

# THE CATALYST

## SLIPPERY ROCK WATERSHED COALITION MONTHLY ACTIVITIES UPDATE

**THIS MONTH'S MEETING:** Thursday November 9 @ 7:00 PM, Jennings Environmental Education Center, Pizza and Pop will be provided!! 10/12/00 meeting attendance: J. Allen, L. Ansell, J. Belgredan, B. Beran, F. Brenner, M. Busler, S. Busler, C. Cooper, T. Danehy, D. DeNicola, M. Dunn, D. Johnson, V. Kefeli, J. Reidenbaugh, and W. Taylor.

### **DCNR Award Given to Coalition and Jennings!**

The **Slippery Rock Watershed Coalition** and the **Jennings Environmental Education Center** were recognized by the **PA Department of Conservation and Natural Resources** as one of the community partnerships in the state that exemplify successful efforts with partners to work toward improvements in state parks and forests.

The award was showcased by **Geralyn Umstead**, DCNR Director of Community Relations at the DCNR managers conference in State College. DCNR Secretary, **John Oliver** stated at the presentation, "I believe very strongly in recognizing new and creative ideas in our ongoing bid to build community partnerships."

This coalition effort has brought many diverse partners from government, the private sector, and the community together to make this outstanding collaboration one of the most innovative and promising environmental partnerships in Pennsylvania.

### **WORK BEGINS ON SR89!!!**

Reclamation at SR89, located on State Game Lands 95, has begun with the drilling of piezometers by McKay and Gould Drilling Co. SR89 (pictured on the right) contributes over 131 lbs/day of acidity, which is approximately 79 percent of the total acid loading to the Hilliards Branch of Slippery Rock Creek, and 36 lbs/day of metals. A forebay, two Vertical Flow Ponds, sediment pond, and an acre wetland are proposed in order to treat the degraded drainage. Once completed, the passive system will make significant improvements to a two mile section of the Hilliards Branch of Slippery Rock Creek.



### **SLIPPERY ROCK WATERSHED COAL ASH TOUR**

Representatives from numerous organizations including **US EPA, PA DEP, Association of Independent Power Producers, Penn State University, Office of Surface Mining, Earthtech, and Amerikohl Mining, Inc.** toured sites within the Slippery Rock Watershed reclaimed through the beneficial use of circulating fluidized-bed coal ash. **Todd Lawton, Scrubgrass Generating Plant**, was involved in the organization of the tour, which included De Sale Phase I, Abel-Dreshman, and Sunbeam Tipple. Circulating, fluidized-bed coal ash is an alkaline amendment commonly used in the reclamation of abandoned minelands. The use of coal ash has helped reclaim about 100 acres in the Slippery Rock Watershed and improve water quality. Participants in the Slippery Rock Watershed Coalition provided specific site information and very much appreciated the state wide and national interest in our restoration efforts.

**COMING NEXT MONTH:** Coalition participates in numerous meetings and conferences relating to watershed restoration and Girl Scouts plant wetlands at Goff Station.

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### **SCIENCE PRESENTATION GIVEN AT EHCA AND JENNINGS**

Shaun Busler presented a lesson on wetlands and abandoned mine drainage to about 30 students in Melissa Busler's science classes at Evangel Heights Christian Academy, Sarver, PA. Having an "in" with the teacher, Shaun received permission to teach about important environmental issues in preparation for a field trip to Jennings Environmental Education Center, where Will Taylor, Program Coordinator, provided hands-on experiences applying concepts discussed in class. Despite near constant rain and occasional downpours, the students were able to analyze the health of a stream and examine abandoned mine drainage treated by several passive systems. Mrs. Getch, Principal, ECHA, and the Buslers thoroughly enjoyed the program while chaperoning and getting wet.

Thanks to The William & Frances Aloe Charitable Foundation, Amerikohl Mining, Inc., Quality Aggregates Inc., and Allegheny Mineral Corporation 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@salsgiver.com](mailto:sri@salsgiver.com), [www.srwc.org](http://www.srwc.org). November Distribution: 572 copies



'The nice thing is, like the phoenix, (those streams) can rise again.'

— Dave Johnston  
BUTLER COUNTY PLANNING DIRECTOR

Pittsburgh Tribune Review, Sunday, July 23, 2000



Christopher Horner/Tribune-Review

Darcy Peart and Tim Daney check pH levels in the water while monitoring the impact of the Goff Station restoration area Friday on Seaton Creek in Venango Township, Butler County. The stream is one of the most heavily impacted streams in the county from acid mine drainage.

## Ripple effect

### Mapping campaign targets dying and endangered streams

By Lawrence Sanata  
TRIBUNE-REVIEW

For decades, mining companies in the far northern reaches of Butler County decimated vast tracts of land in their search for coal.

Because of the county's close proximity to Pittsburgh, Butler County's rich reserves of bituminous coal were an ideal source of power for the once giant, billowing industries to the south.

Today, thousands of acres of above-ground and underground mines lie abandoned and barren and release thousands of pounds of acid and metals into a myriad of streams that crisscross the county.

Compounding the county's water pollution problems is the significant increase in population and commercial development that has occurred in the southern end of the county.

As a result, dead, dying and endangered streams are a fact of life in the fastest growing county in western Pennsylvania, where people and businesses are arriving in record numbers each year.

"The nice thing is, like the phoenix, (those streams) can rise again," said Dave Johnston, Butler County's planning director. "In fact, the dead and dying streams are coming back to life."

#### RESTORATION UNDER WAY

An ambitious campaign is under way by public and private sectors to pump new life into unhealthy waterways throughout the county.

Nonprofit environmental groups, such as Stream Restoration Inc. and the Slippy Rock Watershed Coalition, which for years worked in the background reclaiming old mines and streams, are being joined by local government.

Johnston is optimistic that county government working with private groups will be awarded grants from the state's Growing Greener

program, perhaps as much as \$250,000, to identify dead and dying streams, and to begin aggressively saving them.

The planning director pointed to a detailed map prepared by environmentalists, which read like an obituary. The map identifies streams such as one in Washington Township in the county's far north sector that died as a result of acid mine pollution.

Detailed assessments like this one, he said, are planned for the rest of the county. And while acid mine pollution is a substantial problem in some areas, the maps are likely to reveal other problems, including malfunctioning sewage systems, as well as nitrates entering from farmland and industry, Johnston said.

"There are a lot of streams up there that were always red and never had any fish in them. And now the fish are returning," Johnston said.

He credited environmental groups in the county that have formed alliances with mining companies, such as Amerikohl Mining and Quality Aggregates, which have been successful in saving waterways in the county.

The new public-private campaign also will attempt to clean a maze of abandoned mines in Washington Township, near the headwaters of the Slippy Rock Creek Watershed.

That watershed feeds dozens of streams that flow south through the county, said Margaret Dunn, a geologist in Cranberry who has gained a national reputation for her environmental work.

Parts of the Slippy Rock Watershed also feed into the Connonquenessing Creek, which is a source of drinking water for Zelenople, she said. Slippy Rock Creek is a source of drinking water for Ellwood City.

PLEASE SEE CAMPAIGN/N4

## Slippy Rock Creek watershed

Plans are in the works in Butler County to produce detailed maps like this to identify dead and dying streams in the county, as well as streams that have been revived. This map, the first in a series, targets the headwaters of the Slippy Rock Creek Watershed in Washington Township. Working with the county as it plans its stream inventory is the Slippy Rock Creek Watershed Coalition, an environmental group that has been a pioneer in reclaiming endangered waterways in the county, as well as Stream Restoration Inc., a consulting company that specializes in mine reclamation.



Source: Slippy Rock Creek Watershed Coalition

R. Jason Middleton/Tribune-Review

## Industry left its mark on township

By Lawrence Sanata  
TRIBUNE-REVIEW

Washington Township in northern Butler County is well-known for miles of pristine gamelands.

But for the captains of industry who set up shop in Pittsburgh a century ago, Washington Township was a prime source of coal used in the steel-making process.

That seemingly endless need for fuel has left its mark on the township in the form of defoliated land and polluted waterways.

Washington Township "is perhaps the most heavily impacted areas in the county," according to Margaret Dunn, who has gained an international reputation for her local environmental efforts in Butler County.

In addition to vast tracts of land that were stripped of vegetation to gain access to the coal beds below, there are roughly 4,000 acres of land in the township that sits atop a labyrinth of deep underground mines, she said.

Most of those mines were worked before the federal Surface Mine Control and Reclamation Act of 1977, which placed strict regulations on mining operations.

"It's those old mines that have

**'Black's Creek is heavily impacted. Murrin Run flows the color of 2 percent milk because of the aluminum in it.'**

— Margaret Dunn  
ENVIRONMENTALIST

greatly impacted the streams of Butler County," Dunn said.

Huge piles of coal residue alongside Seaton Creek in Washington Township have released toxic compounds that flow from one creek to another, she said.

"Black's Creek is heavily impacted. Murrin Run flows the color of 2 percent milk because of the aluminum in it. McMurray Run has an old coal refuse disposal site on it that has water that is very acidic," Dunn said.

Glade Dam, which is on game lands that have a wildlife propagation area, also is heavily impacted, Dunn said.

Fortunately, Dunn said, new technology is available to save the streams. Treatment systems that remove toxins from the water through a series of filtering processes — using limestone, mushroom compost and other materials — have helped to clean formerly polluted waterways.

The Slippy Rock Watershed Coalition and Stream Restoration Inc., both of which she is closely involved with, have rehabilitated four miles of Slippy Rock Creek, she said.

Playing a significant role in those efforts, Dunn said, are companies such as Amerikohl Mining and Quality Aggregates, which have donated equipment and expertise. Both companies remain involved in mining.

"This year alone we're hoping to improve another four miles of the stream, which was formerly dead," the environmentalist said. Along with her involvement in nonprofit environmental efforts, she is the president of a for-profit geology consulting firm.

With the public sector partnering with private groups, there is the potential for many more streams to be saved, she said.



# Campaign targets dying streams

## CAMPAIGN FROM/N3

The creek has come under heightened public scrutiny since June, when the U.S. Environmental Protection Agency ordered AK Steel in Butler to supply water to the residents of Zelenople. The EPA also ordered AK Steel to reduce nitrates discharged into the creek.

With the help of \$86,000 in Growing Greener funds approved earlier this year, the Connoquenessing Watershed Alliance is conducting a separate assessment of that creek and its tributaries.

"One stream is reported to have acid mine drainage, and that's Yellow Creek. But I have not seen that stream yet," said Mark McShane of Killam Associates, an engineering firm in Cranberry that is helping

with the assessment.

Altogether, 10 sites in the watershed will be sampled each month for a year, while another eight sites will be sampled for two years, to help determine the health of the watershed, McShane said.

## THE TIP OF THE ICEBERG

John Holden, a water specialist with the Pennsylvania Department of Environmental Protection, said more work needs to be done to fully understand the health of streams in the southern part of the county.

Unlike the northern portion of the county, "you have an entirely different array of problems, and many of them are related to increasing population and commercial development," said Freda

Tarbell, a state Department of Environmental Protection spokeswoman in Meadville.

Identifying endangered waterways and reclaiming them is good for everyone, Dunn said. The value of people's property along streams that have been reclaimed has increased tremendously, she said.

Instead of looking like "moonscapes," former mines in the county have been resurfaced and are covered in lush green grass, said Tim Danehy, an associate of Dunn's. Likewise, birds, fish and other animals have returned to those areas, he said.

In addition, the streams and adjacent land are available once again for recreation, he said. And there even is talk of farming returning to some areas, he said.