SUNDAY CREEK
SPLASH
FALL 2004

Congo Run Subsidence Closure Project Completed

Sarah Clement, AmeriCorps VISTA

Perry Reclaiming workers filled the Congo Run subsidence hole with 155 tons of stone this June. Photo: Cara Hardesty.

The completion of the Congo Subsidence Closure Project on July 9, 2004 marked a significant step toward improving water quality in the Sunday Creek watershed. The project involved sealing a deep mine capture off State Route 68 in southern Perry County.

A deep mine capture is a location where surface water drains into an abandoned deep mine, usually as a result of the earth collapsing above a coalmine room. This creates what is referred to as a subsidence hole. Subsequently, water flows underground through abandoned coal rooms and natural rock fissures until it eventually discharges, often into a stream, as acid mine drainage.

In this instance, a subsidence hole was capturing water from a tributary draining into the Congo Run. This tributary was re-channeled and is now flowing only into the Congo Run rather than discharging into the mine.

The Congo Run drains into the West Branch tributary, which in turn drains into Sunday Creek. With a 72-acre drainage area, the stream had been discharging 144 cubic feet (1,077 gallons) per day into the capture, or about 400,000 gallons per year. It is unclear where the mine water had ultimately been discharging, but it was thought to be contributing to the acid discharge into Sunday Creek located next to John Altier Park in Corning, Ohio.

The project first involved clearing vegetation, followed by filling the deep mine capture zone (subsidence hole) with 155 tons of stone. A new channel was then created to correct the path of the water and create downhill flow. Finally, soil was re-established and a mix of grasses and clover was planted to prevent erosion on the former subsidence hole. The total restored area covers three acres.

Local contractor Perry Reclaiming of Corning, Ohio, performed the work. Bill Jonard, Environmental Specialist for the Ohio Department of Natural Resources, Department of Mineral Resource Management, oversaw construction.

Sunday Creek Watershed Group is pursuing eight similar planned projects within southern Perry County, including a study of the Corning discharge. A new EPA

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Chinese Auction Scheduled for October 23

Sunday Creek Watershed Group is organizing a new fund-raising event! A Chinese Auction will take place October 23, 2004, at the Glouster Moose Lodge, 69½ High St.

Some of you may be unfamiliar with the format of a Chinese auction. We will put items donated by area businesses up for auction, and visitors will be able to bid on these items by purchasing bidding numbers. Bidders then place one or more of these numbers next to items they would like to win. At the end of the auction period one number will be drawn, and the person holding that number wins the item. Envelopes containing 80 numbers will be available for $5, and 15 numbers will be sold for $1.

Please help support SCWG and make our First Annual Chinese Auction a success. Bidding will begin at 5 and end at 7, after which auctioning will begin. Sloppy Joes, hot dogs and refreshments will be served.

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SCWG Wish List

Boots (kids & medium adult sizes)
Copying Machine
Paper cutter
Color Printer
Vacuum Cleaner
CD-Rom Drive
New Computers

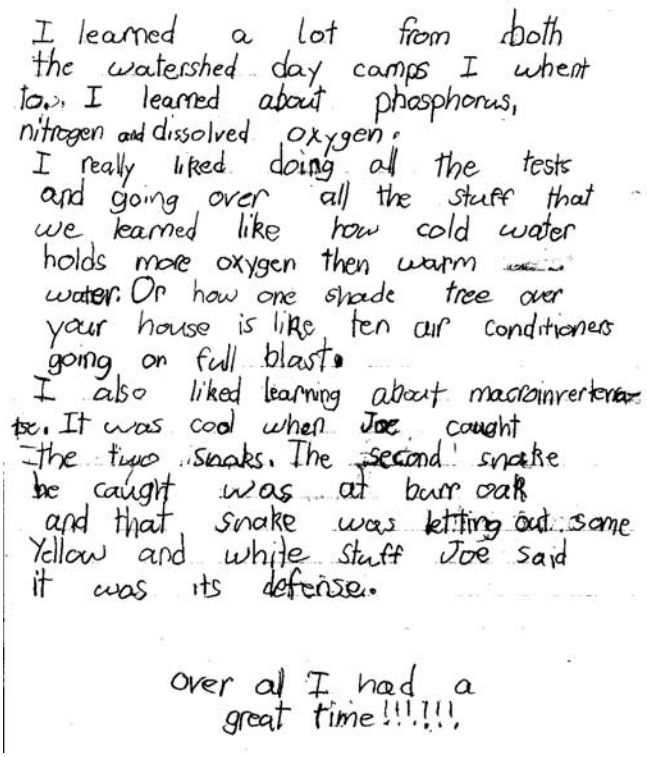
2004 Summer Day Camps A Big Success

Liesbeth Beasley, AmeriCorps VISTA

As we did in 2003, Sunday Creek Watershed Group worked together with Rural Action's Environmental Learning Program (ELP) again this year to organize three-day summer camps for kids between 10 and 13 years of age. The turnout was not great, and we even had to cancel one camp due to low registration. But the two camps that *did* go through were a big success. ELP staff members Diane Wiktorowski, Skye Powers and Carly Hertz did a great job putting together wonderful learning experiences for the 12 kids who attended these day camps.

Thanks to great instructors like Anne Bonner (Ohio Department of Natural Resources) and Gail Doyle (Athens County Soil and Water District), the kids learned a lot about water quality issues and how to make a difference in their own watershed. They had lots of fun exploring unique areas of the watershed, splashing through streams to catch and identify macro invertebrates, learning about snakes and amphibians, playing games and getting dirty.

Here's what Kima Bennett has to say about her camp experience:



I learned a lot from both the watershed day camps I went to. I learned about phosphorus, nitrogen and dissolved oxygen. I really liked doing all the tests and going over all the stuff that we learned like how cold water holds more oxygen then warm water. Or how one shade tree over your house is like ten air conditioners going on full blast. I also liked learning about macroinvertebrate. It was cool when Joe caught the two snakes. The second snake he caught was at bear oak and that snake was letting out some yellow and white stuff Joe said it was its defense.

over all I had a great time!!!!!!

Thank You SCWG Members

We would like to thank the following people and organizations for becoming members or renewing their memberships in the past year:

Jessica, Rich and Noah Fox
JR Malone
Emily and William Resch
Ann Froschauer
Alan Palo
Todd Richards

Congo Run...*Continued from page 1*

319 grant now pending approval would provide funding for these projects, which should be completed in the next three to four years.

Follow-up monitoring will take place to determine if closing the subsidence hole has decreased the acidity of the Corning discharge. In addition, stream flow in the new channel will be measured to evaluate the project's success. The site will be evaluated for two years after the end of construction, during which time any necessary maintenance will be performed.

NCCC: Working on Flood Relief and Trash Clean-ups

Liesbeth Beasley, AmeriCorps VISTA

The National Civilian Community Corps (NCCC) is a division of AmeriCorps, a national service organization. Teams of NCCC members work all over the country on service projects ranging from education and public safety to environmental work and disaster relief. A team of nine NCCC members happened to have just begun an eight-week assignment with Rural Action when the flood hit Sunday Creek watershed on May 19.

This NCCC team did wonderful work here, helping with flood relief efforts all over Corning, Glouster, Trimble and Jacksonville. They labored in flooded homes and businesses ripping out carpets, cleaning up mud, removing furniture and disinfecting buildings before mold could start growing.

During their last week, the NCCC crew performed excellent service with Sunday Creek Watershed Group. They helped with the Watershed Day Camp in Glouster and did trash cleanups and stream sweeps in Glouster, Chauncey and along the Buckeye Trail, leaving the watershed a little cleaner than before by picking up approximately 1.5 tons of trash and removing almost 85 tires. Thanks NCCC!!

Corning Minepool Pilot Study Planned

Cara Hardesty, Watershed Coordinator

The 'Corning discharge' (above) in John Altier Park is fed by the 'Corning minepool.' Photo:Liesbeth Beasley.

Most of us who live in the Sunday Creek watershed are familiar with one of those places in the ground where the orange water gushes out, in particular, the discharge located next to John Altier Park in the Village of Corning. This source of water contamination is referred to as the 'Corning discharge.' The Corning discharge was caused when a hole was drilled with the intent to drain local abandoned mine complexes, which had filled with water, in order to resume mining. Pressure from the escaping water increased the size of the hole, which currently has a circumference of approximately three feet. The subterranean body of water that continues to fill these mine complexes, which is the source of water being discharged, is known as the 'Corning minepool'. With an average acidity load of 267,305 kg/year, it is one of the largest contributors of Acid Mine Drainage to the Sunday Creek.

On July 15, we had the opportunity to bring together technical advisors, Sunday Creek members, citizens of Corning including the Mayor, and members of the consulting firm ARCADIS to discuss a proposed pilot study of the minepool. Ben McCament gave a presentation on the history and science of the minepool, based upon his Master's Degree research and thesis. Jim Harrington of ARCADIS followed this with a presentation and discussion of his proposed pilot study, which could lead to an understanding of how to properly treat the Acid Mine Drainage before it is discharged. A question and answer session followed.

The pilot study would include injecting a reagent (probably lime slurry) into the minepool to adjust alkalinity. Carbon dioxide would also be injected into subterranean airspaces and would serve as a barrier to prevent oxygen from reacting with pyrite and creating new contaminants. The purpose of the study will be to determine whether conditions in the minepool and discharge can be modified. If the pilot study succeeds, future remediation would also involve injection of a source of sugar (probably corn syrup or molasses) into the minepool in order to catalyze a microbial reaction that would consume contaminants.

It appears that the proposed study has the unanimous approval of those that attended this meeting. The pilot study is currently being planned and the Ohio Department of Natural Resources will soon write a Cooperative Agreement.

How to Prevent and Cope with Flooding

Sarah Clement, AmeriCorps VISTA

Since the amount of precipitation and runoff into streams varies throughout the year, water levels also vary. This is why flooding often happens in the spring, when snow melts and precipitation increases.

Flooding is therefore a natural process, but human land use can increase the intensity of floods. However, there are steps you can take to reduce the severity of floods and the extent of your property damage. Here are some inexpensive tips on how to prevent and cope with flooding:

Outside:

- Maintain or plant vegetation, especially trees, on stream banks to slow runoff.
- Do not cultivate close to rivers or creeks. Leave a buffer of natural vegetation to protect stream banks and absorb water.
- If you use your land for pasture, erect a fence to prevent animal grazing near the river.
- Do not throw garbage or debris in rivers or creeks. This can impede flow and aggravate flooding.

Inside: *(adapted from www.fema.gov)*

- Install backflow valves or plugs on drains and toilets to prevent floodwater from entering your home.
- Create openings in foundation walls. This allows floodwaters to flow in and out of your home and prevents collapse.
- Store important documents and irreplaceable personal objects where they will not get damaged.
- Elevate or relocate furnaces, hot water heaters and electrical panels when a flood appears imminent.
- If the building can withstand the force, build and install flood shields for doors and other openings to prevent floodwater from entering.
- Buy and install sump pumps with back-up power.

Septic System Upgrade Cost-Share Program

A great opportunity for homeowners in our watershed

Liesbeth Beasley, AmeriCorps VISTA

When we reported about our proposed Septic System Upgrade Plan in the last Splash, we were still awaiting approval and funding for the program by the Ohio EPA. This time we are glad to tell you that the Septic System Upgrade Cost-Share Program is ready to go!

"What exactly is the Cost-Share Program?" you may ask. Well, it is a great opportunity for homeowners to install or repair a septic system for only 25% of what it costs. Not everybody is eligible, though. The Cost-Share program is *only* for property owners in the Athens County part of the Sunday Creek watershed, and *only* for homes in so-called 'critical areas': parts of Sunday Creek and certain tributaries where fecal coliform levels (sewage pollution) far exceed state limits.

This means you may be eligible for the Cost-Share Program if your property is in Oakdale, Congress Run, Greens Run, Hollister, Millfield or Redtown. But other factors also determine eligibility. For instance, your property must be large enough that an on-lot septic system that doesn't discharge can be installed. Also, eligibility increases when your home is close to the stream or when you currently have a lot of sewage discharge.

So how does the Cost-Share Program work? For starters, Sunday Creek Watershed Group (SCWG) works with the Athens City-County Health Department (ACHD) to administer this program. Application forms are available at the Sunday Creek office in Glouster, at the ACHD office (278 West Union Street in Athens) or on-line at www.sundaycreek.org.

Once you have filled out your application, SCWG determines if you appear eligible. If so, we send your information to the ACHD. A Health Department sanitarian will then contact you to set up a time for site inspection. When it turns out that your property is suitable for an on-lot septic system, you are in!

The ACHD does pre- and post-site inspections, issues necessary permits and serves as a technical resource. You will initially have to pay all costs, and the septic system must be inspected and approved by the ACHD before SCWG can reimburse you. It would be wise to hire a contractor certified or approved by the ACHD. A certified contractor knows all pertinent regulations and can design and install your septic system accordingly. This will improve your chances of passing final inspection by the ACHD.

Once your septic system is approved, the program reimburses up to 75% of all costs, including any fees charged by the ACHD, with a maximum of $4,500 per septic system.

Interested? For more information you can call us, or contact the ACHD office at 740-592-4431.