



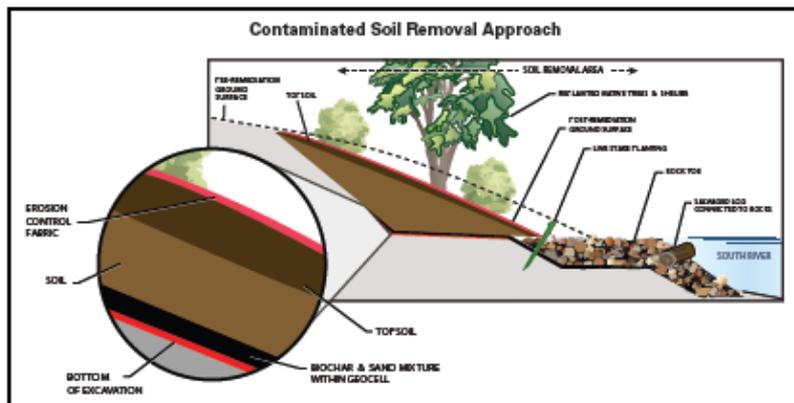
**Outreach  
Learnings  
What's Next**

**SRST Meeting  
4/19/17**

# Outreach

- Promotores programs continue
- Radio, newspaper, blogs coverage
- Wm Perry Elementary School - April 13
  - ~100 3<sup>rd</sup> Graders at Ridgeview Park
- Riverfest - April 29
- ICMGP - August 16
- SETAC 2017
- RAP planning
- Newsletter, Factsheet #8

## Phase 1 Riverbank Remediation and Restoration



At riverbanks with large, eroding areas of contaminated soil, some of the impacted soil will be removed, the riverbank will be regraded to a natural slope, and native trees and shrubs will be replanted on the riverbank to help prevent erosion.

The ultimate goal of all South River Science Team (SRST) efforts is to reduce mercury levels in South River fish. The South River Phase 1 riverbank remediation and restoration design includes soil removal and capping approaches to help achieve this goal. The initial phase of this work was completed in February 2017 at the riverbank at Constitution Park, upstream of the Main Street bridge in Waynesboro. The next phase of work will concentrate on riverbanks downstream within the first two miles of the South River.

The two approaches were designed to remediate eroding riverbanks that contain elevated soil mercury levels. In the removal approach, the contaminated soil is excavated (see graphic above); in the capping approach (see graphic on reverse), the contaminated soil remains and a cap is placed over it. Both approaches include a mixture of biochar and sand within a geocell. Biochar is a charcoal-like material that has the ability to absorb mercury and bind it into place. A geocell is a perforated plastic, honeycomb grid that is used to stabilize the soil and control erosion. Which approach is selected and used depends on the mercury levels in the riverbank and the amount of erosion. Regardless of the approach, preserving valuable trees and habitat is a priority and care will be taken to minimize the overall impact of construction.

The work is being completed in phases using enhanced adaptive management. This technique combines remediation work with monitoring to determine if the remedy is achieving the desired goal. Monitoring data are input into models to evaluate which aspects of the river system are improving and which remain unchanged. This information is used to provide a basis for adjusting the remediation approach to improve effectiveness.

Throughout the work, the technical and outreach activities of the South River Science Team will continue to contribute to these efforts. Public information sessions will be held and information will continue to be posted on the South River Science Team website ([www.southernriverstecollege.org](http://www.southernriverstecollege.org)).

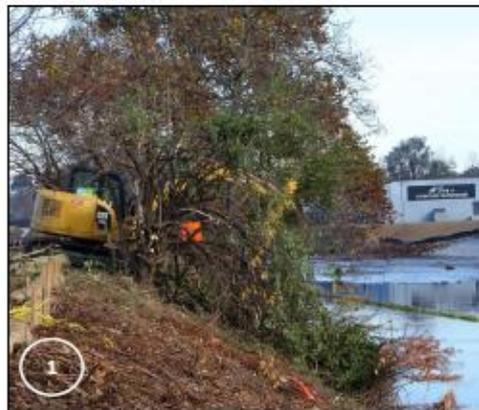
In addition, a Remediation Advisory Panel has been established as a means through which members of community and stakeholder groups can discuss their viewpoints as the project progresses.



# south river SCIENCE TEAM UPDATE

Keeping you up to date on South River Science Team activities • First Half 2017 • Printed on Recycled Paper

## Constitution Park Riverbank Remediation Complete



**1** Site access was controlled with temporary fencing. A silt-retaining curtain was installed in the river, and vegetation was removed. Healthy trees were left in place.

**2** Heavy fabric bags called super sacks were filled with clean soil and used to create a temporary dam around the planned excavation area. The area behind the dam was pumped dry.

**3** An approximately 75-foot-long section of riverbank with the highest mercury levels was excavated. The excavated soil was transported and disposed of at a permitted landfill.

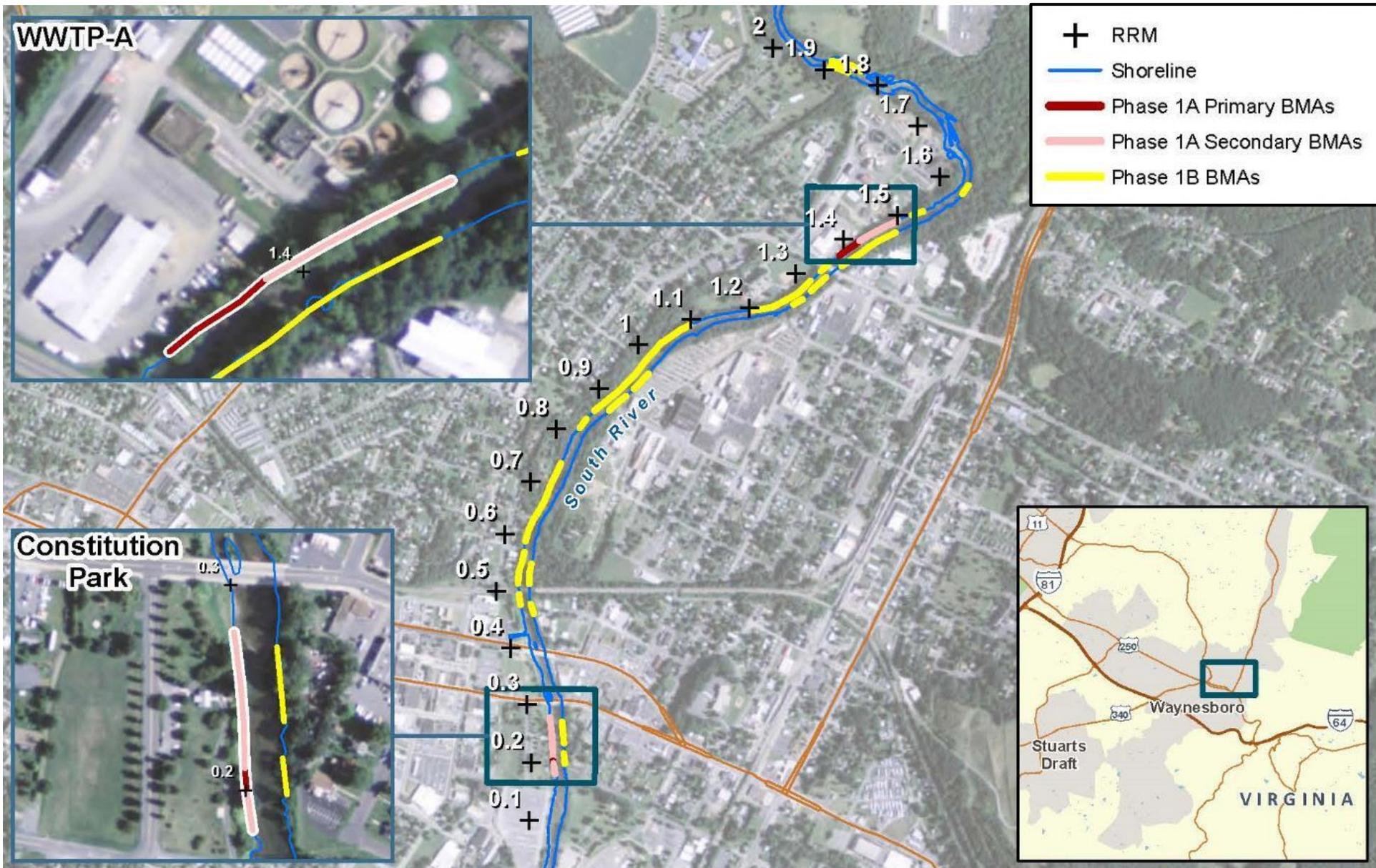


The remediation of the riverbank at Constitution Park was completed in February 2017. This riverbank was identified to be remediated for two reasons: the soil contains elevated concentrations of mercury, and the soil is eroding into the South River. The riverbanks at Constitution Park are the first of several to be remediated with the objective of significantly decreasing the erosion of mercury into river. The majority of the identified riverbanks will be capped. The soil in areas with the highest levels of mercury will be excavated and disposed of properly prior to capping. This newsletter highlights the activities that were involved in completing the remediation at Constitution Park.

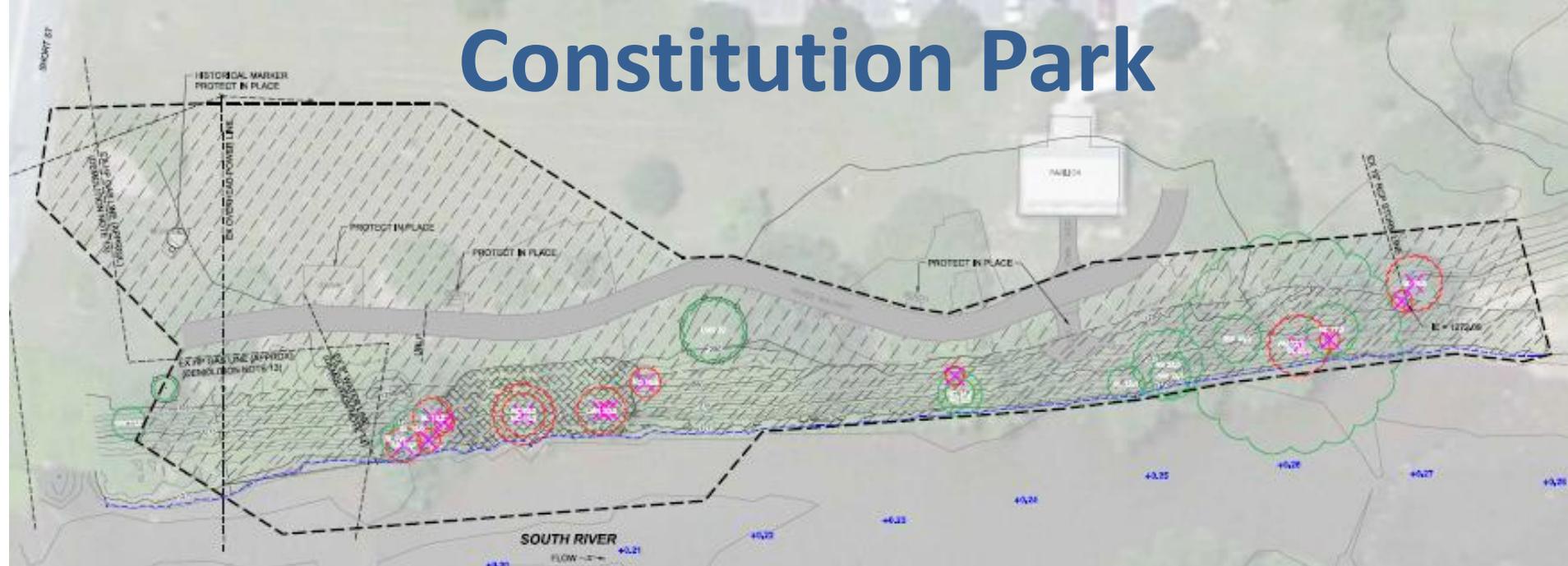
For more information about this project, contact Mike Liberati (DuPont) at (302) 598-9936 or [michael.r.liberati@dupont.com](mailto:michael.r.liberati@dupont.com).

To be added or deleted from our distribution list or to receive the newsletter electronically, contact Kathy Adams at 302.999.3856 or [kathleen.a.adams@dupont.com](mailto:kathleen.a.adams@dupont.com).

# River Miles 0 to 2: Bank Management Areas



# Constitution Park



Characteristic	Primary BMA	Secondary BMA
Length	70 ft	440 ft
Bank slopes >60°	0	0
Bank height range	10 – 11 ft	6 – 12 ft
Current THg Loading Estimate	0.9 kg/yr	1.1 kg/yr
Projected THg Loading Reduction	~90%	



# Clearing/Grubbing

# Coffer Dam Installation



# Excavation of Impacted Soil





# Primary Geocell Placement

# Subgrade Backfill





# Stone Toe and Habitat Enhancements

# Final Primary Grading



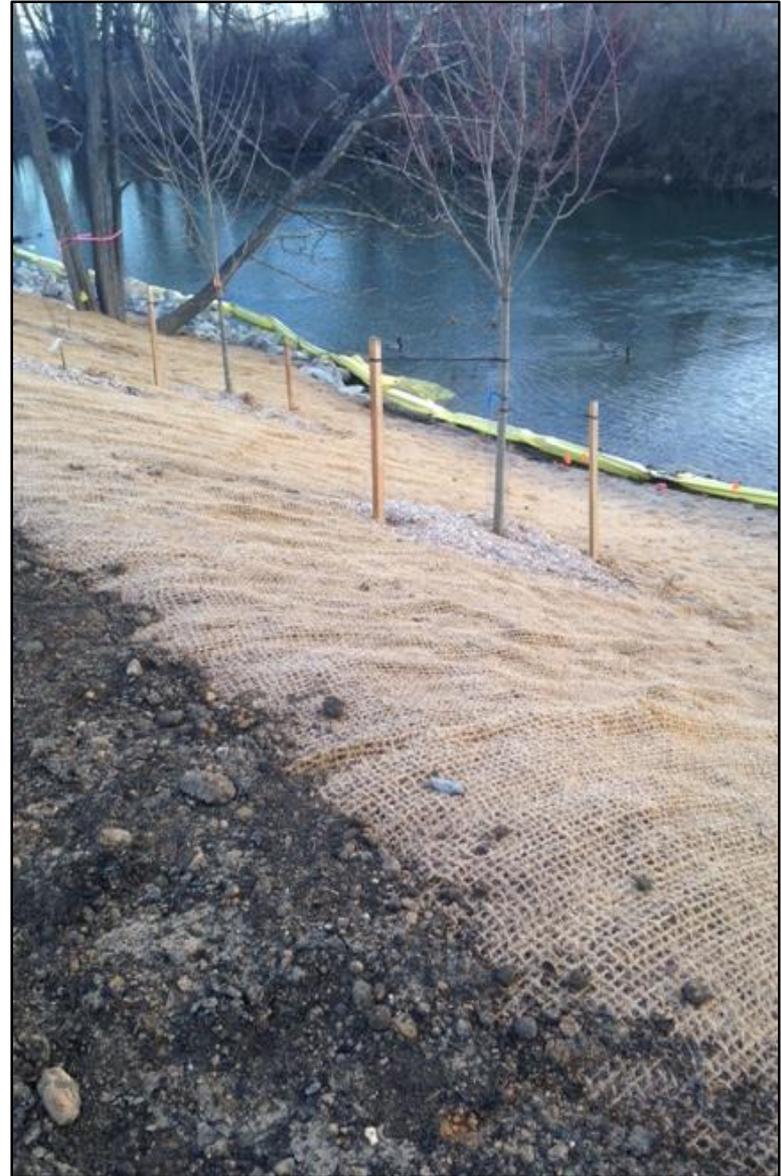


# Secondary Geocell/ Coir Log Placement

# Site Restoration



# Site Restoration and Planting



# Learnings for Constitution Park

- Under-estimated time required to:
  - interface with stakeholders
  - complete design reviews
  - obtain easement and permits
- Seek flexible solutions with inspectors
- Few constructability issues, good design
- Knotweed control is going to be a challenge
- The public is interested, seem to be pleased

# What's Next?

- Completed 510' out of 5,670' in first two miles
  - 75% City-owned (~4,240')
  - 25% Privately-owned (~1,430')
- UECA and Maintenance Agreement
- Commence City Shops riverbank this year
- Design/Permitting queue for other locations
- Outreach to landowners
- Monitoring to determine effectiveness