

THE CATALYST

SLIPPERY ROCK WATERSHED COALITION MONTHLY ACTIVITIES UPDATE

NEXT MEETING: TBD per COVID-19 regulations; March meeting was cancelled. May meeting possible but not certain: Thursday, May 13 at 7 PM at Jennings Environmental Education Center.

Data Logger Action!

A sunny March weekend provided the perfect opportunity for the newest intern at Stream Restoration Incorporated to “get his feet wet” in the figurative sense and nearly the literal sense! High school junior Isaac Busler received valuable hands-on training at the headwaters of Slippery Rock Creek, including a lesson on maintaining a tight grasp of the sonde caps so one doesn’t accidentally slip into the stream! Isaac visited six spots along the headwaters, and at each spot tested the water for specific conductivity and pH, and deployed new data loggers. The six refurbished data loggers are now collecting temperature and conductivity data every 30 minutes. Specific conductivity measures the amount of dissolved ions in the water. Before visiting the streams, Isaac learned how to set up the data logger software. Before his next round of visits back to the six sites he will learn how to download the data loggers to help the SRWC obtain a general idea of stream health and give helpful alerts in the event of pollution events.

Lower conductivity signals less pollution in general, though at times limestone dissolution at a passive treatment system can also raise conductivity. Isaac used a handheld conductivity meter to gather initial conductivity readings, learning how to calibrate the device for correct use. The highest conductivity readings, 510 $\mu\text{mhos/cm}$ at Branchton and 500 $\mu\text{mhos/cm}$ at Boyers, were found at the highest headwater points. The lowest conductivity reading was 230 $\mu\text{mhos/cm}$ at Muddy Creek upstream of Lake Arthur. All six sites showed healthy pH values of 6.5 to 8.0.

Three data logger sondes are still functioning from initial installation in late 2014. Three additional loggers will soon arrive and be installed. Those six data loggers will join the six from the March installation to make a total of 12. Each sonde is uniquely attached to a safe point for best security. Most data loggers are attached via cable to a tree, while some are attached to a bridge if available.

As an intern, Isaac will visit the data logger sites within Slippery Rock Creek watershed every couple of months. He will download the data from each sonde and upload it to the SRWC web site, incorporating it into a single file accessible by the public. Thank you to the Colcom Foundation for their commitment to a sustainable future and funding for this Slippery Rock Creek Watershed data logger project.





The remains of dilapidated Bovard dam, along Slippery Rock Creek near Branchton, PA. Although fallen apart in some areas, this dam unfortunately still prevents fish passage and traps sediment within the stream.

Celebrate Earth Day!

The theme of Earth Day 2021 is “Restore Our Earth.” This annual event on April 22 is a platform for people all across the globe to demonstrate support for environmental protection. First held on April 22, 1970, it now features a wide range of events coordinated globally by earthday.org. It now includes 1 billion people in more than 193 countries. Earth Day focuses on many important areas, such as science and education, plastic and pollution, climate, citizen science, and conservation and restoration.

We remind our readers there are many simple, practical steps you and your family can take to play a part in protecting and improving our planet and its resources. No doubt we are all familiar with the three R's: Reduce, Reuse, Recycle. Did you ever stop to think about the order these words are written in? They are written in this order for a specific purpose. For example, when possible, we should all reduce the amount of “stuff” we buy or energy we use. Think of a trip to the grocery store. If you only buy a few things, skip taking a plastic bag and just carry the items out in your arms. If you do take a plastic bag, it's easy to re-use, but eventually will wear out. And while it can get recycled, that uses energy and resources. So it's best to not take the plastic bag in the first place. Continuing with the grocery store example, many stores now make paper receipts optional. You can choose to have your receipt emailed to you instead. If you take a paper receipt, you could reuse it by writing on its back side, and you could also recycle it — but remember recycling uses energy and resources.

Many people are surprised to learn that in the United States, Americans use about 100 billion plastic bags each year, and only 1% are returned for recycling. 100,000 marine animals are killed by plastic bags every year. Americans purchase 50 billion plastic water bottles every year, and only 23% are recycled. Globally, only 9% of all plastic is recycled. While plastic use should be avoided when possible, it's interesting to know there are other materials many perceive as worse because of an even slower rate of biodegrading. Did you know glass, Styrofoam, and aluminum foil are not biodegradable? It is super important to recycle these materials!

While many large-scale events and gatherings for Earth Day are restricted due to Covid regulations, remember there are plenty of virtual events happening and also likely smaller-scale neighborhood cleanups in your area. You can try small actions that make a big difference: skip the plastic, recycle more, use less water or less electricity. Everyone can do their part to improve our beautiful planet!



The KIDS Catalyst

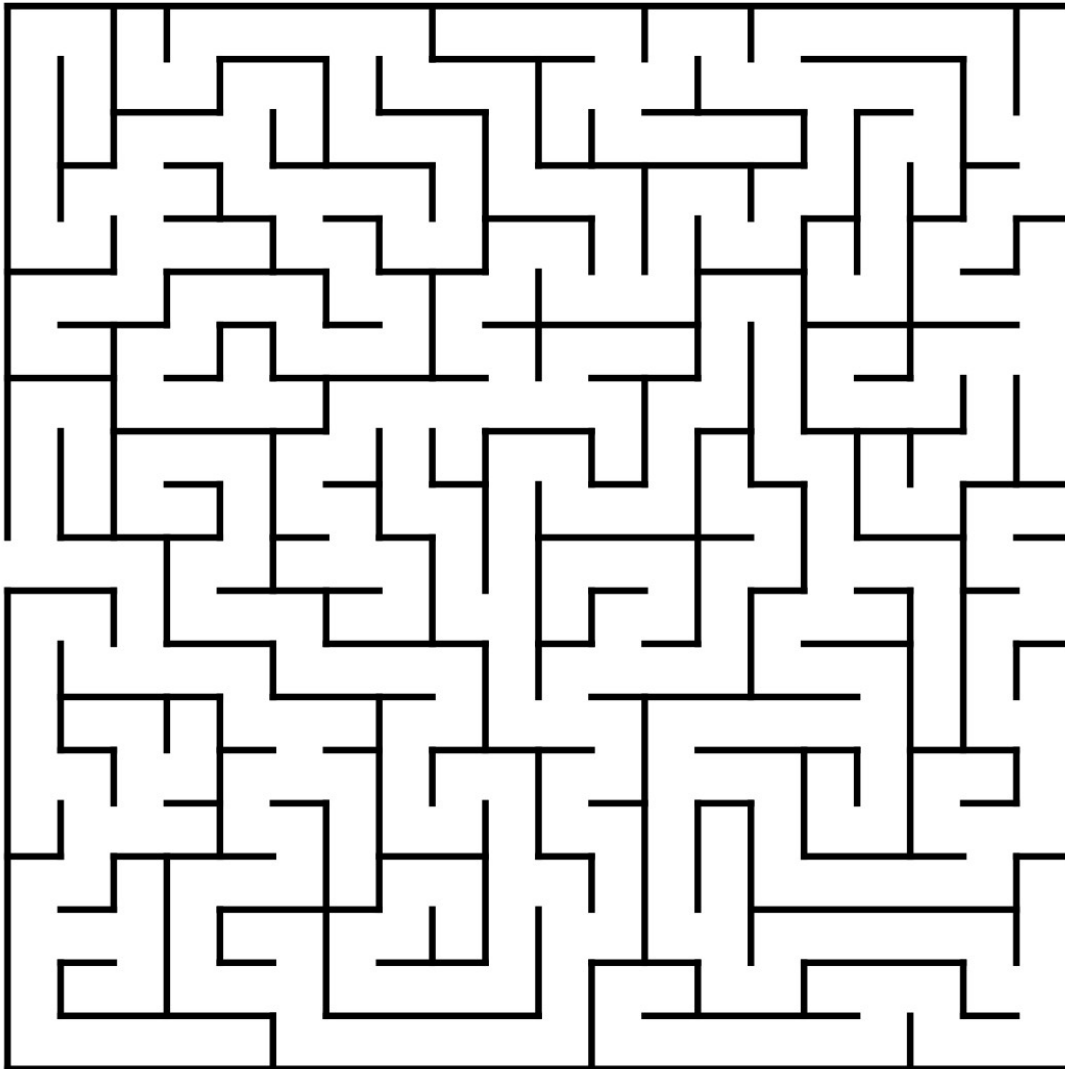
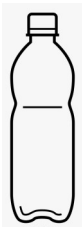
SLIPPERY ROCK WATERSHED COALITION FUN ACTIVITY



Earth Day: Recycling Maze

Earth Day is April 22nd! It's a great time to celebrate our amazing planet and ask yourself what you can do to help protect it and make it even better! Recycling is one important action many people do on a regular basis, but a lot of us can do an even better job with it. Below you will see a maze where your goal is to get the plastic water bottle on the left into the recycling bin on the right. If you successfully make your way through the maze, be sure to mail us your completed paper — because we will then send you a \$1 Amazon credit through a parent's email address! Amazon credits can be saved up so you can buy yourself something really cool! We hope you enjoy Earth Day and find a worthwhile Earth activity to do to contribute to the event.

START:



Name _____ Age ____ Parent email address: _____



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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