

# THE CATALYST

## SLIPPERY ROCK WATERSHED COALITION MONTHLY ACTIVITIES UPDATE

**NEXT MEETING:** 7 pm on 1/8/15 at Jennings Environmental Education Center, pizza and pop provided. No regular December meeting was held.

### 2014 Year in Review

#### Making a Better Watershed with Help from You!!!!

##### Education/Outreach Activities

- Clean Creek ceramic art display & power point presentation at Concord Univ., Athens, WV—2/20
- Benefit Dinner for Ohio River Watershed Celebration, organized by WPCAMR, Mad Mex, Shadyside—3/4
- Mining & Reclamation Advisory Board tour—7/16
- Celebrate the Bloom, Jennings Environmental Education Center—7/19
- Fossil Free Energy Fair, Slippery Rock Univ. -7/26
- Grand Opening of Pittsburgh Botanic Garden, Oakdale, PA—8/1
- Institute for Learning in Retirement, class instructor, Slippery Rock University—9/19
- Volunteer training for “Adopt-A-Passive Treatment System”, JEEC—9/25
- SRWC watershed tour for visitors from Korea - 10/15-10/16
- Environmental Engineering Seminar Series at St. Francis University—10/17
- Classroom visits to St. Luke Lutheran School’s 7th grade—12/4 and 12/11
- Student Symposium on the Environment at Westminster College—12/4
- Adopt-A-Highway Program, clean-up effort for Interstate 79 from mile marker 100 to 101
- “Data loggers” volunteer training, volunteer monitoring of water quality data with CTD sondes
- All issues of *The Catalyst* newsletter now found at [www.srwc.org](http://www.srwc.org), part of website improvements

##### Conferences

- West Virginia Mine Drainage Task Force Symposium, Morgantown, WV—3/25-3/26
- 7th Annual West Branch Susquehanna Restoration Symposium, State College, PA—4/10-4/11
- 31st National Meeting American Society of Mining and Reclamation, Oklahoma City—6/14-6/20
- Pennsylvania’s 16th Annual Abandoned Mine Reclamation Conference, State College, PA—6/26-27
- 13th Annual Ohio River Watershed Celebration, North Park—9/18
- National Association of Abandoned Mine Land Programs 36th Annual Conference, Columbus, OH—9/21-9/24
- Northwest PA GIS Conferences, Clarion Univ.—10/16-10/17

##### Recognition

- Am. Society of Mining & Reclamation William T. Plass Award presented to Margaret Dunn of the SRWC for her contributions to watershed reclamation and restoration—June 2014
- SRWC celebrates its 20th Anniversary

##### Restoration Projects

- Slippery Rock Creek Watershed stream bank restoration
- DeSale Phase II rehabilitation
- Data Logger Stream Monitoring

### Check Us Out Any Time!!

If you’d like to learn more about what the Slippery Rock Watershed Coalition is all about, please join us at a monthly meeting! The SRWC meets every second Thursday of the month at Jennings Environmental Education Center. Everyone is welcome to attend and join us for free pizza and pop! Meetings begin at 7 PM and generally include a review of recent watershed restoration efforts, ideas for new ventures and outreach, and previews of upcoming activities. We love meeting new people, so if you have an interest in the Slippery Rock Creek Watershed, be sure to join us some Thursday evening soon!



### An Oldie but a Goodie

To help celebrate the 20th anniversary of the SRWC, we dug through the photo archives and found a nice group photo of the SRWC taken with Dave Hess, the former secretary of the PA DEP, and Dave Hoge- man, PA DEP Bureau Director. The SRWC was in Harrisburg to receive the Governor's Award for Environmental Excellence.

## Celebrating 20 Years of the SRWC!!!!!!

It's hard to believe, December 2014 marked the **20th Anniversary** of the founding of the Slippery Rock Watershed Coalition!!! Twenty years ago, the Slippery Rock Watershed Coalition began its early days delving into the world of watershed restoration. Two decades later, both founding members and newer participants have many reasons to be proud of their work! Fueled by countless volunteers and many public-private partnerships, the SRWC has faced many challenges and enjoyed quite a few subsequent success stories as they have addressed many abandoned mine drainage problems in the Slippery Rock Creek Watershed.

A brief summary of this watershed includes a 27-square mile portion of the Slippery Rock Creek Watershed headwaters where coal mining was conducted for well over 100 years. Twenty years ago, many of the streams were lifeless due to the toxic effects of acid mine drainage from 4000 acres of abandoned underground mine workings and 8000 acres of abandoned surface mines. To address these problems, the SRWC was formed in 1994 through a volunteer effort by citizens, private industry, schools, government agencies, service groups, and others that lived and/or worked in the area. The SRWC's goals are to:

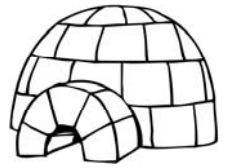
- Restore the headwaters to a viable fishery.
- Develop public-private partnership efforts not only to reclaim abandoned mine sites but also to demonstrate the multiple benefits associated with watershed restoration.
- Develop and improve treatment systems and land reclamation techniques that are environmentally-friendly, low cost, low maintenance, and long term or sustainable.
- Provide educational opportunities to all interested in abandoned mine restoration.

Since 1994, the SRWC has constructed 18 passive treatment systems successfully treating over 1 billion gallons of mine drainage each year. These systems are preventing about 760 tons of iron, 55 tons of aluminum, and 750 tons of acidity annually from entering Slippery Rock Creek! That is the amount of aluminum needed to make approximately 1.88 million aluminum cans each year! The improvement in water quality has resulted in fish being observed in over 11 miles of stream probably for the first time in over a century. In addition to the treatment of mine drainage, about 200 acres of abandoned mine lands have been reclaimed including the removal of over 125,000 cubic yards of coal refuse while over 10 acres of wetlands have been created. Not only that, but Datashed ([www.datashed.org](http://www.datashed.org)), data loggers, Clean Creek Products ([www.cleancreek.org](http://www.cleancreek.org)), a completed Slippery Rock Creek Watershed Conservation Plan, and a new and improved web site ([www.srwc.org](http://www.srwc.org)) are all additional reasons to be excited for what the future holds for the SRWC! We'd love for you to join us!



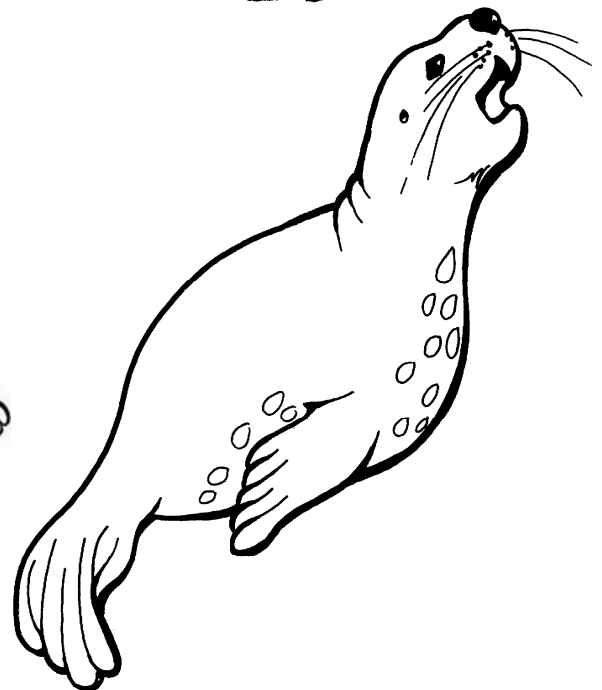
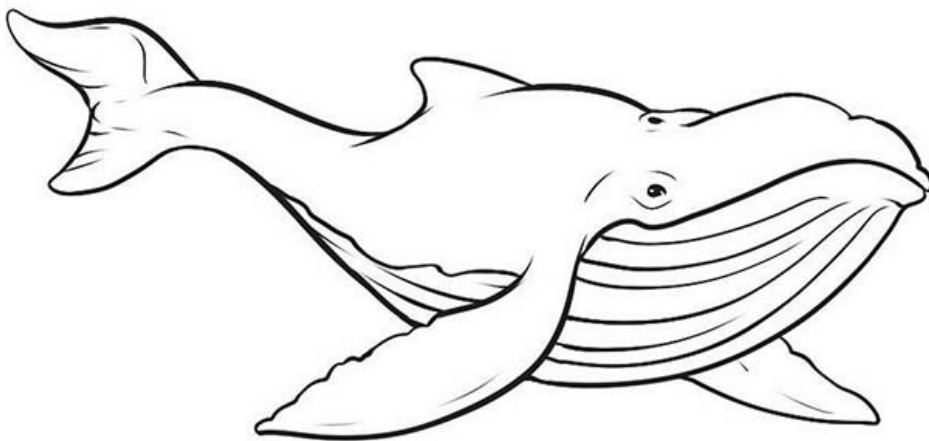
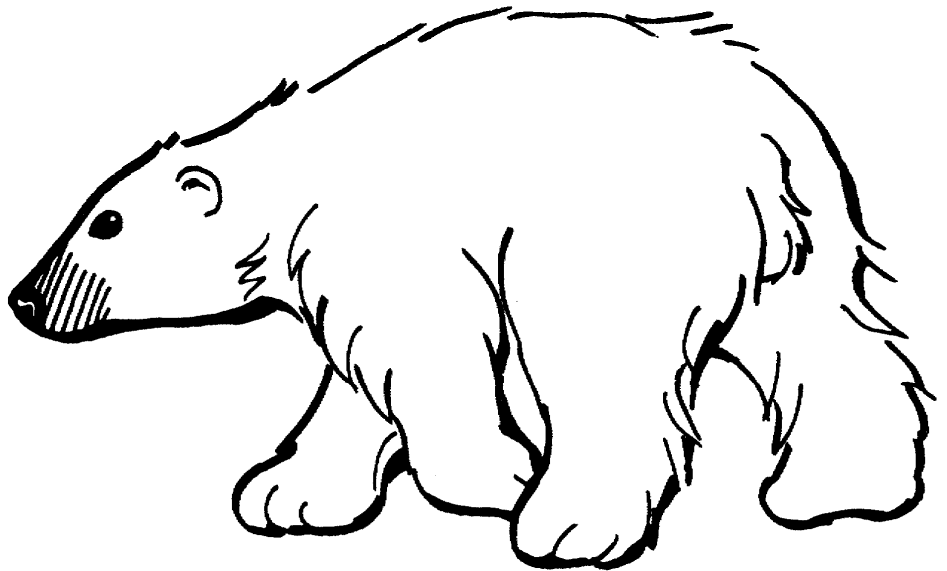
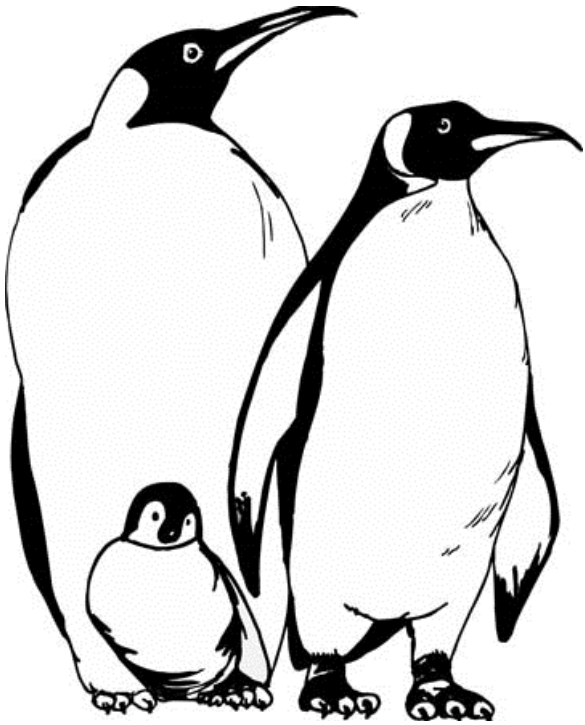
# The KIDS Catalyst

SLIPPERY ROCK WATERSHED COALITION FUN ACTIVITY



## Cold Critters Coloring Page

While some animals hibernate or migrate to warmer areas during the cold winter months, there are some animals who **love** the cold! There are special things about these animals' bodies that allow them to live in the coldest places in the world. **Whales** have a thick layer of fat, called blubber, under their skin that keeps them warm. Harbour **seals** also have a thick layer of blubber to keep them warm, and they also have a very high metabolic rate to generate body heat. There are 17 types of **penguins** in the world. Penguins have a layer of blubber, and on top of their blubber are a layer of fluffy feathers called "down". On top of the down is another layer of thick feathers to keep the warmth in. Sometimes when it is really cold, penguins huddle together in groups of up to 5,000 to keep warm. They take turns moving to the inside of the group where it is warmer. **Polar bears** have a thick fur coat that looks white, but is really translucent. Each hair is a hollow tube that channels the warmth of the sun straight to the skin to help keep it warm. Polar bears also have a thick layer of fat. They dig out dens on snowy slopes to take shelter during blizzards, curling up to let snow drift around their bodies to form an insulating layer. Color the creatures below who love the cold, and if you send us your paper we'll mail you... A CASH PRIZE of your very own!!!



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



Slippery Rock Watershed Coalition c/o Stream Restoration Incorporated  
A PA Non-Profit Organization  
434 Spring Street Ext.  
Mars, PA 16046

NONPROFIT  
ORGANIZATION  
U.S. POSTAGE  
PAID  
PERMIT NO. 63  
Mars, PA

Thanks to The William & Frances Aloe Charitable Foundation, Environmentally Innovative Solutions, LLC, Dominion Peoples, Amerikohl Mining, Inc., Quality Aggregates Inc., Drs. Ron & Kathy Falk Family, 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), 434 Spring Street Ext., Mars, PA 16046 (724)776-0161, fax (724)776-0166, [sri@streamrestorationinc.org](mailto:sri@streamrestorationinc.org), [www.srwc.org](http://www.srwc.org). Jan. distribution: 1127 copies

## PA NW GIS Conference

The 9th Annual Northwest Pennsylvania GIS Conference was held on October 16-17, 2014 at Clarion University of Pennsylvania. **Shaun Busler**, GISP from the SRWC and Stream Restoration, Inc., was on hand to enjoy the networking and learn about the latest in GIS applications from informative presentations, exhibitors, and posters. With a theme of “What’s Your Emergency”, this year’s featured keynote speakers were Mike Anderson, from the Michael Baker Corporation, who presented on “Next Generation 911 and the Changing GIS Role,” and Fred McMullen, WCM, National Weather Service, who spoke on “GIS at the National Weather Service.”



**Russ Stutzman**, a retired PA DEP Aquatic Biologist who was invited by Shaun to attend the conference, brought his one-of-a-kind, water-sampling drone for attendees to examine. Russ presented on Unmanned Aerial Vehicles (UAVs), also known as drones, and took along several working models to show attendees. His remotely controlled hexcopter has the potential to access hard-to-reach bodies of water for sampling purposes. He and his former associate, **Jacob Hayson**, brainstormed and together created both the concept and first-working model. Unfortunately, the first mission had to be aborted due to the proximity of many large trees. Undeterred, Russ and Jacob built a new hexcopter with improved flight and load capabilities and better floatation. This craft was successfully demonstrated at the **Ohio River Watershed Celebration (ORWC)** in September at North Park. Russ was excited to share his ideas at the conference, and also has plans to explore hexcopter applications for remote air and soil sampling.

