## Mine Water Reclamation in Appalachia Facilitated by Student Support and Technical Assistance from Academia<sup>1</sup>

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Abstract: Acid mine drainage (AMD) is one of the most persistent and expansive sources of water quality degradation in Appalachia, impacting over 4,000 miles of stream throughout the state of Pennsylvania alone. The Center for Watershed Research and Service (CWRS) at Saint Francis University in Loretto, Pennsylvania was developed in 2012 with the mission to provide support for local and international watershed protection. Due to the mining impacts surrounding the University, the CWRS has assisted in the monitoring, design, research, and maintenance of AMD treatment facilities throughout Pennsylvania. Many of these projects are facilitated by collaboration with local consultants, watershed districts, and the Department of Environmental Protection. Work is completed through volunteer efforts by students, faculty/staff of the CWRS, student class projects, or fee for service opportunities with clients. While assisting in AMD remediation, the CWRS provides unique opportunities for students at Saint Francis University to use their skills to solve real world problems and promote environmental stewardship. The success of the CWRS has helped reduce AMD water quality degradation in Pennsylvania while developing the next generation of environmental stewards. Similar models could be applied at other academic institutions to support student learning while solving environmental issues.

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