THE CATALYST SLIPPERY ROCK WATERSHED COALITION MONTHLY ACTIVITIES UPDATE

<u>NEXT MEETING:</u> 7 pm on 2/12/15 at Jennings Environmental Education Center, pizza and pop provided. 1/8/15 meeting attendance: C. Denholm, M. Dunn, V. Kefeli, W. Taylor

Data Loggers Fully Underway

Five volunteers have undergone training and are now collecting readings from 11 of 12 data loggers which have been stationed at several important locations throughout the Slippery Rock Creek Watershed to monitor stream quality for several purposes. The data retrieved will provide valuable and much needed water quality information not only for monitoring current degradation in the watershed by abandoned mine drainage but also for collecting baseline data prior to extensive drilling for Marcellus and Utica shale gas. Shale gas drilling has only recently begun in the watershed, with only 10 wells drilled to date within the entire 408-square mile watershed. Data loggers will enable the documentation of baseline conditions. SRI has a demonstrated track record of addressing the legacy of abandoned mine drainage problems in the Commonwealth of Pennsylvania and working with industry to prevent future problems. The same partnership approach, we believe,

will help us address any potential issues with the

gas industry.

Data loggers are currently recording conductivity and temperature of streams, which will be interesting to track for seasonal changes. Significant changes in conductivity may indicate a discharge of pollution. One recent spike in a graph of conductivity readings in South Branch Slippery Rock Creek is believed to be a result of road salt. Several months' worth of data have now been collected, and will SRWC website soon be posted the on (www.srwc.org). Being both efficient and cost effective, the data loggers are a commonly-used method to collect water quality data on a continual basis.

Volunteers were trained by SRWC participant **Shaun Busler**, who also installed the data loggers. These sensors take readings every 15 minutes and store this information for future analysis. The primary job of the stream monitor volunteers is to download the data, clean, and maintain the data loggers.

One remaining data logger on the campus of Grove City College will soon be monitored by a student, and, another yet-to-be-installed data logger will be capable of recording water level.

This new monitoring method would not be possible were it not for funding from the **Colcom Foundation!** We are excited about the possibilities this new monitoring effort brings to the Slippery Rock Creek Watershed and are very thankful to our dedicated volunteers.





PHOTO OF THE MONT



Ryan Mahony and Dan Guy from Bio-Most, Inc. recently completed some maintenance at the De Sale Phase I and Phase II treatment systems. This photo was taken by Ryan from the cab of the excavator as he stirred the treatment media at De Sale Phase II.

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Contributions of SRWC Soil Scientist Dr. Valentin Kefeli

As he continues to enjoy doing research and teaching environmental health classes at **Robert Morris University**, **Dr. Valentin Kefeli** has again compiled some wonderful volumes highlighting a variety of topics

centered in the Slippery Rock Creek Watershed. "Plant Cancer" was compiled in 2014 for use in a college class, as Dr. Kefeli explored the effects of wood burls and gall flies on trees. Dr. Kefeli also created an archive from 1999-2014 of many of his forest biomass and fabricated soil studies. His writings include information on wetlands, passive treatment systems, and fabricated soil (including composition, construction, research, and applications). In his volume entitled "General Ideas and Legacy: Otto Emery Jennings", Dr. Kefeli highlights Otto Emery Jennings, who was born October 3, 1877 in Allegheny County and was one of the most well-known botanists and naturalists of western Pennsylvania. After discovering a prairie in the year 1905, Dr. Jennings (pictured at right) was involved in the purchase and protection of this unique ecosystem. Dr. Jennings' legacy of environmental education, conservation, and stewardship lives on today, as thousands of visitors annually come to the Jennings Environmental Education Center to participate in fun-filled environmental programs and outdoor activities, and to appreciate the beauty that includes over 30 breathtaking blooming wildflowers in mid-summer.

"Enterprise in Slippery Rock" showcases the **Cultural Studies Academy, Inc.** which was founded in 1963 by **Slippery Rock University Professor**



The Jennings Environmental Education Center was named for western PA botanist and naturalist Otto Emery Jennings.

Emeritus Dr. Henry Lenz and his wife, Linda. Currently run by Sonya Lenz, CSA Tours now offers historical, cultural, and specialty tours to Europe, Egypt, and the Orient. Photos and travel anecdotes from Valentin's trips to such places as Poland, Monaco, Turkey, Spain, and Germany are highlighted in this journal.

Another volume, "General Ideas and Legacy: Robert A. Macoskey", focuses on the lifetime accomplishments of one of Slippery Rock University's most beloved and environmentally-active professors. A champion of the concept of sustainability, the late Dr. Macoskey founded the **ALTER Project**, a community-based advisory and support organization which serves as a catalyst for sustainable systems education. Multiple sustainable systems experiments, projects, research, and analysis are described.

We appreciate all of the work and interest by Dr. Kefeli in compiling the information about the environmental and educational efforts of so many people in the Slippery Rock Creek Watershed.



The KIDS Catalyst SLIPPERY ROCK WATERSHED COALITION FUN ACTIVITY



Natural Resources Word Search

A natural resource is any material naturally produced by the Earth (not made by man) that people can use. They can be forests, water, wind, minerals, coal, etc. Pennsylvania is a state very rich in several mineral resources. Some of the most important ones are coal, limestone, sandstone, timber, natural gas, and petroleum. The box below lists 15 of Pennsylvania's natural resources. See if you can locate all of the words hidden in the word search puzzle. Circle them. If you mail us your completed paper, we'll send you a cash prize!!!!

rivers soil timber coal slate	sandstone limestone petroleum natural gas gravel	aggregate lakes streams clay shale
slate	gravel	shale

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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, <u>sri@streamrestorationinc.org</u>, <u>www.srwc.org</u>. Feb. distribution: 1128 copies

Who Wants Pie?

Upcoming Annual Cherry Pie Hike on Feb. 23rd

The Butler Chapter of the North Country Trail Association, along with the Jennings Environmental Education Center and the North Country Brewery, will be hosting the annual Cherry Pie Hike on Saturday, February 21, 2015 at Jennings Environmental Education Center. Come follow the steps of George Washington and brush up on your local history! Rod Gasch, of the George Washington Trail, and Dan Nehrer, a French & Indian War re-enactor, will present an interesting history of George Washington's travels through the area. Dan Nehrer will be dressed in period costume similar to what Washington and his guide, Christopher Gist, might have been wearing in 1753. After each talk, there will be an opportunity to take a short hike or a long hike. The long hike will be along the North Country Trail, which in this area is approximately the old Venango Trail which George Washington and Christopher Gist would have travelled. The long hike of approximately 2 hours will be led by members of the North Country Trail Association and the Butler Outdoor Club. A ranger from Jennings will lead a short hike of about an hour on one of Jennings' many trails. To sign up for this event, please contact John Stehle via email (stehles@gmail.com) or phone (724-256-0674) so that enough pies will be available. Please indicate which program (9 AM, 11 AM, or 1 PM) you would like to attend.

Ongoing Activities...

"Natural Gatherings": A Year-Long Project with Jennings and 3MJC

Do you enjoy working with your hands and the camaraderie of others with similar interests? "Natural Gatherings" is a shared year-long project with Jennings and 3MJC which offers the opportunity for you to use your skills and imagination to create hand-made ornaments and decorations that will benefit Jennings through 3MJC, a community non-profit, who supports our local state parks.

This project group meets on the 3rd Wednesday of each month. If you have any questions, please contact the Center at 724-794-6011 and ask to speak with Brandi.