

THE CATALYST

SLIPPERY ROCK WATERSHED COALITION MONTHLY ACTIVITIES UPDATE

THIS MONTH'S MEETING: Thursday 2/8/07 at 7 pm at Jennings Environmental Education Center, pizza and pop provided. 1/11/07 Meeting Attendance: C. Cooper, C. Denholm, T. Grote, D. Johnson, V. Kefeli, W. Taylor

2006 Year in Review

Working Together for Our Watershed!!!

Education/Outreach Activities

- SRWC interviewed for Ellwood City Ledger newspaper article — 3/16
- EPA/PA DEP Nonpoint Source Tour — 4/19
- National Aviary Homecoming Weekend Festival, Pittsburgh, PA — 5/13
- Robert Morris University Department of Science Board of Advisors Meeting — 5/17
- Abandoned Mine Lands Fund Rally, Pittsburgh, PA — 6/16,
- 5th Annual Ohio River Watershed Celebration, Pittsburgh, PA — 9/21
- National Public Lands Day, Jennings Environmental Education Center — 9/30
- Abandoned Mine Lands Legislative Strategy Meeting and Press Conference, Altoona, PA — 10/18
- Harrisville Community Days, Harrisville Park — 7/4
- SRWC participants guest lecture at University of Pittsburgh, Don Hopey's Issues class — 11/9
- GIS Day, Harrisburg, PA — 11/16
- Western PA Coalition for Abandoned Mine Reclamation quarterly meeting, Indiana, PA — 11/16
- New book published by Dr. Valentin Kefeli: "Sustainability and Regeneration of Ecological Systems in Western Pennsylvania, USA: Research and Efforts"
- "Adopt-a-Highway" Program, clean-up effort for Interstate 79 mile markers 100-101

Restoration Projects

- Slippery Rock Creek Watershed Assessment
- Blacks Creek Restoration Plan
- Slippery Rock Creek Watershed Operation and Maintenance Plan
- Rivers Conservation Plan for Slippery Rock Creek Watershed

Conferences

- 7th International Conference on Acid Rock Drainage; Society for Mining, Metallurgy and Exploration, Inc. Annual Meeting; The American Society for Mining and Reclamation Annual Meeting; St. Louis, Missouri 3/27-30
- American Water Works Association, Southwestern PA Section, Greensburg, PA — 3/31
- Acid Drainage Technology Initiative Coal Mining Sector Annual Meeting, Morgantown, WV — 4/19-20
- West Branch Susquehanna Restoration Symposium, State College, PA — 5/12
- Pennsylvania Statewide Conference on Abandoned Mine Reclamation, State College, PA — 8/24-26
- 28th Annual National Association of Abandoned Mine Lands Programs, Billings, Montana — 9/24-27
- Coal Combustion Products (CCP) State Review, Harrisburg, PA — 12/13-15

Recognition

- 10th Annual Carnegie Science Center Awards for Excellence, the SRWC wins Honorable Mention in the Environmental Category — 2/1
- Western Pennsylvania Environmental Awards, BioMost, Inc. winner in the Business Category — 5/25
- Washington County Conservation District's 2006 Conservation Consulting Firm of the Year, awarded to BioMost, Inc. — 12/12





The new vertical flow system flow control box (right) at Jennings Environmental Education Center took a lot of work to construct (center), but was in need of repair (old VFS flow control box pictured at left). *Please see article below.*

A New Look for an Old Site

2007 marks the 10th anniversary of the installation of the vertical flow system at Jennings Environmental Education Center. To celebrate, big changes are in store for the Jennings Abandoned Mine Drainage Research and Demonstration Site! Thanks to the DEP Growing Greener II Bond Initiative and the DEP Environmental Education Grants Program, over \$15,000.00 will be invested into the site over the next three years. Combined with over \$9,000.00 of in-kind and matching contributions that accompany the grants, \$24,000.00 worth of repairs, improvements, education programs and interpretive exhibits will be completed.

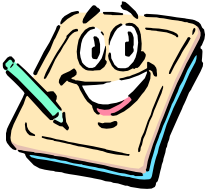
First priority will be to conduct some system maintenance and repair. Although the water quality of the system effluent continues to be excellent, several flow splitting and control devices are in need of repair. During this past summer the first system maintenance and repair project was completed. The vertical flow system flow control box was completely rebuilt. The new structure now boasts a poured concrete floor, cement block footer, new control valves and an attractive board and batten exterior preserved with stain pigmented with iron oxide. This beautiful new flow control box can now double as a lockable, walk-in storage building. Several more maintenance and repair projects are scheduled for the spring of 2007 including the replacement of the vertical flow pond influent valve box and flow splitter box.

Second, overall site aesthetics will be improved. Projects will include the removal of debris, trail improvements, staining, native plantings and invasive species removal. During the early portion of this winter the Quonset hut housing various research tanks and projects was greatly improved by replacing the insulating plastic exterior and installing a set of heavy-duty double doors. Finally, the overall interpretation of the site will be enhanced by the design and installation of various wayside exhibits. This interpretive signage will orient visitors to the site and describe the series of events that led to the development of the research and demonstration site.



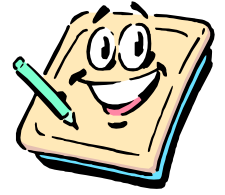
The inside of the VFS flow control box before (Left) and after (Right) repair

The Jennings Abandoned Mine Drainage Research and Demonstration Site is unique to Pennsylvania, if not the country. Located within a state park, there is the potential for thousands of visitors and students to visit each year. These improvements will greatly enhance not only the performance of an already successful passive treatment system, but the awareness of the issue of abandoned mine drainage and the value of research, education and successful partnerships.



The KIDS Catalyst

SLIPPERY ROCK WATERSHED COALITION FUN ACTIVITY



Icy Icicle Maze

Icicles are tapered, hanging spikes or cones of ice formed by the freezing of dripping or falling water. You have probably noticed icicles hanging from places like roofs and fences. Below is a mailbox icicle maze we hope you have fun with! If you mail us your completed paper, we will send you a free gift certificate!

START →

→ FINISH

Name _____

Age _____

Address _____



Slippery Rock Watershed Coalition c/o Stream Restoration Incorporated
A PA Non-Profit Organization
3016 Unionville Road
Cranberry Twp., PA 16066

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New Manual Aids in Maintaining the Watershed's Passive Systems

Treating AMD using passive treatment means a minimum of operation and maintenance, right? When compared to conventional chemical treatment systems, the answer is a resounding “yes”; however, there is still Operation & Maintenance (O&M) work to be done regarding passive systems! Keeping in mind that passive treatment is still a relatively new technology, it is understood that periodic inspections and system maintenance are necessary for the facilities to continually and successfully treat the mine drainage.

The Slippery Rock Watershed Coalition, through a volunteer effort, works to maintain the passive systems, and to help with this effort an Operation and Maintenance Manual for all projects within the Slippery Rock Watershed is being completed. The plan consists of the following components, which are to be available for download from www.datashed.org :

- An overview of AMD and related chemistry
- Detailed information regarding different types and components of passive treatment systems
- Instructions for conducting site inspections and completing maintenance tasks
- Site location maps
- Individualized inspection forms for each reclamation project

The SRWC's O&M Manual was completed through a public-private partnership which includes: **BioMost, Inc., Jennings Environmental Education Center, PA DEP BAMR, PA DEP Grants Center, PA DEP Knox DMO, Quality Aggregates, the Slippery Rock Watershed Coalition, Stream Restoration Incorporated, and 241 Computer Services**. Funding for the O&M Manual was provided through a Technical Assistance Grant awarded to Stream Restoration Incorporated through the **PA DEP's Growing Greener** program.

The SRWC is taking an “active” role using “passive” systems to fix the problems caused by AMD. The comprehensive O&M Plan, portions of which were created based on the example from **P.J. Shaw** of the **PA DEP BAMR**, outlines and details the work needed to ensure the sustainability of the watershed's passive systems. The SRWC is very excited about how this comprehensive O&M Manual will benefit the Watershed and those who play a role in caring for its restoration. Future O&M articles will examine various plan components.