The South River Current

Promoting interest and collaboration for watershed stewardship

September 2021 Volume 2 Issue 9

River Restoration

How does the construction of a parking lot impact the health of a river? When rain hits the asphalt or concrete pavement, it runs off. As it flows across the parking lot surface, the water picks up pollutants such as sediment, oil, and nutrients. These pollutants can make their way to the river either through surface flow or through groundwater discharge after the water infiltrates the soil. When the South River Science Team converted their construction staging area next to Shiloh Baptist Church into a parking lot, they had to address the amount and quality of stormwater runoff from the parking lot. They added a retention pond to lessen the transfer of pollutants into the river. In addition, they contributed to nutrient reduction efforts statewide by purchasing nutrient credits. A "nutrient credit" represents a specific amount of pollution reduction achieved somewhere else within the watershed. This type of nutrient trading helps keep the South River and the Chesapeake Bay Watershed at large from absorbing too many nutrients. Click here to learn more about nutrient trading in the Chesapeake Bay Watershed.

Shiloh Baptist Church parking lot

Did You Know?

- When something enters a storm drain, it is not treated before draining to the South River.
- A city block creates five times more runoff than a woodland. This is because rain does not infiltrate impervious surfaces, such as roads and roofs.
- Yard clippings and debris that flow to waterways contribute excess nutrients that can cause algal blooms and fish kills.

Take a Walk Back

Did you know there was a time when rivers in America were so polluted that they caught fire? In 1969, an oil and sewage fire in Ohio's Cuyahoga River (the 12th such fire on the river) gained national attention and ultimately prompted Congress to establish the Clean Water Act. The Act provided the structure for regulating pollutant discharges into U.S. waters and developing quality standards for surface water. Since 1972 when it was enacted, the Clean Water Act has reduced soil depletion from agricultural runoff by a billion tons per year, increased water treatment plant coverage from 8 million people to 173 million people, and reduced pollution from factories and city streets (source). The South River itself has rebounded enough for smallmouth bass and other warm-water species to repopulate. Trout stocking, habitat improvements, dam removals, and riparian covers have created a haven for Virginia and out-of-state anglers. These anglers purchase fishing licenses, visit local restaurants, stay overnight in local hotels, and buy fishing gear from small business owners. Clean water has not only improved our quality of life, but it has created revenue for our community.

Connections

The lessons you learn as children can shape your outlook through adulthood. With that in mind, the City of Waynesboro created a Watershed Awareness Program to enlighten students on the everyday impact we all have on the health of the South River Watershed. Last year, the City's Stormwater Program staff delivered three interactive presentations to area fourth graders and used games and an interactive soils map to show sixth graders a watershed and demonstrate how watersheds are affected by surrounding conditions. Go to the Stormwater Program's Webpage to see upcoming events, take a virtual tour of the Wayne Hills Stormwater Detention Pond, and explore more watersheds. To better understand the path of water from your backyard to the river, check out the latest South River Video, "Only Rain Down the Drain," featuring the City's Stormwater Program Manager, Jennifer Allen-Key.

The Current is a publication of the South River Science Team (www.southriversciencteam.org).