

# Slippery Rock Watershed: AMD Treatment, Education, and Recreation Project

Abandoned Mine Land Economic Revitalization (AMLER) (aka AML Pilot Program)

Pennsylvania Department Environmental Protection Abandoned Mine Reclamation Program

Project #: AMD 10(3776,6834,7131)101.1

Contract: 7C-FA-28.0

December 2022



**Project Sponsor:** Stream Restoration Incorporated ([www.streamrestorationinc.org](http://www.streamrestorationinc.org))

**Project Description:** Stream Restoration Incorporated (SRI) and the Slippery Rock Watershed Coalition (SRWC) received an Abandoned Mine Land Economic Revitalization (AMLER) grant to complete a multi-faceted project consisting of three sub-projects on public lands.

**Barkley Road Passive Treatment System:** The Barkley Road passive treatment system was constructed in 1996 on Moraine State Park property to treat Acid Mine Drainage (AMD) flowing directly into Lake Arthur. After many years of operation, iron sludge and debris had accumulated within the ponds resulting in AMD overflowing the berm and bypassing treatment. A new sludge pond was constructed, and the existing treatment system was cleaned of sludge and debris restoring treatment functionality. Based on available data, the system treats 15 million gallons of mine drainage per year, preventing 1,800 lb/year of iron from entering Lake Arthur.

**Foltz Schoolhouse Restoration:** The oldest known passive treatment system in the Slippery Rock Creek watershed was built at the Jennings Environmental Education Center (JEEC) around 1988. Being a Pennsylvania State Park, JEEC has utilized the abandoned underground mine, historic structures, AMD, and passive treatment system, as an environmental educational resource and a research and demonstration site. Next to the passive system existed an old, abandoned, one-room schoolhouse operating from 1880-1963. The JEEC has long wanted to restore the Foltz schoolhouse, which would be utilized as a museum of early local education history and culture and environmental education. The all-volunteer community organization Moraine, McConnells Mill and Jennings Commission (3MJC) began to spearhead an effort to obtain funding and resources to restore the schoolhouse. The interior and exterior were renovated including electric heaters, insulation in walls and ceiling, wainscoting, drywall, trim, replica antique light fixtures, shutters, interior and exterior paint, driveway, parking lot, and ADA parking space. A single composting trailhead toilet has been installed for public use.

**North Country National Scenic Trail:** The North Country National Scenic Trail (NCT) stretches 4,600 miles over eight states from North Dakota to Vermont. About 275 miles of the trail passes through Pennsylvania, of which a good portion of that passes through the Slippery Rock Creek watershed, including sections that traverse through McConnells Mill, Moraine, and Jennings Environmental Education Center State Parks, as well as PA Gamelands #95. The NCT also passes beside or directly through six passive treatment systems in the watershed. Building and maintenance of the 57-mile segment that goes through Butler County are mostly conducted by volunteers of the Butler County Chapter of the North Country Trail Association (NCTA). As part of this project, four large named bridges and four smaller unnamed bridges were replaced. The new bridges were designed to be longer than the original ones to overcome past and future bank erosion issues. In addition, about 500 feet of new boardwalk were built along the trail, and approximately 4,500 feet of other trail improvements were completed, such as placing limestone in wet and muddy areas.

**Funding:** \$176,246 and an estimated \$150,000 of donated and in-kind services including more than 6,000 volunteer hours

**Project Partners:** Anonymous Donors; BioMost, Inc; Boy Scout Troop #53; Butler Co. Chapter of the North Country Trail Association; Butler Co. Area Vocational School; Butler Co. Commissioners; Butler Outdoor Club; Community Development Corporation of Butler Co.; Foltz Schoolhouse Volunteers; Jennings Environmental Education Center; Moraine, McConnells Mill and Jennings Commission (3MJC); Moraine State Park; Pennsylvania Department of Environmental Protection Bureau of Abandoned Mine Reclamation; Pennsylvania Game Commission and State Game Lands #95; Slippery Rock Watershed Coalition; Stream Restoration Incorporated; Union Carpenter Local #432; U.S. Office of Surface Mine Reclamation and Enforcement;