

Pre-Remedy Monitoring Update

Former DuPont Waynesboro Site, Virginia
Area of Concern (AOC) 4

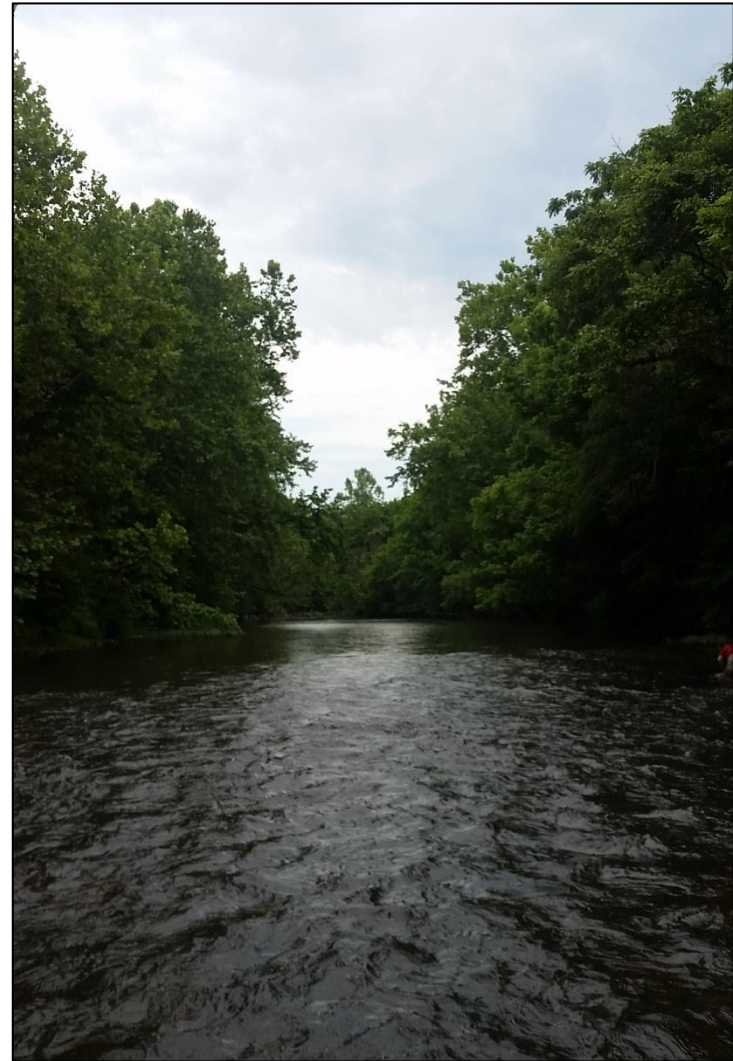


July 26, 2016

AECOM

Agenda

- Spring/Summer Data Collections
- Long-term Monitoring (LTM)
 - Mallard Data Review
 - Benthic Community Overview
- Short-term Monitoring (STM)
- Reporting Schedule
- Field Schedule- Fall 2016



LTM- Mallard Ducks

- Objective
 - Assessment of potential human exposure
- Approach
 - March 2016
 - 13 locations (1 background, 12 study)
 - Breast tissue analyzed for THg and MeHg (EPA 1631/1630)



Photo: USFWS; <http://www.werc.usgs.gov/>

Spring/Summer Data Collections

– Approximately 1,600 safe work hours completed year to date!

Long-term Monitoring

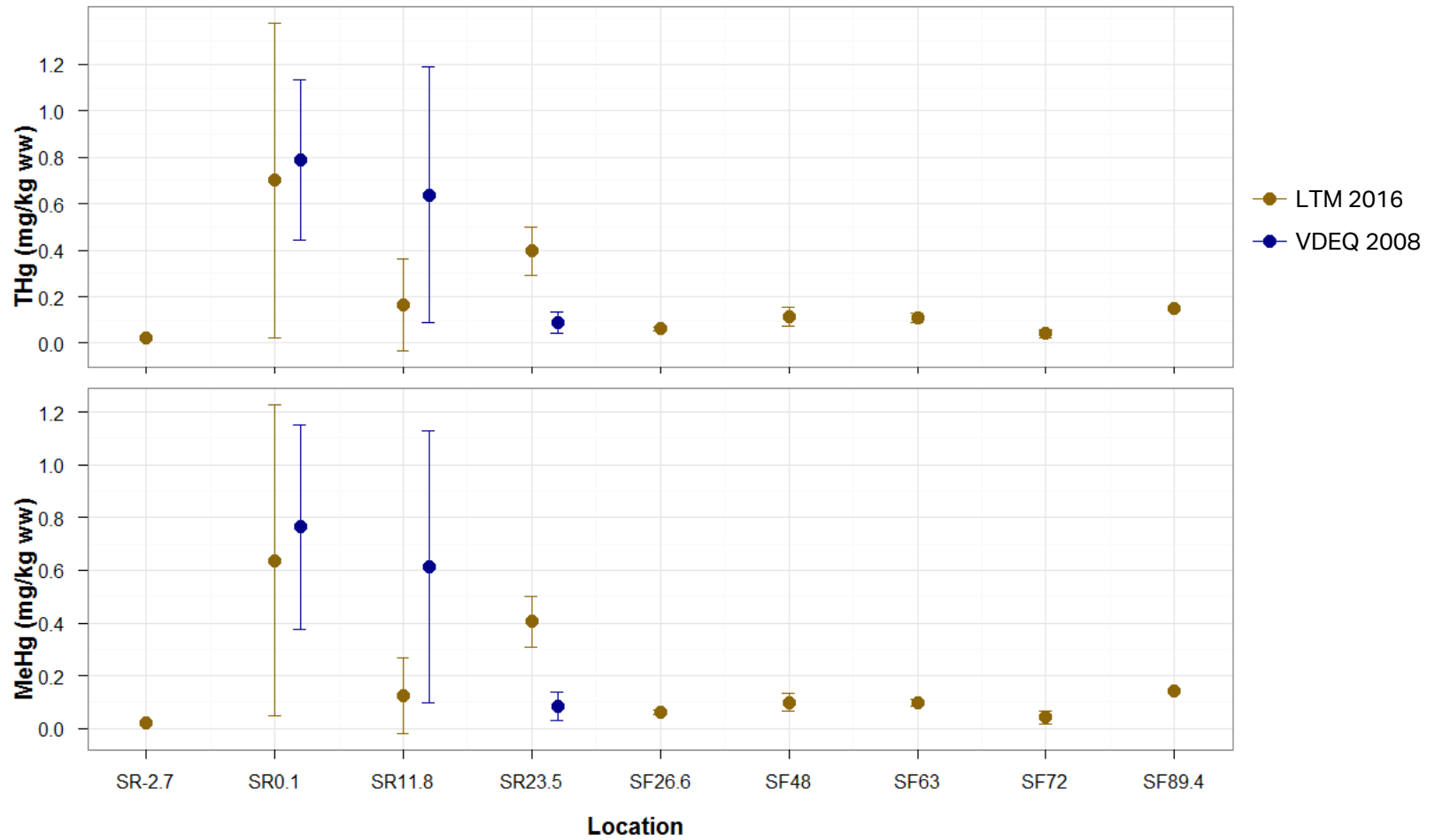
- Fish tissue
- Snapping turtles
- Mallard ducks
- Carolina wren
- Earthworms/Spiders
- Aquatic Eco

Short-term Monitoring

- Bulk sediment
- Pore water
- Periphyton
- Transplanted clams
- Habitat metrics



LTM- Mallard Ducks

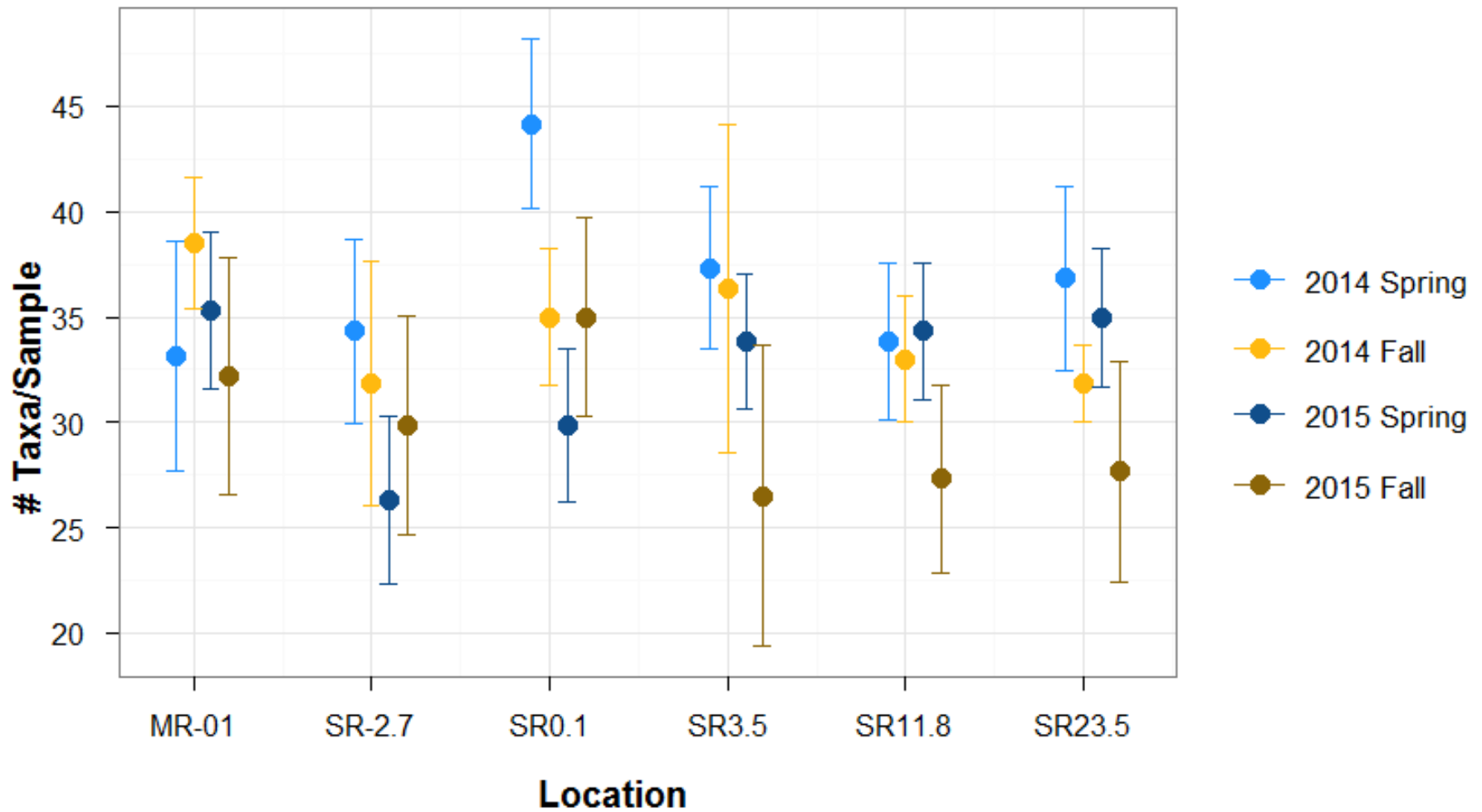


LTM- Benthic Community

- Benthic community samples collected with a Surber sampler
- 6 replicate samples collected per location in June and October
- 300 organism sub-count; Species-level ID
- Standard benthic metrics calculated



LTM- Benthic Community



LTM- Benthic Community

- Archived benthic voucher collections available for academic use
- Archival of annual LTM /STM synoptic reference collections

Study	Year	Archived Sample Material Description	Status
Field Microcosm Study	2010	Vouchers	Available for Academic Use
Pond Amendment Pilot	2011	Vouchers	
Benthic Colonization Study	2011	Vouchers	
Dam Removal (Baseline)	2011	Vouchers	
Post-Dam Removal	2012	Vouchers	
LTM	2014	Vouchers	Archive
STM	2016 - ongoing	Annual Synoptic Reference Collections	
LTM			

- Annual summary of accepted taxonomic changes to be prepared by certified taxonomic laboratory (EcoAnalysts, Inc.)

Short-term Monitoring

- Sampled same locations as 2015 (STM-01, STM-03, STM-05)
- Spring data collection complete
 - Periphyton
 - Transplanted clams
 - Bulk sediment
 - Pore water
 - Habitat metrics
- Data pending



Reporting Schedule

– Short-term Monitoring

- 2015 Annual Report undergoing revision – final document to be posted July/August
- STM will be reported annually

– Long-term Monitoring

- First summary report to be compiled following 2016 data collections
- Post-Remedy- Every three years...



Fall 2016 Field Summary

– STM

- Periphyton
- Transplanted clams
- Bulk sediment
- Pore water
- Benthic Community
- Habitat metrics



– LTM

- Bass (Adult and YOY)
- Periphyton
- Transplanted clams
- Interstitial sediment
- Mayflies
- Benthic Community
- Habitat metrics



Thank You

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