

Outreach & Communications

July 24, 2018

South River Science Team Meeting

Updates

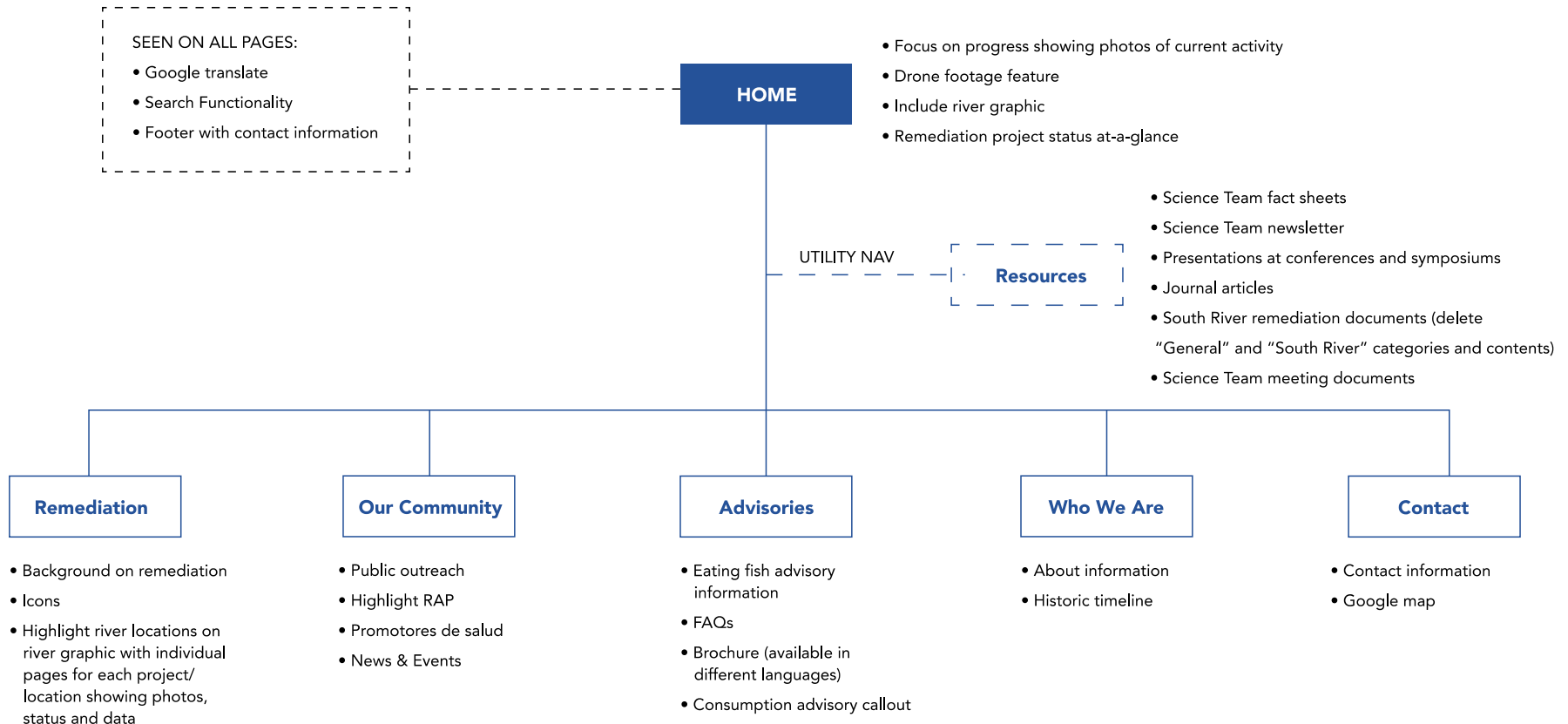
- SRST Website Re-Design
- Interactions with Private Landowners
- Fact Sheet: South River Phase 1 Remediation Progress
- Banner: Remediation and Restoration

Website Re-Design

Information Architecture



South River Science Team
Website Information Architecture
July 2018





THE SOUTH RIVER SCIENCE TEAM

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SOUTH RIVER REMEDIATION PROGRESS

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PILOT BANK

CONSTITUTION PARK

STATUS: Complete

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CITY SHOPS



ALLIED READY MIX



SHILOH BAPTIST CHURCH



NORTH PARK



600 W. Main Street
Wynantsburg, VA 22090
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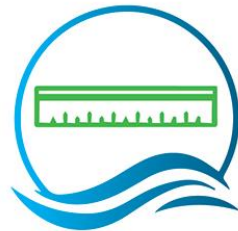
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[Resources](#)[Translate](#)

south river SCIENCE TEAM

THE SOUTH RIVER SCIENCE TEAM

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CITY SHOPS



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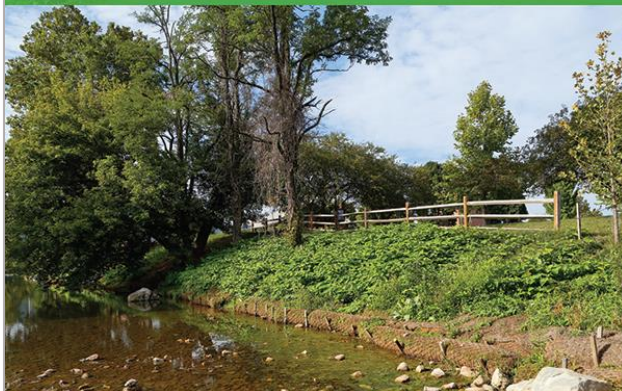




PILOT BANK

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LEARN MORE →



CITY SHOPS



ALLIED READY MIX



SHILOH BAPTIST CHURCH



NORTH PARK



508 W. Main Street
Waynesboro, VA 22980
540-949-5361

RESOURCES

Presentations
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Meeting Documents
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SUBMIT

*Required

[Remediation](#)[Our Community](#)[Advisories](#)[Who We Are](#)[Contact](#)[Public Outreach](#)[Remediation Advisory Panel](#)[Promotores de salud](#)[News & Events](#)

OUR COMMUNITY

Waynesboro is in the Shenandoah Valley less than five miles away from the Blue Ridge Parkway, Skyline Drive, and the Appalachian Trail. The location and nature of the South River as a recreational hub and ecological resource enhances our city's appeal.

The 2½-mile stretch of river that meanders through Waynesboro and past Constitution Park is a popular trout fishing area. The South River also supports plants, fish, birds, and other animals in its watershed. All of these, combined with soil and water, interact to create a dynamic ecosystem.

Apart from consuming fish caught from the river, the South River is safe to fish, boat, swim, or float. The South River Science Team wants to make sure that it remains a vital ecosystem for future generations.

PUBLIC OUTREACH

The South River Science Team participates in and supports local events to update community members on the team's progress and help communicate the fish consumption advisories to the users of the South River and South Fork Shenandoah River.

Science Team members provide information and answer questions about the team's activities at large, annual events like Riverfest as well as in smaller settings like high school classrooms. The



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REMEDIATION ADVISORY PANEL

In February 2015, a Remediation Advisory Panel (RAP) was established as a means through which members of community and stakeholder groups can discuss their viewpoints as remediation progresses.

Thirteen people representing diverse interests and the community at large serve on the panel and meet to ensure routine and consistent communication between all parties. RAP members are affiliated with organizations such as:



CENTER *for* COLDWATERS RESTORATION

CENTER for COLDWATERS RESTORATION



Promotores de Salud



DEPARTMENT OF
**GAME & INLAND
FISHERIES**
CONSERVE. CONNECT. PROTECT.

PROMOTORES DE SALUD

The Promotores de Salud Program trains Hispanic women and men to be lay health resources (Promotores) in their community.

Since 2011, the South River Science Team has been collaborating with members of the Promotores de Salud as part of our effort to educate communities along the South River and South Fork Shenandoah River about the mercury fish consumption advisories. [Click here to read our charter.](#)

In 2014, the program shifted its focus to 14- to 18-year olds within the Latino community. The new program, Promotores Jr!, focuses on the mercury fish consumption advisories, as well as physical health, mental health, sexual health, and health careers.

The Promotores de Salud Program is part of the Blue Ridge Area Health Education Center at James Madison University.



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[LEARN MORE](#)



WHAT'S HAPPENING

In order to more effectively communicate the fish consumption advisories to the users of the South River and South Fork Shenandoah River, members of the South River Science Team participate in and support local community events.

Check out some of our featured events!

[VIEW ALL EVENTS](#)



EVENT TITLE

JUNE 1, 2018 | 3:00 P.M.

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EVENT TITLE

JULY 4, 2018 | 5:00 P.M.

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Interactions with Private Landowners



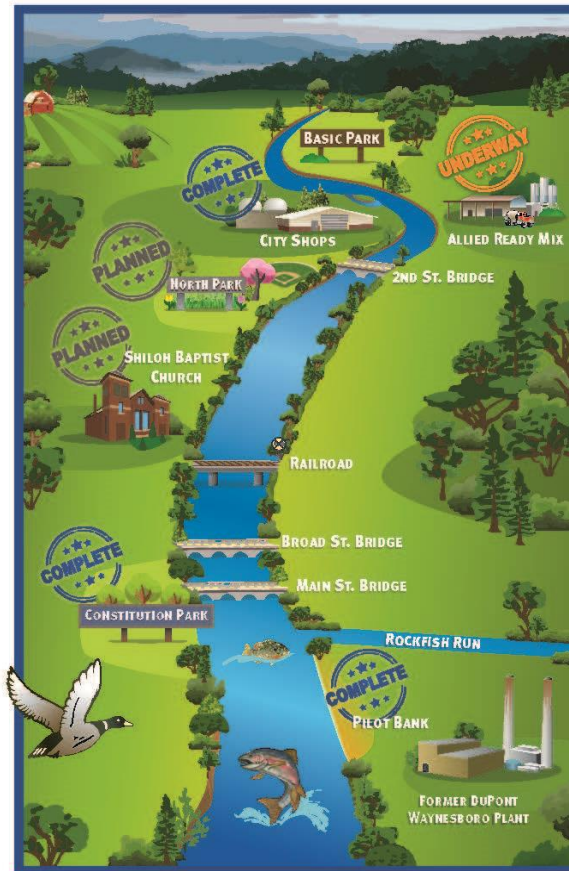
Fact Sheet

South River Phase 1 Remediation Progress

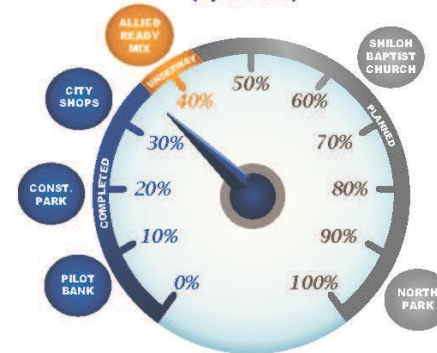


From 1929 to 1950, mercury was used as a catalyst in the production of Rayon fiber at the former DuPont facility in Waynesboro. Although more than 60 years have passed since mercury was last used, later investigation discovered residual mercury in soils on the plant site. Since that time, the Virginia Department of Environmental Quality and others have been monitoring mercury in fish, water, sediment, and soil in and along the South River and South Fork Shenandoah River. Though DuPont no longer operates the Waynesboro plant, the company continues its involvement in Waynesboro today, working to understand and remediate the residual mercury on and around its former site with the ultimate goal of reducing mercury levels in fish.

Through its work with the South River Science Team, DuPont learned that some of the mercury released long ago bound to soil particles in the river and then ended up being deposited on riverbanks along the South River. Today, when this riverbank soil erodes, mercury goes back into the river with it.



Estimated Percent of Mercury Input Reduced to Date
(April 2018)



It is estimated that the erosion of six South River riverbanks contributes appreciable mercury to the river each year. The goal of the remediation work is to stop the erosion of these riverbanks and, in doing so, reduce the mercury input into the South River by 90%.

DuPont's remediation approach focuses on reducing the amount of mercury going into the river from riverbanks with the goal of reducing mercury in fish tissue. This approach was tested on a riverbank, called the Pilot Bank, in September 2009, and results showed the approach was successful in controlling mercury releases to the river. In October 2016, DuPont began remediating and restoring additional riverbanks with elevated soil mercury levels (see map to left). This is the first phase of work, which focuses on specific riverbanks within two miles downstream of DuPont's former plant.



DuPont is collecting samples before, during, and after remediation to see if remediation goals are being met. Depending on these results, additional phases of remediation may be performed downstream of Waynesboro. Here are some highlights of progress and efforts to date:



Nearly **2,000 feet** of South River banks have been remediated to prevent erosion. The new riverbanks have been replanted and restored to enhance riverside habitat.



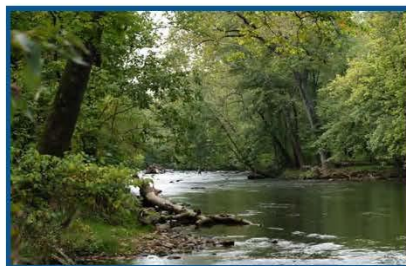
Steps providing **river access** have been constructed at Constitution Park, and other recreational features that improve the riverside experience will be created as part of future work.



Construction crews have logged over **12,000 hours** to date on this work.



5,000 monitoring samples have been collected to date to evaluate the success of the remediation.



Contacts:

- >> **Kurt Kochan**, Virginia Department of Environmental Quality, 703.583.3825, kurt.kochan@deq.virginia.gov
- >> **Mike Liberati**, DuPont, 302.598.9936, michael.r.liberati@dupont.com
- >> **Dave Hirschman**, Hirschman Water & Environment, SRST Facilitator, 434.409.0993, dave@hirschmanwater.com

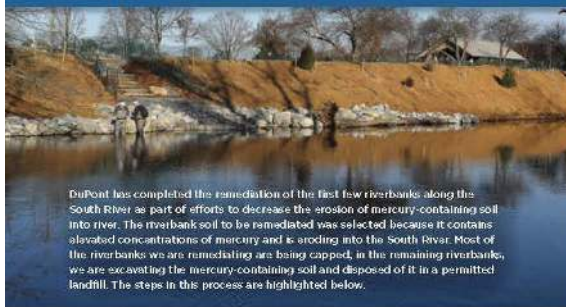
www.southriverscienceteam.org



To be added to our distribution list, contact Kathy Adams at 302.999.3856 or kathleen.o.adams@dupont.com

Banner





DuPont has completed the remediation of the first few riverbanks along the South River as part of efforts to decrease the erosion of mercury-containing soil into river. The riverbank soil to be remediated was selected because it contains elevated concentrations of mercury and is eroding into the South River. Most of the riverbanks we are remediating are being capped, in the remaining riverbanks, we are excavating the mercury-containing soil and disposed of it in a permitted landfill. The steps in this process are highlighted below.

1

Site access is controlled with temporary fencing. A silt retaining curtain is installed to prevent sediment from eroding the river and vegetation is removed. Healthy trees are left in place.



2

Large fabric bags called "super sacks" are filled with clean sand and used to create a temporary dam around the planned excavation area. The area behind the dam is pumped dry.



3

Sections of riverbank containing the highest mercury levels are excavated. The excavated soil is transported and disposed of at a permitted landfill.



4

The riverbanks are reinforced using 12-inch deep, honeycomb-shaped grid material called a "geocell." The geocell openings are filled with a mixture of sand and biochar, a charcoal-like material that can adsorb mercury and keep it in place.

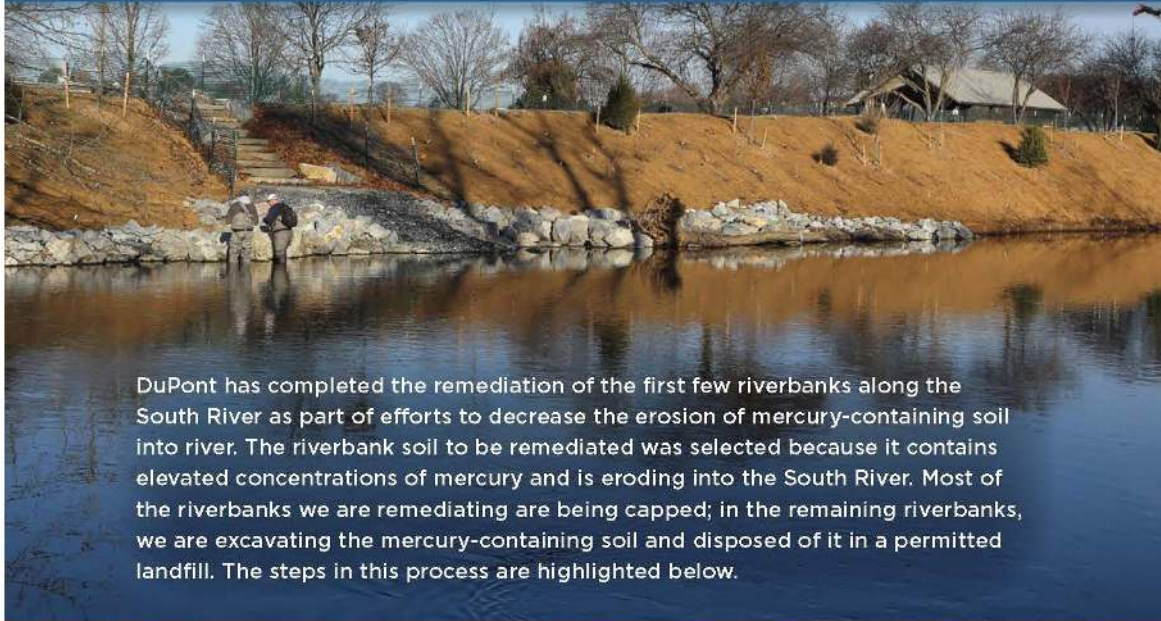


5

Topsoil and an erosion-control blanket are placed over the geocell. Hundreds of native shrubs and trees are planted, once mature, the plantings will enhance the habitat and stabilize the riverbank. At some riverbanks, we are improving the river habitat with salvaged trees and building river access points and greenway trails.



South River Phase I Riverbank Remediation



DuPont has completed the remediation of the first few riverbanks along the South River as part of efforts to decrease the erosion of mercury-containing soil into river. The riverbank soil to be remediated was selected because it contains elevated concentrations of mercury and is eroding into the South River. Most of the riverbanks we are remediating are being capped; in the remaining riverbanks, we are excavating the mercury-containing soil and disposed of it in a permitted landfill. The steps in this process are highlighted below.

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Questions?