2024 Fourth Quarter Issue



Promoting interest and collaboration for watershed stewardship



RXFIRE was hired by Headwaters Soil and Water Conservation District to clear, reseed, and cover the Stoney Creek abutment with biodegradable erosion control netting for dam safety. (*Picture credit*)

Watershed Preservation: Damage Control

At the end of September, Hurricane Helene caused widespread flooding and landslides in the Appalachian Mountains of North Carolina. The area, like most, was not prepared for such massive amounts of rainfall in such a short time, with 30 inches of rain falling in just three days. How could they have been more prepared? What measures do we have in place in the South River Watershed to combat the threat of flooding? The Central Shenandoah Planning District Commission has been working on plans for our communities to help lessen flooding hazards. One significant mitigation measure, launched over 50 years ago, has been establishing strategically located flood-control dams. A floodcontrol dam is a structure, built across a river or stream, that limits the amount of water and sediment moving downstream. The dam reduces the risk of flooding for downstream communities by impounding and then releasing water in controlled amounts. It also stores water for groundwater recharge. There are 13 flood-control dams along the South River (**click for details**), three of which were rehabilitated in the last 20 years. The dam on an easement on the Waynesboro Nurseries property is scheduled to be rehabbed in the next year. Augusta County, the City of Waynesboro, and Headwaters Soil and Water Conservation District have partnered with the Natural Resources and Conservation Service (NRCS) to make these dams a priority.



Science Talks Coming Soon!

The South River Watershed Coalition co-sponsors monthly science talks at the Wayne Theatre covering a multitude of fun, educational topics. All talks are free, in person, and available to live stream on Facebook— <u>Virginia Museum of</u> <u>Natural History Page</u> or <u>Wayne</u> <u>Theatre Page</u>.

Talks scheduled for early 2025:

- January 21, 2025 TBD
- February 18, 2025 Drought Effect On Groundwater
- March 18, 2025 TBD
- April 15, 2025 Bears



Left: The main drive at Grand Caverns after Hurricane Helene; Center: A fallen tree "upcycled" into a playground climbing feature; Right: Pathway under bridge

Connections: Grand Recovery at Grand Caverns

Grand Caverns Park is a National Natural Landmark and the oldest continually operating show cave in the United States – all right here in the Shenandoah Valley. The park is naturally vulnerable to flooding because its elevation is below the river and the park is located along a sharp bend in the river. After flood damage in the 1990s, two culverts 100 feet apart were constructed to allow floodwater to flow under the main roadway through the park. Although these culverts have helped prevent flooding, the excessive amount of water from Hurricane Helene overwhelmed the system. The water found shortcuts, flowing over the road and riverbanks. It exposed tree root balls and carved tracks in footpaths, scouring the walking trail along the river and exposing historic river rock throughout the alluvial floodplain. Flooding also eroded the riverside trail used to haul heavy machinery in and out of the park. Fortunately, the wooded area along the southern side of the property seemed to help lessen the impact of floodwater and repair work was soon underway. Crews cleaned up the debris and added gravel where needed for about \$2,500. They are also investigating more ways to lessen flooding impacts and create an alternative trail for heavy machinery. One happy outcome was the opportunity to repurpose a well-intact fallen tree. Often fallen trees are so damaged that they are only good for firewood, but this tree had fallen into another, cushioning the fall. The trunk remained intact and became a new feature for the natural playground (see picture).



Did You Know?

- Learn details about the flood risk level of your home by entering your street address at the FEMA Flood Map Service Center.
 (Sample map in picture to the left)
- Grand Caverns is back up and running, of course! Click <u>here</u> for current events.
- On average, Virginia is impacted by a tropical storm or its remnants once a year, and a hurricane once every 2.3 years.

The News-Virginian Most Devastating Flood In History Strikes Waynesboro, County Areas Hundreds Of Homes See Election Regults, Page 15 Flooded, No Deaths The Other Finder ndo Hard Hi By Flood Wat Tenney Urges Boiling Water

The News Virginian Issue, August 20, 1969

Take a Walk Back: Fifty Years Ago, But Not Forgotten

Has the South River Watershed ever seen rain like Hurricane Helene? Yes, it has! Over 50 years ago on August 18, 1969, Hurricane Camille hit Mississippi and then hovered over the mountains in Virginia, pulling in moisture that was dumped back to earth as massive amounts of rain. The region of Nelson-Augusta-Amherst-Rockbridge experienced torrential downpours, nearly 30 inches of rain in less than a day. More than 150 died or were missing, and all communication between Richmond and the Shenandoah Valley was severed. In Waynesboro, the South River overflowed and sent 8 feet of water downtown causing millions of dollars of damage. Nearly 100 homes existed as islands surrounded by water, while other less lucky homeowners experienced waistdeep water in their houses. The only transportation in the Club Court area was by boat. In Augusta County, roads were under 4 feet of water. Sherando area residents witnessed floodwater spilling over the banks of Back Creek. Although no one in Waynesboro lost their lives, many perished in nearby Rockbridge and Nelson Counties. As the floodwaters receded, the communities joined together to help their neighbors. Churches created emergency shelters and people

brought in clothing and blankets for the flood victims. In Nelson County, the recovery of bodies continued long after floodwaters receded. More than fifty years later, some of the missing have yet to be found. Even now, five decades after Camille, there are those who become restless and worried when a hurricane's rain makes its way north from the Gulf Coast, especially in late August. And there are those who pause and remember the family members, friends, and schoolmates who were gone in the blink of an eye, literally lost between one short sunset and sunrise in the summer of 1969. Excerpts from <u>"The world changed between sunset and sunrise, Aug. 19-20, 1969" by</u> Nancy Sorrells, The News Virginian.



What Can I Do? Practical Flood Prevention

Is any property safe from flooding? According to the Federal Emergency Management Agency's (FEMA's) home flooding protection brochure, "Anywhere it can rain, it can flood – so we all live in a flood zone, and we all live with the risk of flood damage to our property." The brochure includes advice on how to reduce the flooding risks in your home. A few highlights are listed below, but click <u>here</u> to read all the details.

- Maintain proper water runoff and drainage—Make cleaning downspouts and gutters a regular part of home maintenance.
- Improve lot grading—Observe where rainwater puddles during storms and consider building up sunken areas so water flows away from the house in every direction.

- Reduce impervious surfaces around your home—Consider alternatives to concrete and asphalt such as rain gardens, vegetated swales, or pervious pavements to allow more water to be absorbed by the ground.
- Elevate utilities and service equipment—Raise equipment to at least 1 foot above potential flood elevations.
- Install a rain barrel—Stored rainwater can be used to water lawns and gardens during dry spells.
- Seal the foundation and basement walls in your home.
- Protect your valuable possessions—Store important documents above flood levels.
- Install a sump pump—Sump pumps mechanically move water away from your home.



Now Available

The South River Watershed Coalition office is available to be reserved for community group meetings. The space is outfitted with projection capability and Wi-Fi plus tables and chairs for 15 to 20 people. The office is located at 510-D West Broad Street in Waynesboro. Reservations are free; donations are appreciated. Email **info@southriverwatershed.org**

For upcoming events, check the <u>South River Watershed Coalition Events Page</u>. Like us on <u>Facebook</u> and <u>Instagram</u>!

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> Our mailing address is: 510-D West Broad Street Waynesboro, VA 22980