

## THE CATALYST

### SLIPPERY ROCK WATERSHED COALITION MONTHLY ACTIVITIES UPDATE

**NEXT MEETING:** 7 pm on 3/10/16 at Jennings Environmental Education Center, pizza and pop provided. 2/11/16 meeting attendance: T. Danehy, C. Denholm, V. Kefeli, B. Kuban, W. Taylor, F. VanAtta, J. Wikinson

### De Sale Phase II vs. the Eager Beavers!!!

**Dam!** It was recently discovered that the De Sale Phase II Passive Treatment System made a nice home for beavers! The system was constructed in 2000 to treat an entire unnamed tributary impacted by mine drainage from an abandoned surface mine in the headwaters of Seaton Creek in Venango Township, Butler County. The system components include a berm and intake pipe to capture the stream, a forebay, two parallel Vertical Flow Ponds (VFPs), a settling pond, a wetland, and a Horizontal Flow Limestone Bed (HFLB).

Even though routine system maintenance and sampling has been conducted by the Slippery Rock Watershed Coalition since construction, in December 2015, the system designer, **BioMost, Inc.**, investigated the beaver activity at the site reported by nearby landowners. During the investigation, it was discovered that the wetland outlet and settling pond outlets had been dammed by beavers, causing water to overtop the berm of the wetland. This forced flow away from the system outlet and onto the property of adjacent landowners as well as the system access road. To address this issue, the beaver dam was removed to allow all of the flow to again enter the HFLB. As a more permanent solution to the problem, two, 12-inch, culvert pipes were installed parallel to the designed spillway with the inlets and outlets under water to reduce the sound of running water that attracts beavers. While equipment was on site, the system forebay inlet and outlet pipes were inspected and cleared of sediment. Beaver activity and flow will be monitored along with site inspections on a regular basis.

Prior O&M work was conducted on the system over the winter of 2013/2014 to remove leaves, sticks, and other debris, which had clogged the bar guard of the forebay pipe which splits flow between the two VFPs. A build-up of ice had caused water to flow over the emergency spillway, bypassing the treatment system. Backflushing was conducted for each VFP using the outlet pipes (16 pipes) with the excavator powering a 6" hydraulic-drive pump. After backflushing, VFPW was drained and the upper 3-4 feet of media within the pond was stirred. The treatment media consists of a layer of spent mushroom compost overlying limestone aggregate with a perforated underdrain piping system conveying the water to the pond outlets. By stirring the mushroom compost into the limestone layer, a more uniform distribution of flow has been developed.

This is another example of the ongoing public-private partnership effort that has been instrumental in restoring the watershed!!! A special thanks to the **PA DEP Growing Greener** program and **Foundation for PA Watersheds** for providing the funding to make this much needed maintenance activity possible. **Unfortunately, we just couldn't "leave it to beavers!"**



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12" culvert pipes with cleanouts to reduce beaver activity at De Sale Phase II (Left). The access road to the system was flooded due to water overtopping the berm of the wetland (Right). See article on first page for more information.

### SRWC at 2016 Forest Landowner Conference

The Clarion Forest Landowner Conference was held on Saturday, February 20 at the Grunenwald Science & Tech. Center at Clarion University. The purpose of this conference is to help forest landowners understand some of the available management options. The knowledge gained from this conference will prepare them to make sustainable management decisions for their forestland so a healthy and diverse forest will remain for many years to come. **Shaun Busler**, of Stream Restoration Incorporated and an SRWC participant, attended the conference in part to share about passive treatment options for landowners who may be dealing with abandoned mine drainage problems on their land. Shaun enjoyed meeting several new western PA “neighbors” and sharing stories about the challenges of owning substantial property in the area. Several speakers at the conference provided attendees with interesting property use ideas, both for fun and for profit. Shaun especially enjoyed the information presented in discussions on maple syrup making and beginner bee keeping. Additional session topics included fruit and nut trees for wildlife, legal strategies for protecting forestland, making good maps for your property, and planning for the legacy of your woods (communicating values and goals).

Over 100 landowners participated in the conference. Special thanks to **John Brundege**, Forester for the **PA Department of Conservation and Natural Resources**, for extending an invitation to the SRWC, and to the other main Sponsors of the conference: **Clarion County Forest Stewardship Committee, Penn State Cooperative Extension, and WOCAV (Woodland Owners of Clarion Allegheny Valley)**. WOCAV seeks to promote forest stewardship through educational programs, demonstrations, and sharing the experience of other woodland owners. It is a forum to exchange information about the practical applications of Best Management Practices by sharing practical first-hand experiences to enable members to establish goals and confidently manage their woodlot to meet their objectives.



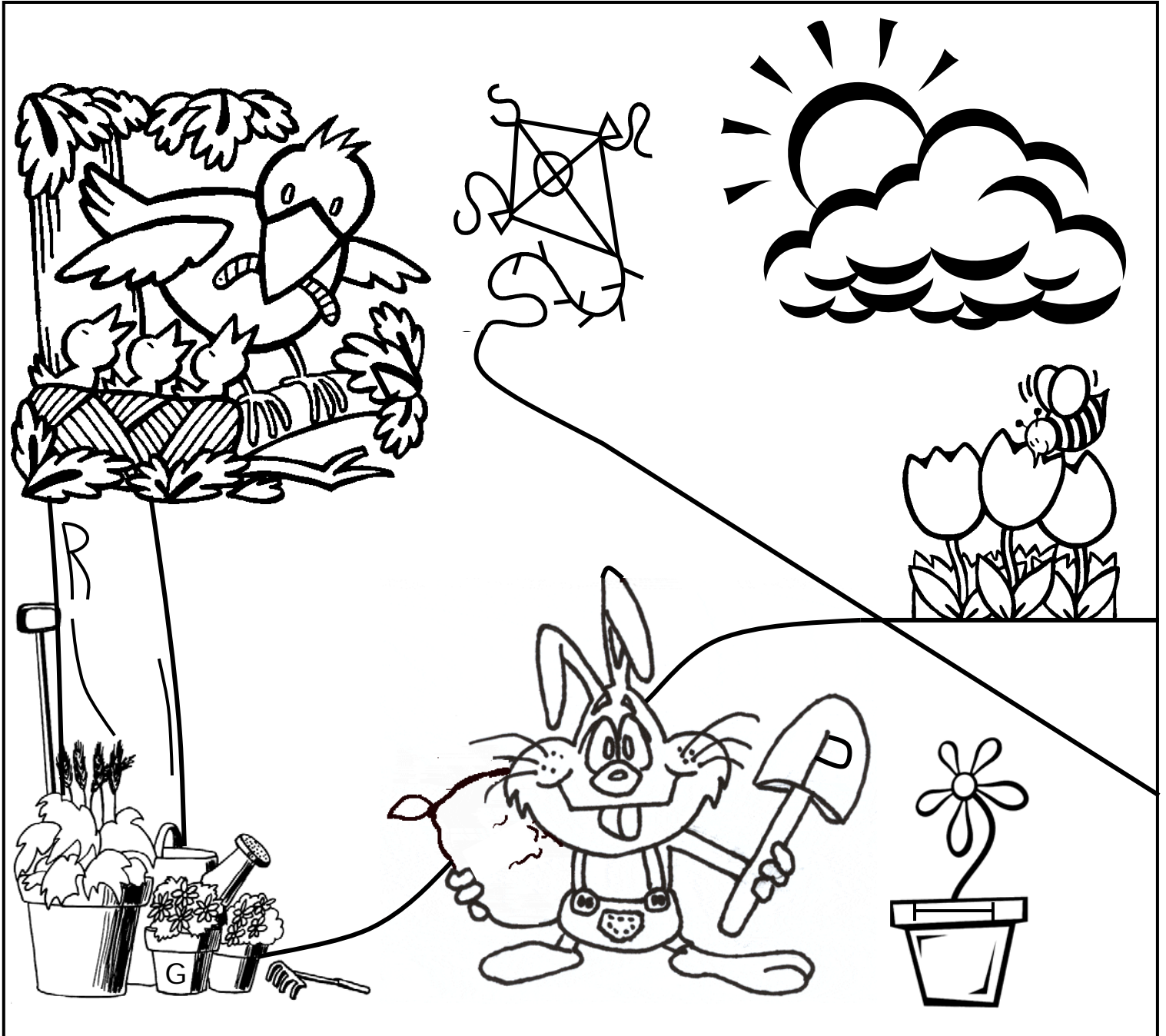


# The KIDS Catalyst

## SLIPPERY ROCK WATERSHED COALITION FUN ACTIVITY

### Seeking Spring

What do you think of when you think of spring? It's time to plant a garden or fly a kite! It's time to enjoy the flowers, the sunshine, and the warmer temperatures! Baby birds are chirping everywhere, animals come out of their winter hibernation, and insects are starting to buzz all around us! The first day of spring is March 20. In honor of spring, the 6 letters that spell S-P-R-I-N-G are hidden in the spring coloring picture below! Try to find all 6 and circle them, then color the picture! If you mail us your paper, we will give you a \$1 credit for Amazon.com that you can save and accumulate to buy something really special!



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

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## **North Country Trail Butler Chapter Hosting March Hike**

The **Butler Chapter of the North Country Trail (NCT)** hosts monthly hikes for anyone interested, the next hike will be on **Sunday, March 20 at 1PM**. The hike will be on the eastern-most section in the newly-dedicated trail town of Parker, PA. This is a beautiful section, going through hemlock woods, and over two unique bridges. The distance of the trail is 2.8 miles, which will be hiked out and back, for a total hike of 5.6 miles. Participants will meet at the Game Lands parking lot on PA State Route 268, about one mile west of Parker where the trail crosses the road. There is an NCT trail post in the parking lot visible from the road. Anyone, who would like to, can also join some of the NCT members for breakfast before the hike at the Parker VFW at 214 North River Avenue. Breakfast is served from 9 AM to 1 PM on Sundays, and several hikers plan to meet to share a meal at 11:30 AM before going to the trailhead. New hikers are always welcome! If you have any questions, please contact **John Stehle** at 724-256-0674.

## **SRWC Volunteer Thank You Dinner**

A fun appreciation dinner was held on Monday, February 29 for SRWC participants and watershed volunteers. Over a dozen folks enjoyed the delicious food and festive atmosphere at the North Country Brewing Company in Slippery Rock. Thanks to everyone who joined us, and a special heart-felt thank you to each



person who has helped the SRWC in its restoration and stewardship of the land and water in the Slippery Rock Creek Watershed by volunteering their time and talents—we can't do it without you! And we could always use new helpers, so if you are interested in learning more about what we do, please join us at one of our regular meetings, held every 2nd Thursday of the month at 7 PM at Jennings Environmental Education Center. Anyone and everyone is always welcome to attend!