

## THE CATALYST

### SLIPPERY ROCK WATERSHED COALITION MONTHLY ACTIVITIES UPDATE

**THIS MONTH'S MEETING:** Thursday December 9 at 7pm Jennings Environmental Education Center, pizza and pop will be provided. 11/11/04 Meeting Attendance: J. Belgraden, S. Busler, C. Cooper, T. Danehy, C. Denholm, M. Dunn, D. Johnson, V. Kefeli, A. Pavlick, S. Smith, W. Taylor

### National Organization Recognizes Value of Volunteer Efforts

With over 5,000 members nationally, the mission of the **American Institute of Professional Geologists** includes not only providing continuing professional development and promoting outstanding achievement but also supporting and encouraging volunteer efforts by their members to provide geological expertise to the general public. **Margaret Dunn, Pam Esch, and Cliff Denholm** of Stream Restoration Inc. recently traveled to Saratoga Springs, New York to attend the 2004 Annual Meeting where **Robert Corbett**, AIPG President, awarded the **John T. Galey Sr., Memorial Public Service Award** to **Margaret Dunn**. The award recognizes members who have outstanding records of public service on the national, state, or local level well beyond their normal professional responsibilities. Cliff wrote and presented the citation at the awards banquet where he had the opportunity not only to mention Margaret's contributions but also the accomplishments of the many groups/agencies involved in the SRWC. The citation and Margaret's response will be published in an upcoming issue of AIPG's monthly journal.

While in Saratoga Springs, they took advantage of the beautiful weather and the opportunity to see ancient stromatolites (fossilized beds of cyanobacteria) and "geysers" which flow under pressure due to carbon dioxide. In the 1850s, a resort/spa was established and bottling factories were built to ship the water all over the world.



### PA GIS Day In Harrisburg

November 9 was Pennsylvania's GIS Day in Harrisburg! GIS Day is a grassroots event that formalizes the practice of geographic information systems (GIS) users and vendors "to open their doors" to schools, businesses, and the general public to showcase real-world applications of this important technology. Hundreds of people participated in PA's GIS Day, held in the East Wing Rotunda in the Capital Complex of Harrisburg. Many exhibitors set-up poster displays, including **Shaun Busler** of Stream Restoration Inc. Using a live internet connection, Shaun ran **Datashed**, an interactive on-line, GIS-enabled database program for water quality information relating to passive treatment systems and their receiving streams. This database system was developed by Shaun and **Peter Drake, 241 Computer Services**. Shaun was very pleased with the interest in **Datashed** and also enjoyed "spreading the word" about AMD to several of the GIS Day participants, some of whom were not familiar with this water problem.

From 8:00 AM to 2:30 PM, hundreds of folks visited displays and networked with one another, discussing and learning about the many uses and applications for GIS. One of the exciting applications was the use of GIS to show the effects of Hurricane Ivan. There were several posters on Ivan containing aerial photos of river corridors obtained by PEMA, comparing the Ohio, Monongahela, Allegheny, and Susquehanna Rivers before and after the heavy rain and flooding. A special thank you to **PASDA** for inviting Shaun to attend this very special and fun event! Manning the PASDA display at GIS Day were **Maurie Kelly, James Spayd (pictured to the right), and Ryan Baxter**. PA legislators and their aids also spent time in the East Wing Rotunda, examining the information on-hand that included the **PA DEP, PA DCNR, PHMC**, and a variety of other local and state agencies and organizations. Students took part, too! 8th graders from a Philadelphia-area school had an impressive GIS project poster on display!

The national GIS Day was November 17; hundreds of organizations in countries all around the world hosted GIS Day events! **Millions** of interested individuals of all ages benefited from the opportunity to learn about GIS technology through the combined efforts of GIS Day participants!



P  
H  
O  
T  
O  
O  
F  
T  
H  
E  
M  
O  
N  
T  
H



P  
H  
O  
T  
O  
O  
F  
T  
H  
E  
M  
O  
N  
T  
H

Participating in the WV Mine Drainage Task Force Tour were: (back row) **Tim Danehy; Cliff Denholm; John Belacastro; Jim Seckman; Charles Miller; Ron Hamric; Tiff Hilton, III; Tiff Hilton, II; Jeff Skousen; Randy Maggart; Ben Faulkner;** (front row) **Margaret Dunn; Wayne Stanley; Brent Means;** (not pictured) **Ben Greene; Bob Beran; Shaun Busler.**

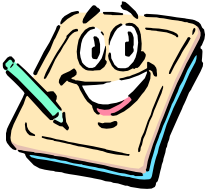
## Slippery Rock University Students Take Aquatic Plants Class to Jennings

Professor **Dean DeNicola** took his Aquatic Plants class to **Jennings Environmental Education Center** on October 25 for a lab in which students examined the changes in water chemistry as the abandoned mine drainage moved through the passive treatment system. As part of the lab, students conducted a qualitative survey of the wetland plants in the treatment wetland planted by participants of the **Jennings Water Quality Improvement Coalition** and around the ponds near the gazebo. Being late October, many of the plants were dormant for the winter, making identification challenging. Students who took part in this hands-on learning lab were: **Rachel Bradley, Rich Ozimok, Ben Pepper, Danny Pittinger, and Mamta Shrestha.**



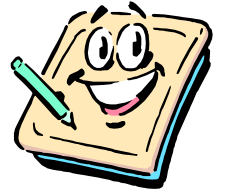
## West Virginia Mine Drainage Task Force Tour Slippery Rock Creek Watershed

Members of the WV Mine Drainage Task Force took part in a tour of several AMD treatment sites throughout PA on October 20 and 21. As part of their tour, participants traveled to three passive treatment systems in the Slippery Rock Watershed: DeSale Phase I, II, and III, located in the Seaton Creek Watershed. These systems, which include various collection components, vertical flow ponds, horizontal flow limestone beds, wetlands, and settling ponds, have made a substantial positive impact on the environment. At DeSale Phase II, **Bob Beran** of Beran Environmental operated a small excavator to compare manganese precipitation at different depths within the Horizontal Flow Limestone Bed. The SRWC was honored to show the WV Mine Drainage Task Force some of our passive treatment systems.



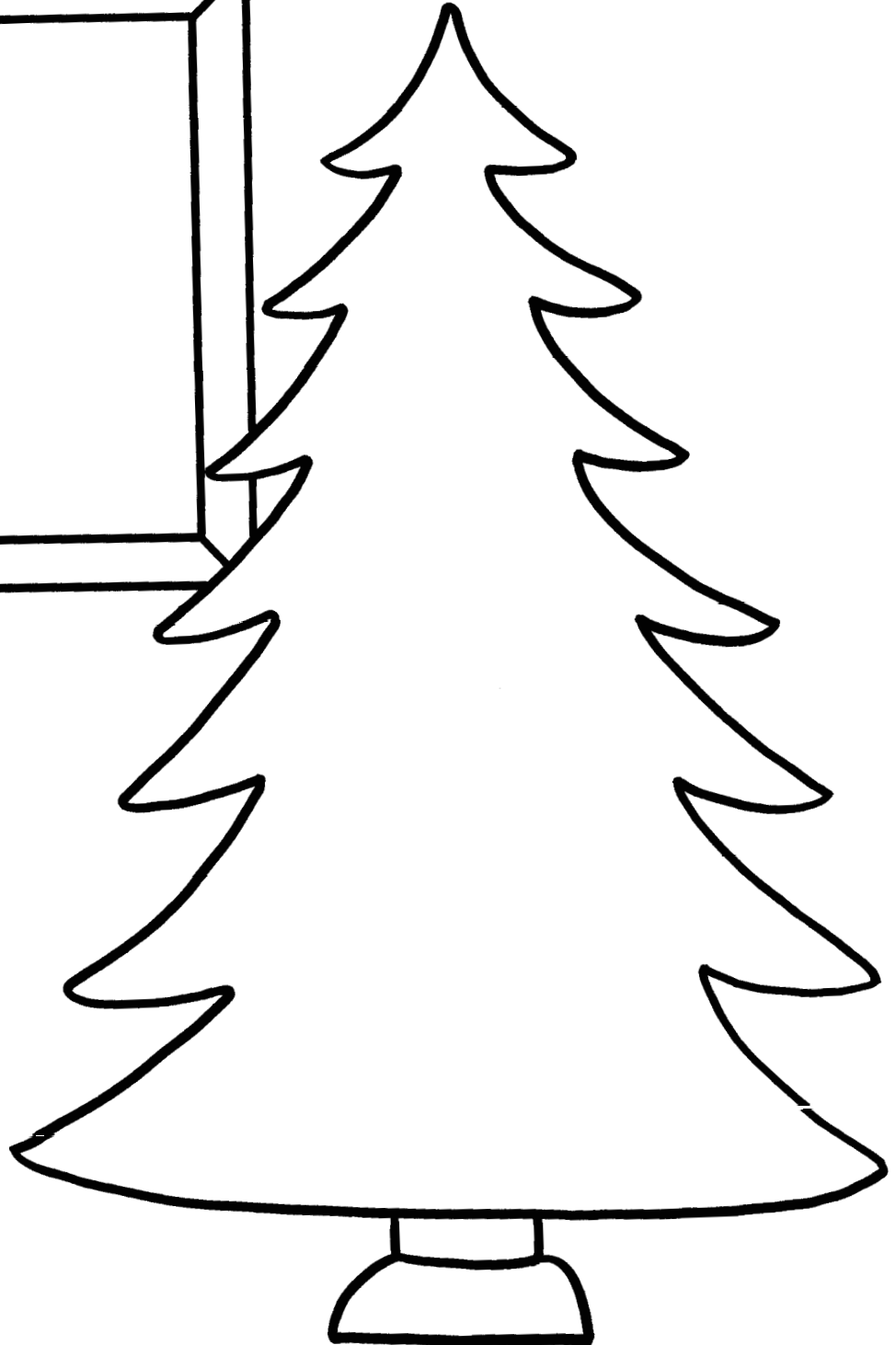
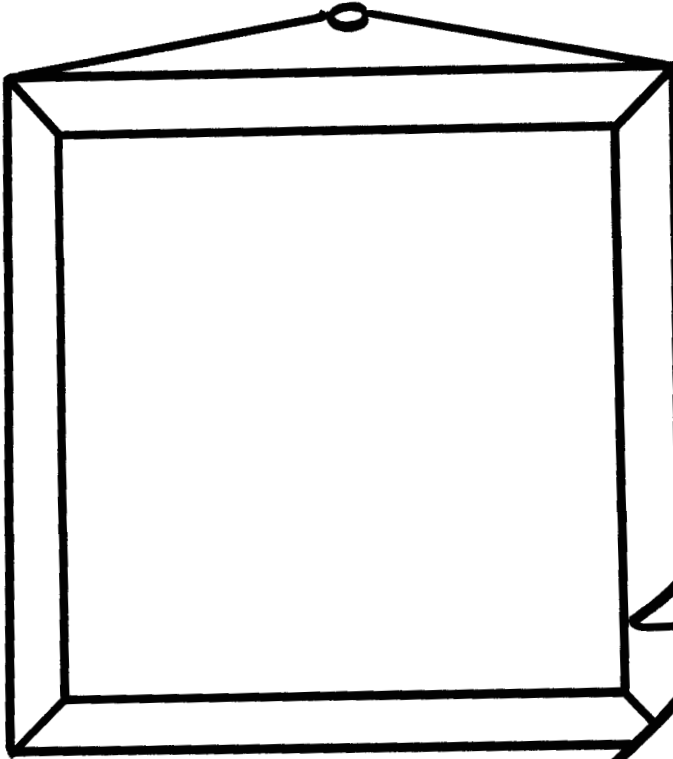
# The KIDS Catalyst

## SLIPPERY ROCK WATERSHED COALITION FUN ACTIVITY



*Christmas Coloring Fun!*

Merry Christmas from all of us at the Slippery Rock Watershed Coalition! We hope you kids have fun with this month's activity! Decorate the Christmas tree below, and draw a picture in the empty picture frame of something you like to do during the holidays! If you mail us your paper, we'll send you a free gift certificate!



|               |                         |
|---------------|-------------------------|
| Name: _____   | Age: _____              |
| Street: _____ |                         |
| City: _____   | State: _____ Zip: _____ |



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

NONPROFIT  
ORGANIZATION  
U.S. POSTAGE  
PAID  
PERMIT NO. 434  
CRANBERRY, PA

Thanks to The William & Frances Aloe Charitable Foundation, Environmentally Innovative Solutions, LLC, Dominion Peoples, Amerikohl Mining, Inc., Quality Aggregates Inc., BioMost, Inc., Allegheny Mineral Corporation and PA DEP for their support. For more information contact: Slippery Rock Watershed Coalition, c/o Stream Restoration Incorporated (PA non-profit), 3016 Unionville Road, Cranberry Twp., PA 16066, (724)776-0161, fax (724)776-0166, [sri@streamrestorationinc.org](mailto:sri@streamrestorationinc.org), [www.srwc.org](http://www.srwc.org). December Distribution: 1239

## Plugging Up the Wells

The expanding efforts of the Slippery Rock Watershed Coalition include a project that involves plugging eleven orphaned and abandoned oil and gas wells in the Slippery Rock Creek Watershed in Concord Township, Butler County. PA State Game Lands No. 95 has six orphaned wells with rusted casings that leak oil and iron-contaminated drainage into the groundwater and into the South Branch Slippery Rock Creek. Five abandoned wells on private property are located near streams, within the PA State Game Land Floodplain easement, and within proximity of a newly constructed Natural Resource Conservation Service (NRCS) wetland restoration project. These wells also have rusted casings and are leaking into the groundwater and streams. The stream flows from south to north through the proposed NRCS wetland restoration project on Dr. Lenko's property. From there it flows through the Game Land Floodplain easement and on into a completed NRCS wetland restoration project on PA Game Lands No. 95. It then flows into the Glade Dam Lake.

Because these wells are in a geographic area of restoration projects they met the guidelines for Growing Greener funding in the DEP's Bureau of Oil and Gas Management's year 2000 manual on PA's Plan for Addressing Problem Abandoned Wells and Orphaned Wells. Partnerships include DEP's Bureau of Oil and Gas inspector **Dave**

**Sepos**, the State Game Land No. 95 Land Manager **Dale Hockenberry**, Slippery Rock Watershed Coalition volunteer **Wendy Beeching**, and the property owner and Slippery Rock University professor **Dr. Philip Lenko**. This project will improve groundwater quality and the water quality of South Branch Slippery Rock Creek as it enters Glade Dam Lake. Five leaking oil wells have been cleaned and plugged to date.

SRU's **Dr. Dean DeNicola** and his **Aquatic Plants** students along with volunteers from the **Lenko family** assisted **Wendy Beeching** in site remediation efforts on **October 18, 2004**. Seeding, tree planting, and mulching were completed for plugged oil well number 3. The students and volunteers learned about problems associated with abandoned oil and gas wells as it pertains to water-use planning.

