



# SAN CONNECTIONS

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## Watershed group opens treatment system near Silver Creek Mine

By Gerry Ulicny (Correspondent) 8/7/10

[Click here](#) for article

NEW PHILADELPHIA - The Schuylkill Headwaters organization can boast having taken one more step toward improving its namesake, the Schuylkill River.

The organization celebrated on Friday [8/7/10] the opening of a water treatment system established on 8 acres of land near the former Silver Creek Mine in New Philadelphia to treat nonpoint source pollution due to mine drainage.

William Reichert, president of Schuylkill Headwaters, said

the system will treat approximately 1,200 gallons of water per minute for the next 20 years.

Christine Haldeman, a project engineer with RETTEW Associates Inc. who is project manager for the site, said the treatment system will remediate decades of acidic drainage.

"This entire area used to be a huge silt bank," Haldeman said. "In the 1970s, they removed the culm [mine spoils] but the water was still very much polluted with heavy metals. ..."

"This was one of the top ten priority sites," she said.



Currently, the discharge at the site has an acidic level of 5.36pH. Haldeman said the goal is to have a pH between 6.5 and 7.

The system consists of three separate pools. The first allows for water to collect from the discharge. It then flows over

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## Philly Water's Best Friend Competition

Learn more at: [www.phillywatersheds.org/spokesdog](http://www.phillywatersheds.org/spokesdog)

The Philadelphia Water Department is looking for two eco-friendly dogs who want to help keep Philly's waterways clean...one in the Manayunk/Roxborough area and one in East Falls! Spokesdogs will be chosen to teach bark-park buddies and their caretakers about the importance of picking up pet waste.

Each spokesdog will be chosen at a community event and will win a \$200 gift certificate to a pet shop in their neighborhood. As a part of the campaign, the winning dogs' images will be used on a number of brochures, advertisements, websites, etc. Winning spokesdogs and their owners will be required to attend at least 3 community events to distribute information on living the eco-friendly dog life. Applications will be accepted beginning this fall & the two spokesdogs will be crowned in 2011!! [Click here](#) for a printable flyer.

## Doggie Waste Facts

- In 2000, 68 million Americans owned dogs, that's 40% of all households.
- 3.6 billion pounds of dog waste a year is produced in the U.S. alone, equaling 800 football fields, one foot high.
- Nutrients in canine waste can act as a fertilizer in water and may cause algae blooms. These blooms can reduce the amount of oxygen available to other organisms in the waterways.
- Poo may take upwards of a year to degrade fully.
- This poo also contains both bacteria and parasites. The parasites can live in the soil for years before ever hatching.
- Average dog goes 23 times a week. Based on a [study conducted in Washington DC](#), This leaves between 100-200 pounds of waste per dog every year.

Members of the Schuylkill Action Network share information, expertise, and technology to help each other achieve a shared vision of clean water and a healthy environment for the Schuylkill River and its tributaries.

## Schuylkill River Restoration Fund



Carol R. Collier, Executive Director of the Delaware River Basin Commission, attended the grant announcement, which took place at Aiden Lair Park in Upper Dublin Township, site of a recently completed stormwater improvement project from the 2008 grant round.

"I am pleased to be here today, as we announce four, very deserving, non-profit grant recipients and to welcome the Philadelphia Water Department as a new funding partner," Collier said. "I encourage others in the Schuylkill River watershed to join Exelon and PWD in making contributions to support this important work."

The Schuylkill River Heritage Area has received a total of \$324,441 from Exelon Nuclear's Limerick Generating Station and the Philadelphia Water Department to support the Schuylkill River Watershed Restoration Fund—a fund used to improve water quality in the river and its tributaries. Grants from the fund were awarded in August to four non-profit groups to address pollution issues associated with agricultural, storm water runoff, and abandoned mine drainage. All of the projects will benefit the entire watershed because they reduce the amount of run-off and pollution that enters creeks, and ultimately, the river, which is a source of drinking water for over 1.5 million people.

Carol R. Collier,



### 2010 Schuylkill River Restoration Fund Awards

<i>Berks County Conservancy</i> – Martin Farm, Agricultural BMPs	\$52,500
<i>Greening Greenfield</i> – Schoolyard Stormwater Project	\$50,000
<i>Lower Providence Township</i> – Five Stormwater Basin Retrofits	\$40,000
<i>Schuylkill Headwaters Association</i> – Glendower Pond Breach	\$80,000

## Buffer Protections Strengthened



This past summer, by votes of 4-1, the Pennsylvania Independent Regulatory Review Commission (IRRC) passed key regulatory changes to Chapter 102 state regulations that will require some developers to maintain or create a 150-foot natural vegetative buffer beside Pennsylvania's best rivers and streams. These rules affect so-called E&S permitting or Erosion and Sedimentation Control measures implemented with construction projects to reduce impact on streams and rivers. Streams in the top 20% statewide for water quality will be subject to the increased protections.

Streamside buffers are widely considered to be the best and most effective long-term solution for protecting water quality. Buffers help filter water, reduce the impacts of flooding, shade and reduce water temperatures creating better habitat for fish and aquatic species. Clean Water Action says that over 200 municipalities require buffers with 63 requiring at least 100 foot buffers. The updated Chapter 102 regulations are expected to go into effect sometime in November.

Also passed by the IRRC, new drilling rules (Chapter 95) will now require treatment of highly saline wastewater to meet drinking water standards if they'll be disposed of it in Pennsylvania's waterways. Natural gas drilling in the Marcellus Shale of Pennsylvania has become greatly scrutinized due to the immense quantities of water used in the process, the chemical additives employed, and the manner of treatment. Between 2 and 9 million gallons are used to "frack" each well in order to release the natural gas deposits. That water is injected with a cocktail of chemicals and salts. Some water flows back up and is collected in storage ponds for re-use or treatment.

For more information on gas drilling, see a recent article in the Estuary News: [Click Here](#)

## Silver Creek Treatment System (continued)

several tons of limestone chips in an artificial waterfall in order to aerate the water and adjust the pH. The second and third pools slow the flow of water before it re-enters the Schuylkill River in Port Carbon.

The process will soften the water in that the pH will be raised slightly, allowing the heavy metals in the water to drop out more easily.

The treatment system was established on land offered by current owner Premium Fine Coal, New Philadelphia, allowing for a 20-year easement.

"The project has a 20- to 30-year life expectancy, which could be extended if the iron and other metals are dredged out when needed," Haldeman said.

Cost of the treatment system is

\$832,000, funded by the federal Environmental Protection Agency through the state Department of Environmental Protection.

Though the site is tied to the Silver Creek Mine, the water issues were not considered by either DEP or EPA to be "acid mine drainage." Regardless, the water contains pollutants and the Schuylkill Headwaters volunteers sought grant money to remediate the problem. The funding came through EPA-319 funding, which is earmarked for pollution that does not have a "source point" but is still, at least generally, caused by something man-made.

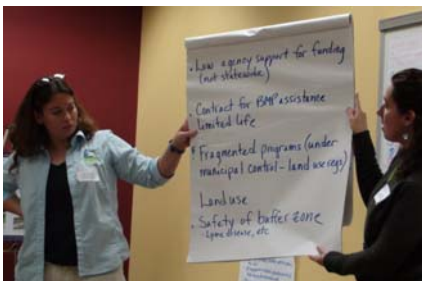
Donna Carnahan, a water pollution biologist in DEP's Division of Watershed

Protection, was on hand for the opening of the treatment system.

"This is very important not just for Silver Creek but for the entire (Schuylkill) river," Carnahan said. "You know, if it were not for these organizations, I don't know what would happen. The fact is that the only way a lot of these projects would ever get done is through the efforts of these watershed groups."



## 2010 SAN Annual Workshop – Success



On Monday, October 25<sup>th</sup>, over 70 watershed stakeholders attended the SAN annual workshop, which was held at Reading Area Community College, Berks County. The event, which takes place annually, provides an opportunity for SAN partners to come together and share information on their past accomplishments as well as plan for future projects and initiatives. The morning portion of this year's workshop included an overview of the SAN Strategic Planning Process as well as updates from all 6 workgroups.

During the afternoon, the group focused its attention on the theme of "Riparian Buffers". To start off the conversation, John Jackson, a Senior Research Scientist with the Stroud Water Research Center, gave a presentation on the health of the Schuylkill Watershed, referencing 15 years worth of water quality monitoring data from 19 sites throughout the 1900 square mile Schuylkill River basin. Jackson was able to make the connection between the health of our rivers and streams and the amount of forested land within the watershed.

Following this presentation, Dr. Jerry Mead, a Section Leader of with the Patrick Center for Environmental Research of the Academy of Natural Sciences, presented information on his riparian

buffer reforestation and protection prioritization tool. This tool will allow individual modeling to be run on stream segments within the Delaware Basin, identifying the benefits of restoring riparian areas and threats associated with removing them. The SAN plans to work with this tool over the next year at a pilot location within the Schuylkill Watershed.

Finally, nearing the end of the event, the workshop attendees participated in a brainstorming session focusing on developing a watershed-wide strategy for riparian restoration and protection. The SAN hopes to play a greater role in organizing efforts to strategically target the important task of restoring and protecting our riparian areas. This initial discussion will hopefully just be the start of this important conversation.

## SAN Dates to Remember

- 11/15: Schuylkill County Source Water Protection Meeting
- 11/16: SAN Planning Meeting
- 11/17 SAN Ag meeting
- 12/09 SAN Planning Meeting
- Dec. 2010 (TBA) SAN Stormwater Meeting
- Dec. 2010 (TBA): SAN Watershed Land Collaborative meeting



**CONGRATULATIONS**  
Larry Lloyd  
Berks County Conservancy

**2010 SAN MVP  
Award Recipient**

Ideas for the next edition of SAN Connections?

Contact Tom Davidock,  
SAN Coordinator:  
(800) 445-4935 x109  
or email:

[tdavidock@DelawareEstuary.org](mailto:tdavidock@DelawareEstuary.org)

## Two Schuylkill Contests Announced for Students



The [Schuylkill Action Network](#) has launched two contests for students of all ages, and the theme of both is the Schuylkill River. All students, schools and, colleges and universities in the watershed are eligible to apply. An award will be given to each winning entry at the elementary, middle, high school and college level.

For the fifth year, students can vie for a Drinking Water Scholastic Award. These are given to select classes and youth groups who carry out educational programs or restoration projects that help to

keep the Schuylkill River clean. Previous winners have planted trees along streams, created a campus rain garden, given presentations in their community and more.

Also, for the first time, students can enter the Schuylkill Stories Contest by submitting videos up to three minutes long. The theme of the inaugural competition is "This is My Watershed." The SAN is seeking videos from students explaining how and why they enjoy the Schuylkill River, as well as the many waterways flowing into it.

For more information on both contests, including instructions for applying, visit the Schuylkill Action Network website at [www.SchuylkillWaters.org](http://www.SchuylkillWaters.org). Good Luck!

### Eligibility:

Both contests are open to students, schools, or classrooms located within the Schuylkill River Watershed.

### Due Date:

Submissions for both contests must be received by March 1, 2011.

### Prizes:

Prizes for each contest vary. The winners of each category will be honored at an award ceremony during National Drinking Water Week in May 2011. Schools and students will receive region-wide exposure and recognition from high ranking government officials and local media.



## Environmental Film Festival – Nov. 4th

An event billed as the largest environmental film festival in the United States is coming to Pottsville.

The Schuylkill Headwaters Association is hosting the "Wild & Scenic Environmental Film Festival" to be held at 6 p.m. Nov. 4. The event will be held at the Sovereign Majestic Theater, 209 N. Centre St., Pottsville. There are six films on the schedule.

It brings together award-winning environmental and outdoor adventure films designed to inspire and motivate you to go out and make a difference in your community and around the world. This is the first time the Schuylkill Headwaters Association, a nonprofit that formed in 1998, has sponsored such an event.

The association's mission is to promote the environmental integrity of the Schuylkill River, its tributaries and the watershed that lies within Schuylkill County.

**For More Information:** [Click Here](#) or contact Patrick Kennedy at 570-622-3742 ext.112 or [pkennedy@co.schuylkill.pa.us](mailto:pkennedy@co.schuylkill.pa.us)