

THE CATALYST

SLIPPERY ROCK WATERSHED COALITION MONTHLY ACTIVITIES UPDATE

NEXT MEETING: 7 pm on 2/11/16 at Jennings Environmental Education Center, pizza and pop provided. 1/14/16 meeting attendance: C. Denholm, V. Kefeli, B. Kuban, N. Marsh, N. Sulzer, W. Taylor, F. VanAtta

2015 Year in Review

Working Together for a Clean, Green Watershed

Education/Outreach Activities

- Guest speaking engagement by Cliff Denholm, Robert Morris University—3/2
- Slippery Rock Rotary Club guest speaking engagement, Cliff Denholm & Margaret Dunn—3/9
- Grove City College Alumni Career Panel Night, Shaun Busler guest panelist—3/26
- Paddle Without Pollution stream clean-up day, Slippery Rock—4/25
- Guest speaking engagement by Margaret Dunn at St. Francis University—spring 2015
- Celebrate the Bloom, Jennings Environmental Education Center—7/18
- SRWC's 20th Anniversary Celebration, Slippery Rock—10/9-10/10
- Classroom visits to St. Luke Lutheran School's 7th grade—11/13 & 11/20
- Student Symposium on the Environment, Westminster College—12/3
- Adopt-A-Highway Program, Interstate 79 mile markers 100-101 by Charles Cooper
- "Data loggers" volunteer training, volunteer monitoring of water quality data with sondes

Conferences

- WV Mine Drainage Taskforce Symposium – 3/31-4/1
- PA Land Trust Association (PALTA) Conference - CCP display, Gettysburg, PA - 5/7-9
- 32nd National Meeting American Society of Mining and Reclamation, Lexington, KY—6/7-6/11
- Pennsylvania's 17th Annual Abandoned Mine Reclamation Conference, State College, PA—6/25-26
- Dirt and Gravel Road Conference, Cranberry Twp., PA - 9/29-30
- Northwest PA GIS Conferences, Clarion University—10/15-10/16

Recognition

- SRWC celebrates 20th Anniversary

Restoration Projects

- Erico Bridge PTS rehabilitation
- DeSale Phase II PTS rehabilitation
- McIntire PTS rehabilitation
- Streambank planting at Slippery Rock Campground

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 any monthly meeting! **The SRWC meets the 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 Watershed, be sure to stop by and join-in at one of our meetings soon!



Lake Titicaca on the border of Bolivia and Peru serves as the breathtaking backdrop in this group photo on an October trip with the non-profit group “Engineers in Action,” led by Saint Francis University professor Dr. Bill Strosnider. (See article below.)

BioMost Volunteers Join “Engineers in Action” on Trip to Bolivia

Dr. Bill Strosnider, an associate professor of environmental engineering at **Saint Francis University**, has been working to correct acid mine drainage problems in Bolivia since 2006, when he was a graduate student at the University of Oklahoma. He has been continuing his efforts and encouraging others to work together with the local people to make a difference in the lives and health of residents affected by the intensive mining of silver and other metals for over four (!!!) centuries. He recently led a group of four volunteers (**Tim Danehy**, **Margaret Dunn**, **Ryan Mahony**, and **Buck Neely**) to complete preliminary design work on a water treatment project in Potosí, Bolivia, the second-poorest nation in our hemisphere. The project goal is to treat contaminated mine drainage so that the water can be safely used for much-needed irrigation in the impoverished farming communities downstream. BioMost, Inc. is assisting in the Bolivia project by providing cost estimates, designs, and construction guidance free-of-charge.

The idea for the project began several years ago when Dr. Strosnider and **Dr. Robert Nairn** (Oklahoma School of Engineering and Environmental Science) envisioned a passive water treatment plant in Potosi, a very poor and arid region whose main source of water is the Juckucha River. This river is so contaminated that the local people know not to drink from it; however, the Juckucha River is still the key water supply for the area’s livestock and irrigation. A 2008 analysis of residents’ blood samples showed exceptionally high levels of cadmium, lead, and arsenic for locals living as far as 100 miles downstream from the silver mines. Phase I of the Juckucha reclamation project was completed in May 2012, with 4 million pounds of limestone moved by hand (quite a task with each rock weighing 40 to 70 pounds!!) to line the two highest channels of the river. Phase II of the project focuses on creating passive treatment systems for the Upper Juckucha River, where the abandoned mines are located, which is the focus of the work of BioMost, Inc.

Doug Daley, a visiting environmental engineering professor from the State University of New York, College of Environmental Science and Forestry, also accompanied Strosnider’s team on their October trip as a consulting hydrologist. **Julie Horvath** of the Saint Francis Office for Study Abroad helped coordinate the travel, and the trip was funded by the **United Methodist Committee on Relief** in coordination with the environmental engineering department’s nonprofit partner organization, **Engineers In Action**. Saint Francis students will help with the project as part of their capstone work at the university. They will work with Saint Francis professors and BioMost, Inc. personnel to aid in the design of the irrigation water treatment project, and during study abroad trips to Bolivia, they will continue to assist with the monitoring and maintenance of the systems, once constructed. This project is an exciting example of transferring environmental technology developed here in Pennsylvania to help those in need a continent away! We are excited to be part of a remarkable partnership involving the Bolivian government, Potosi Rotary Club, Oklahoma University, resident volunteers, and Engineers in Action. It was thrilling to see an active water treatment plant installed and operated by a local mining company as of 2014, and after 100 years of no life in the Juckucha River, there is now moss, algae, grass, and birds returning to the valley, and most importantly there is a new hope for the residents for clean water for their community!



The KIDS Catalyst

SLIPPERY ROCK WATERSHED COALITION FUN ACTIVITY



Groundhog's Day Fun With Phil!

Groundhog's Day is February 2! On this day, lots of people will be tuning in to hear the news of the famous groundhog, Phil, who lives in Punxsutawney, Pennsylvania. According to tradition, if it is sunny on Groundhog's Day then Punxsutawney Phil will come out of his burrow and cast a shadow, meaning there will be 6 more weeks of winter. If Phil comes out of his hole and doesn't see his shadow, tradition says there will be an early spring! Phil has been used to predict the weather since 1887! Most of the time, Phil has seen his shadow. Groundhogs and woodchucks are common names for the same animal, a rodent that can actually climb trees and swim! During the winter, groundhogs go into a deep hibernation that lasts until early February. It is believed that growing amounts of sunlight trigger the groundhogs to wake up from their hibernation time. Groundhogs in the wild eat succulent green plants, such as dandelion greens, clover, plantain, grasses, and are tempted by nearby garden vegetables. Adult groundhogs weigh about 10 pounds and are about 2 feet long. Below are several words related to Groundhog's Day that are hidden in the word search. Try to locate and circle all of the words. If you mail us your completed paper, we'll give you a \$1 credit on Amazon.com (with a parent's email address) that you can save and use to buy something really great!

Groundhog	Punxsutawney	Tradition	Winter	Predict
February	Pennsylvania	Forecast	Phil	Hibernate
Spring	Shadow	Burrow	Woodchuck	Sunny

B	U	S	O	Q	A	N	T	R	A	W	O	O	D	C	H	U	C	K	W	O	K	S
F	E	H	M	P	H	C	V	N	O	J	Z	Q	F	B	Y	J	U	N	A	S	I	P
S	R	I	M	S	H	J	O	A	E	C	H	V	E	E	I	L	P	I	O	U	H	R
Z	G	B	R	B	Q	I	J	C	H	E	R	T	S	K	M	L	E	N	P	N	U	E
Y	R	E	R	N	T	P	L	E	N	N	S	Y	P	L	V	A	I	W	Q	N	Z	D
E	X	R	L	I	M	W	N	Y	F	K	F	O	R	E	C	A	S	T	E	Y	P	I
N	P	N	D	D	I	C	M	O	O	Q	D	N	I	N	N	O	W	S	H	Z	A	C
W	O	A	C	R	B	S	C	U	O	P	L	J	N	C	K	W	N	T	E	S	R	T
A	R	T	Z	C	G	O	H	D	N	U	O	R	G	Q	F	U	H	M	R	Y	W	O
T	O	E	N	N	A	V	T	A	D	R	E	G	H	U	P	I	O	D	R	S	A	B
U	Q	T	Y	B	H	D	C	W	D	P	K	Y	B	F	R	T	H	A	M	V	U	E
S	I	W	I	N	T	E	R	W	A	O	I	C	B	W	W	O	U	C	H	R	C	K
X	P	U	N	X	T	Q	U	N	X	E	W	U	K	L	O	R	B	E	R	A	E	P
N	E	N	N	S	Y	B	Q	W	P	Y	I	V	C	X	B	Z	U	O	S	T	R	E
U	T	H	Y	A	I	N	A	V	L	Y	S	N	N	E	P	Q	W	E	N	T	I	L
P	E	C	B	Q	S	A	T	F	J	C	N	O	F	O	S	A	F	E	B	M	S	W

Name _____ Age _____ Address _____

_____ Email _____



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, www.srwc.org. Feb. distribution: 1108 copies

Escape the Winter Blues with Fun Programs at Jennings

Who says you have to stay cooped up this winter? Take a break from your winter hibernation to join the knowledgeable staff at Jennings Environmental Education Center (JEEC) for some interesting programs! JEEC is a state park located in Slippery Rock 12 miles north of Butler on PA Route 528. JEEC offers a diverse array of environmental education programs year-round. Check out 3 of their fun upcoming events! These programs are offered at no cost, but interested individuals should call JEEC (724-794-6011) to sign up.

<p><u>Program Title:</u> The Great Backyard Bird Count</p> <p><u>Date:</u> February 13, 2016</p> <p><u>Time:</u> 9 AM to 12 PM</p> <p><u>Contact Info.:</u> Will Taylor, Program Coordinator, 724-794-6011</p> <p><u>Program Description:</u> Learn the basics of bird identification, while contributing to research about bird populations. Join Jennings and the Bartramian Audubon Society for an informative birding session. Watch and count birds at the feeders and find out how to contribute data to the GBBC. Use your new skills to observe and submit your own data at home. This free program is designed for ages 10 and up and requires registration. Registration ends February 10.</p>	<p><u>Program Title:</u> Step Into Snowshoes</p> <p><u>Date:</u> February Saturdays</p> <p><u>Program Description:</u> If you can walk...you can snowshoe! Try it today. A limited number of snowshoes are available daily when JEEC is open (including regular business weekdays) and enough snow covers the trails. Borrowing the snowshoes is absolutely FREE! Orientation and brief instruction will be provided upon request. A valid drivers license is required to borrow snowshoes. Snowshoes are not permitted to leave the park. A different Family Fun Snow Activity will be offered each Saturday that the center is open for snowshoeing. These activities could include a snowman kit, giant snow piles, and other kid-oriented winter fun activities.</p>	<p><u>Program Title:</u> Home Sweet Home: Backyard Maple Sugaring</p> <p><u>Date:</u> February 27</p> <p><u>Time:</u> 8:30 AM to 12:30 PM</p> <p><u>Program Description:</u> Here's an opportunity for adults who want to try making their own tasty maple syrup! From choosing appropriate trees through tapping, collecting and evaporating maple sap, participants will learn, observe and practice the steps in the sugaring process, and discover how it can be done on a backyard scale. Information and resources will be provided for finding out more and getting started at home. An optional tour of Jennings' sugar bush will follow the workshop, from 1-2 p.m. The program is free, with equipment available to purchase. Registration is required by February 20. Register online or by calling 724-794-6011.</p>
--	--	--