA) to leave the treatment ponds in place and to utilize the collection system and ponds as part of an innovative passive system for long-term sustainable treatment. Otherwise, the treatment ponds were to be removed once the road construction was completed and the untreated discharge would have flowed directly into an unnamed tributary of North Fork Montour Run.

The MRWA received a \$337,367 Pennsylvania Department of Environmental Protection DEP Growing Greener Grant and a \$100,000 US Office of Surface Mining Watershed Cooperative Agreement Grant to design and build a passive system. Incorporation of the collection system and treatment ponds provided significant savings in the construction of the passive treatment system at an estimated \$189,120. In addition to the PTC and ACAA, this public-private partnership effort included consulting companies, a mining company, environmental organizations, volunteers, and local government agencies.

Based on existing water quality data on Datashed (www.datashed.org) the North Fork passive system is treating over **26 million gallons of AMD** per year. The system is **neutralizing 50,000 lbs of acidity per year** and **removing 23,000 lbs of metals per year**.