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Long Branch Passive AMD Treatment Project

Project No. WV-217

Recipient: West Virginia University

Principal Investigator: Brady Gutta, Research Associate
West Virginia Water Research Institute

Funding: \$176,807 WVDEP
\$ Cost-Share
\$ Total Value

Project Duration: 10/28/2004 – 9/30/2006

Project Description: The Longbranch of Paint Creek project, located near Burnwell, WV consisted of constructing a 10,000 foot open limestone channel in an effort to combat the 160 tons of acid entering into ten mile fork each year. The open limestone channel has been effective at removing the aluminum as well as neutralizing the acidity. The Longbranch of Paint Creek drains into Ten Mile Fork before entering into the Paint Creek. The open limestone channel installed on Longbranch has also had a significant impact on the chemistry of Ten Mile Fork. The pH has increased by 11%; the acidity has decreased by 10% while the alkalinity has increased by 82%. The metal concentrations have also seen decreased of 50%, 60% and 13% for iron, aluminum, and manganese, respectively.

Project Significance: Lessening the impacts of water draining from coal mines has a positive impact on water quality downstream.