### THE CATALYST

#### SLIPPERY ROCK WATERSHED COALITION MONTHLY ACTIVITIES UPDATE

THIS MONTH'S MEETING: Thursday September 13 @ 7:00 PM, Jennings Environmental Education Center, Pizza and Pop will be provided!! 7/14/01 meeting attendance: C. Denholm, C. Cooper, J. Belgredan, F. Brenner, V. Kefeli, L. Spencer, W. Taylor, S. Busler, M. Busler, M. Dunn, T. Danehy, J. Reidenbaugh, T. Kennedy

### Flushing at De Sale Phase I

On August 10, flushing of a vertical flow pond at the De Sale Phase I site was conducted by **Chris Treter**, OSM intern at Stream Restoration Incorporated, and **Jamie Stilley**, volunteer. The vertical flow pond was designed with two layers of pipe, with each layer being divided into quadrants. The flushing of the vertical flow pond involved a quadrant on the upper layer of pipe and a quadrant on the lower layer of pipe and lasted for over 5 and 1/2 hours! The valves for each pipe were opened at the same time and several sludge and water samples were taken throughout

the flushing. Flow measurements were conducted using the "4 inch drop-off" technique.

This preliminary attempt at extended flushing was conducted to observe the movement of solids through the compost and limestone layers of the vertical flow pond. The information collected from this test will help improve passive treatment technology. Thanks to Jamie and Chris for conducting the flushing and collecting the samples!



# SITE MAINTENANCE IN THE SLIPPERY ROCK WATERSHED

Last month, Jamie Stilley, volunteer, and Chris Treter, OSM Intern at Stream Restoration Inc. traveled in the Slippery Rock Watershed and conducted maintenance on several of the passive treatment systems. The sites included De Sale Phase I, which is entering its second year of operation, and SR 114 (also known as Argentine) which is entering its sixth year of operation. The maintenance at SR 114 involved the removal of iron precipitate from a trash rack that protects the drain to the wetland. It was a challenging job because the precipitate was extremely soft and had worked its way into every possible crack and crevice. By cleaning the trash rack, flow into the wetland drastically increased from its previous trickle and overflowing the settling pond was avoided! Maintenance at De Sale Phase I involved the cleaning of a pipe that was partially clogged with iron precipitate. Maintenance of these sites took less than three hours to complete! Thanks to Jamie and Chris for the maintenance effort!

# SHAMOKIN WATERSHED TOURS SLIPPERY ROCK WATERSHED

Recently, the **Shamokin Watershed Group** toured several sites in the Slippery Rock Watershed. The tours were conducted by **Will Taylor** (Jennings Environmental Education Center), with help from **Dr. Fred Brenner** (Grove City College) and **Bob Beran** (Aquascape). Fred Brenner assisted in the morning at **Jennings Environmental Education Center** and Bob Beran assisted at **Goff Station**. The tour concluded at **De Sale**. Thank you, Shamokin Watershed Group for praising our efforts!! We can not tell you how much this means to us.

PHOTO OF THE MONTH



Dr. Fred Brenner of Grove City College and Shaun Busler of Stream Restoration Incorporated busy themselves with electro-fishing as Nick Morgan and John Lawrence look on.

### FISH GET BUZZED ON ELECTRICAL CURRENT

Monday, August 6th, an electro-fishing survey was conducted in Seaton Creek by Dr. Fred Brenner, Nick Morgan (Grove City College), John Lawrence (Slippery Rock Watershed resident) Shaun Busler, Cliff Denholm, and Chris Treter (Stream Restoration Incorporated). Electro-fishing is a harmless process that involves stunning fish with a mild electrical current so the fish can be captured. identified, and released back into the stream. The fish survey involved documenting the absence of fish at the raw flow at De Sale Phase II (before any restoration) and shocking at McJunkin Road downstream of the De Sale systems and Chernicky reclamation), Erico Bridge (future restoration area under Growing Greener Round 3), Murrin Run (at the Goff Station system), and Goff Station Road (downstream of all restoration areas). The water tested prior to entering De Sale Phase II did not have any fish, due to the poor water quality and no fish were observed at Erico Bridge. The iron content in the water at Erico Bridge was so high, the generator would short out! When the survey was completed, 4 five-spine stickleback, 1 pumpkinseed, 2 johnny darter, 1 bullhead, 3 crayfish, 3 green frogs, and 13 common shiners were found. Special thanks to everyone involved in the testing and thanks to Grove City College for making this possible!





P

0

Т

Н

Ε

M

N

Т

Н



School:

Completed by:

Address:

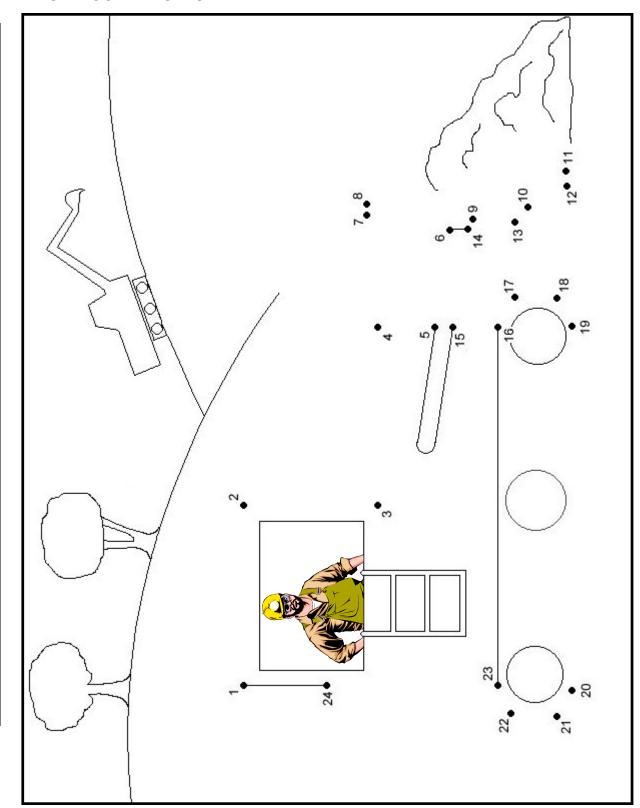
## The **KJDS** Catalyst

### SLIPPERY ROCK WATERSHED COALITION FUN ACTIVITIES



## **CONNECT THE DOTS**

Connect the dots to see what the picture is. When you are done connecting the dots, color the picture. And don't forget to send the colored picture to the Slippery Rock Watershed Coalition for a *GIFT CERTIFICATE TO A LOCAL RESTAURANT!* 



Construction equipment, like this bulldozer, is important for the construction of passive treatment systems.

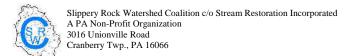
### **ARRIPA TOUR**

On 7/20/01, participants of the Slippery Rock Watershed Coalition had the privilege to attend a tour of reclamation sites in Indiana and Cambria Counties with the Association of Independent Power Producers in the Anthracite and Bituminous Regions of Pennsylvania (ARIPPA). First stop on the tour was the Ernest site where John Stilley of Amerikohl Mining, Inc. discussed a current remining operation that will reclaim a previously barren coal waste pile situated between a church and a stream. Amerikohl's project in addition to a major reclamation effort being made by the Cambria Reclamation Corporation, discussed by Dave Young, Cambria CoGen, will reduce pollution in the stream, improve the drinking water supply for the town of Ernest, reclaim and revegetate about 250 acres and create about 14 acres of wetlands!! The learning kept moving along as Barry Scheetz, PSU & Roger Hornberger, PADEP discussed geology, mining, reclamation and coal ash whilst traveling between sites. Next stop was the Colver Power Project where presentations on coal ash utilization were given by **Dennis Noll**, Earthtech, Inc., **Mike Menghini**, PADEP, **Dr.** Art Rose, Prof. Emer. PSU, Dennis Simmers, Jeff Zick, and John Hall, Colver Power Project. The award winning Colver project utilizes waste coal as fuel and produces alkaline coal ash used in the successful reclamation of the site! Last but not least was a trip to Nanty Glo and Revloc where Gary Anderson, General Manager Ebensburg Power Company presented the problems and solutions being applied in the field!! Special thanks goes to **Todd Lawton**, Scrubgrass Generating, for the invite and **Bille Ramsey**, ARIPPA for the hospitality!!!! It is truly exciting to see reclamation in action!

### **FUTURE ARTICLES**

- \$ Jennings Environmental Education Center hosts Watershed Workshops
- \$ Jack Dam construction at De Sale Phase II

Thanks to The William & Frances Aloe Charitable Foundation, Amerikohl Mining, Inc., Quality Aggregates 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, <a href="mailto:srip">srip</a> September Distribution: 743 copies



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