

# THE CATALYST

## SLIPPERY ROCK WATERSHED COALITION MONTHLY ACTIVITIES UPDATE

**THIS MONTH'S MEETING:** Thursday 2/11/10 at Jennings Environmental Education Center, pizza and pop provided. 1/14/10 meeting attendance: J. Belgraden, D. Carney, S. Carney, C. Denholm, M. Dunn, D. Johnson, V. Kefeli, S. Smith

## 2009 Year in Review: Working With YOU to Clean AMD!

### Education/Outreach Activities

- EPA 319 Past, Present, and Future Tour, Slippery Rock Creek Watershed—2/26
- Jennings Environmental Education Center Invitational Public Meeting, JEEC—3/18
- Symposium for Student Research, Scholarship, and Creative Activity, Slippery Rock University—4/2-4/3
- Daisy Scout Troop 60660 Tree Planting at BC16 site, Slippery Rock Creek Watershed—5/2
- Harrisville Community Days—7/4
- Dr. Valentin Kefeli (our unofficial overseas delegate) travels to Istanbul, Turkey, to complete work on the book "Mechanisms of Landscape Rehabilitation and Sustainability" - August
- 8th Annual Port-of-Pittsburgh Ohio River Watershed Celebration—10/1
- Westminster College students presentations at SRWC meeting—11/12
- Student Symposium on the Environment, Westminster College & SRWC—12/3
- "Adopt-a-Highway" Program, clean-up effort for Interstate 79 mile markers 100-101 by volunteer Charles Cooper

### Conferences

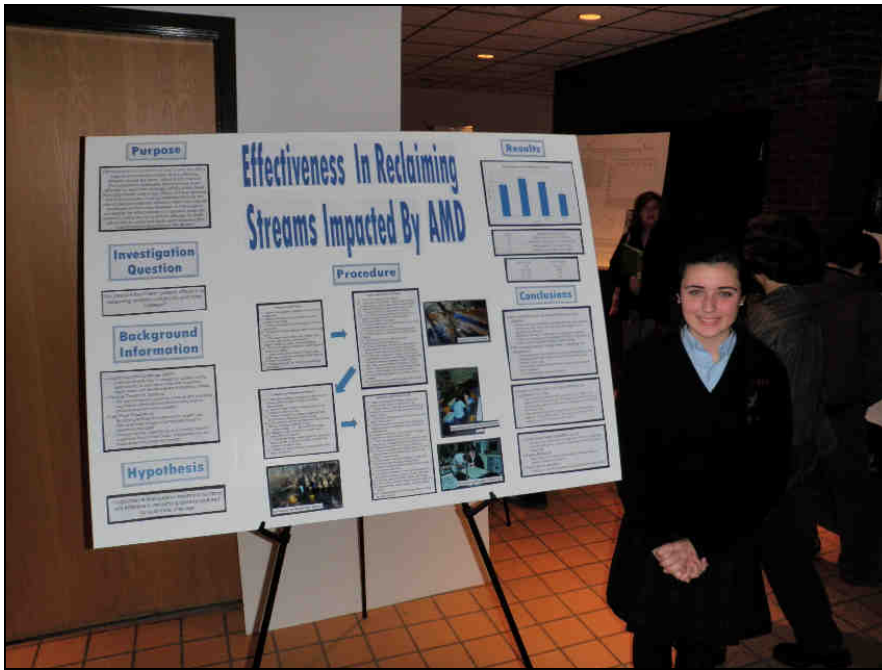
- PITTCON Conference & Expo, Chicago, IL—3/8-3/13
- West Virginia Watershed Network Forum, West Virginia University, Morgantown, WV—3/17
- West Virginia Mine Drainage Task Force Symposium, Morgantown, WV—3/31-4/1
- OSM Stream Design Conference, Bristol, VA—4/28-4/30
- 17th Annual PA GIS Conference, Grantville, PA—5/19-5/20
- Annual Meeting of the American Society of Mining and Reclamation and the 11th Billings Land Reclamation Symposium, Billings, Montana—5/30-6/5
- 11th Annual PA Abandoned Mine Reclamation & Coal History Conference, Johnstown, PA—7/13-7/16

### Recognition

- Stream Restoration Incorporated named "Finalist" in Nature Conservancy Award
- Hartford Heroes donation recipient from Shirley Funkhouser, Hartford Financial Services Group—February
- *Pennsylvania Magazine* features article on SRWC and Clean Creek Products—March
- *The Allied News* features article on SRWC and Clean Creek Products—6/3
- *Land and Water Magazine* features article on SRWC—July
- De Sale Restoration Area showcased in *U.S. EPA "Greener Cleanups"* web page feature—Sept.
- "*Advances in Molecular Biology*" (publication of Istanbul Kultur University in Turkey) publishes 2 papers by Dr. Valentin Kefeli & students
- Celebrating 15th Anniversary of the SRWC!!!! (1st meeting ever held: 12/16/94)

### JOIN US!!!

The Slippery Rock Watershed Coalition meets the 2nd Thursday each month—and always includes free pizza and soda pop! Join us and check things out! We love seeing new faces and are always happy to answer questions. Learn about what's new with our watershed activities! Meetings take place at Jennings Environmental Education Center, 2951 Prospect Road, Slippery Rock, PA 16057; phone 724-794-6011.



**Frances Anne Tosto**, a **sophomore(!!!)** at **St. Joseph High School** summarizes her research at the 12/3/09 Student Symposium hosted by **Westminster College** and the SRWC.

Ms. Tosto's research, entitled "Effectiveness in Reclaiming Streams Impacted by AMD" was conducted in the Slippery Rock Creek Watershed.

Congratulations as being recognized as having one of the best posters at the symposium!!!

### **Celebrating 15 Years for the SRWC!!!**

We're all feeling rather OLD here at the SRWC, as we shake our heads in amazement that 15 years (WOW!!) have past since the inception of the SRWC!!!! December 16, 1994 marked the first SRWC meeting, which took place in the multi-purpose room of the Student Union at Slippery Rock University. The SRWC was formed to combat what the Commonwealth's Operation Scarlift program declared to be "**the most severe condition of coal mine drainage**. Indeed, very little drainage from this region is produced exclusive of contact with, or issuance from mine workings." Many longtime residents of the area have referred to Slippery Rock Creek as "Sulfur Creek" due to the extensive and quite obvious affects of mine drainage upon the watershed.

In its 15 years, the SRWC has partnered with many landowners, government agencies, private foundations, the mining industry, volunteers, students, youth organizations, church groups, environmental professionals, etc. to install about 18 environmentally-friendly passive treatment systems in the Slippery Rock Creek Watershed. Those 18 systems are treating approximately 750 million gallons of abandoned mine drainage per year from nearly 30 discharges. That is enough water to fill 9 million typical 5-foot long bathtubs or provide a small town of about 17,000 people with their annual water supply. We are also preventing about 200 tons of iron, 8 tons of aluminum, and 335 tons of acidity annually from entering the headwaters of Slippery Rock Creek. In addition, about 200 acres of abandoned mine lands have been reclaimed to productive farms or wildlife habitat, while over 10 acres of wetlands have been created. These efforts have resulted in an amazing improvement in 11 miles of streams and the observation of fish in six miles of streams, probably for the first time in about a century..

A little-known fact that may surprise many people is that the SRWC is not a typical organization. There are no committees. There are only people. People who have come from diverse social, economic, political, and educational backgrounds with different skills, knowledge, and experiences, but have set aside any differences to come together in a concerted team effort to restore the watershed to an ecologically-healthy and viable state. That is what we are all about!

### **Make a New Year's Resolution to Check Out the "The Point North" Webzine!**

A new year has begun! Why not "resolve" to support the environmental efforts of our friends at **The Point North** magazine, as they have gone paperless and are now exclusively on the web?! If you visited their web page in January, you were treated to an excellent piece about the SRWC's 15 year anniversary!!! Hard to believe, it has been 15 years since the SRWC was initially formed!!! **Cliff Denholm**, an Environmental Scientist with SRI and a participant of the SRWC, authored a brief retrospective in the Point North's "Our Environment Matters" feature. In this article Cliff recounts his time with the SRWC, the role the SRWC has played in his life and professional career, and some of the SRWC's accomplishments. The Point North can be found on the web at **www.thepointnorth.com**. Its regular features include articles on financial wellness, organic food, pets and wildlife, children and teens, baby boomers and seniors, and so much more!



# The KIDS Catalyst

## SLIPPERY ROCK WATERSHED COALITION FUN ACTIVITY



### AMD Word Unscramble

Acid mine drainage, or abandoned mine drainage (AMD), has polluted over 2,400 miles of streams in Pennsylvania. AMD refers to the flow of acidic water from (usually abandoned) metal or coal mines. Coal mining has been taking place in the Slippery Rock Watershed for over 100 years! The SRWC treats over 500,000,000 gallons of AMD water every year! Below are several statements about AMD, each with a scrambled word to complete the sentence. There are a few clues to some of the answers in the articles written in this month's Catalyst newsletter, if you need help. If you mail us your completed paper, we'll send you a free gift certificate!

- Streams affected with AMD look this color when there are particles containing iron in the water or on the streambed.

\_\_\_\_\_ RNAGEO

- Streams affected with AMD look this color when there are particles containing aluminum in the water or on the streambed.

\_\_\_\_\_ EIWTH

- Streams affected with AMD look this color when there are particles containing manganese on the streambed.

\_\_\_\_\_ KBCAL

- When streams are polluted by AMD, it is hard for \_\_\_\_\_ (SFIH) and other aquatic life to survive.

- Passive treatment systems are built to \_\_\_\_\_ (NELCA) water that has been polluted by AMD.

- \_\_\_\_\_ (OALC) mining started in Pennsylvania in the mid-1700s.

- Early mining companies did not have the technology or knowledge to realize the long-term effects of mining; therefore, the more than 200 years of coal mining in Pennsylvania have left over 4,000 miles of streams \_\_\_\_\_ (LULOPDET) by abandoned mine drainage from old mining operations.

Name \_\_\_\_\_ Age \_\_\_\_\_

Address \_\_\_\_\_



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## **“Snapshots” of over 200 Passive Treatment Systems Identify Value to PA Watersheds**

We are excited to report that a valuable partnership effort has been organized to conduct two water monitoring “snapshots” of publicly-funded passive systems installed for the treatment of abandoned mine drainage located within Pennsylvania. These “snapshots” consist of collecting water samples for laboratory analysis as well as measuring selected field parameters. The general water monitoring program includes the raw untreated AMD, the final effluent of the passive system, and the influent and effluent of every alkalinity-generating component such as ALDs, VFPs, SAPS, etc., as feasible.

The first “snapshot” was conducted in the fall of 2009 with the second planned for late winter/early spring (March, April, May 2010). The monitoring is being organized or conducted by a team consisting of individuals from the **PA DEP Bureau of Abandoned Mine Reclamation (BAMR), Stream Team, PA Senior Environmental Corps, Mill Creek Coalition, Babbs Creek Watershed Association, Broadtop Township, and Stream Restoration Incorporated**. Funding is through a **PA DEP Growing Greener Grant** to the **Western Pennsylvania Coalition for Abandoned Mine Reclamation**.

Information collected during these two “snapshots” will be made publicly available via **Datashed** ([www.datashed.org](http://www.datashed.org)) which is a **free, online** database designed to assist in the management of information related to passive treatment systems and stream monitoring for watershed groups, nonprofits, academia, government agencies and anyone else interested in passive treatment. In addition, available historical information regarding these passive systems, which has been collected by BAMR, relating to water quality, site schematics, as-builts, etc. is planned to be uploaded to Datashed. An account is not necessary to view any of this information; however, if you would like to be able to upload your own data, documents, etc. you can set-up an account very easily by contacting **Cliff Denholm** or **Shaun Busler** at Stream Restoration Inc. **724-776-0161** or [sri@streamrestorationinc.org](mailto:sri@streamrestorationinc.org).

Thanks, thanks, thanks to the commitment of many volunteers, who have worked tirelessly on this worthwhile effort!!!!