

GE Housatonic Update Meeting

Pittsfield, MA

March 27, 2024

Presentation Outline

- EPA Introductions
- History of the GE-Pittsfield/Housatonic River Site.
- Remediation of the first two miles of the Housatonic River.
- "Rest Of River" process and remedy selection.
- Reach 5A (5-Mile Stretch of the River in Pittsfield).

Why is EPA remediating the River and Floodplain?

Current Risks

- Risk from eating contaminated fish and waterfowl
- Risk from prolonged direct contact to soil certain areas in the floodplain
- Risk to ecological receptors such as mink, otter, amphibians, osprey and benthic invertebrates
- Continued downstream transport of PCBs all the way to Long Island Sound

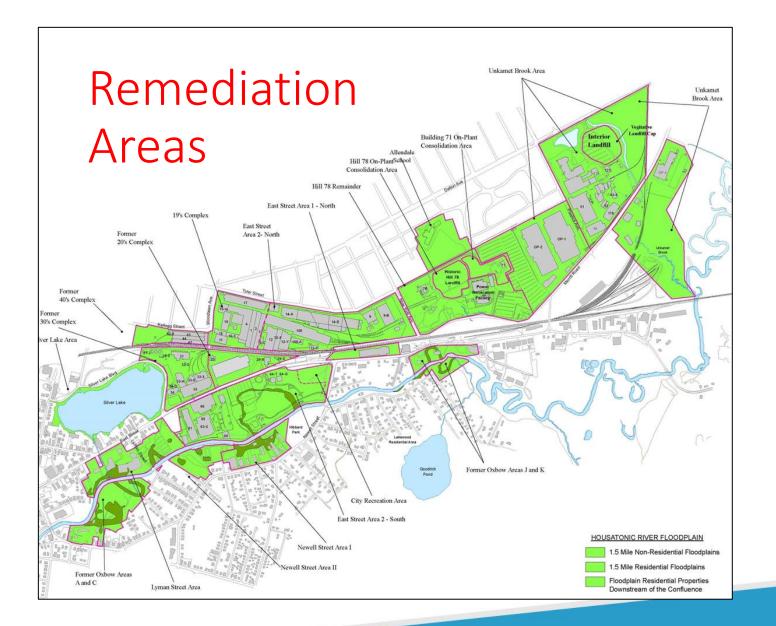
Not significant risks

- Fishing, wading in the River, and swimming
- Inhalation of PCBs
- Living near the River and Floodplain

2000 Consent Decree

- Signed by EPA, MA, CT, GE, City of Pittsfield, and Pittsfield Development Authority (PEDA).
- 27 cleanup actions with prescribed remedies Process for Rest of River Remedy Selection.
- \$45 Economic Development package for City.
- Natural Resource Damage Settlement (\$15.6M cash, \$6M in work).
- Set up Process for Rest of River Remedy Selection.

- 20 Cleanups
- 5 Groundwater Actions
- Upper ½-Mile River
 Cleanup
- 1.5 Mile Reach River Cleanup



Active Oil Seeps-1999

First ½-Mile of Housatonic River

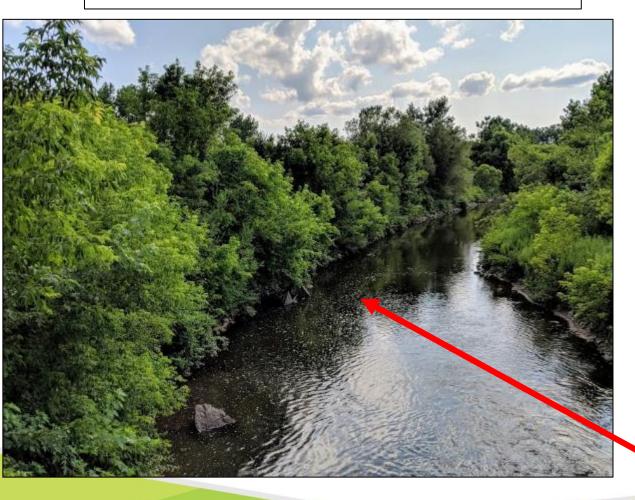








1.5–Mile Sheetpile Diversion Method





Restored bank, looking downstream from Lyman Street

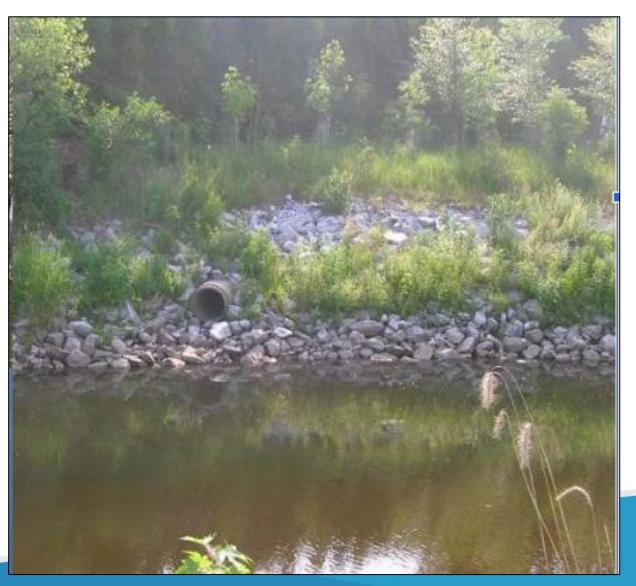


1.5 Mile Reach - Pump Bypass



1.5 Mile – Restoration of Eroding Banks





Restored 1.5-mile reach at the Confluence





Upper ½-Mile Reach Pre- vs. Post-Remediation PCB Sampling Results (mg/kg)

Depth (inches)	Pre- Remediation (pre-2002)	Post Remediation (2022)	% Reduction 2022 vs. Pre-2002
0-6 Avg.	112	0.14	99.9%
0-12 Avg.	85	0.14*	99.8%
12-24 Avg.	60	N/A	N/A
0-24 Max.	9,411	2.7	99.9%

^{*}Depth interval include samples with sample depths up to 25 inches

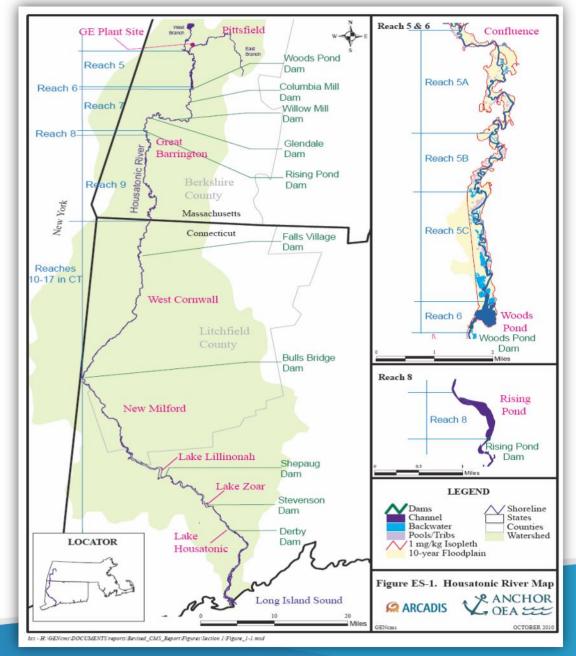
1. 5 Mile Reach
Pre- vs. Post-Remediation PCB Sampling Results (mg/kg)

Depth (inches)	Pre- Remediation (pre-2002)	Post Remediation (2022)	% Reduction 2022 vs. Pre-2002
0-6 Avg.	11	0.11	99.0%
0-12 Avg.	21	0.14*	99.3%
12-24 Avg.	60	N/A	N/A
0-24 Max.	8,635	1.32	99.9%

^{*}Depth interval include samples with sample depths up to 18 inches

Rest of River

- 135 Mile Stretch from Pittsfield to Long Island Sound
- Subject of River Modeling, Ecological and Human Health Risk Assessments, and 5 Peer Reviews



Mediated Settlement Agreement - 2020

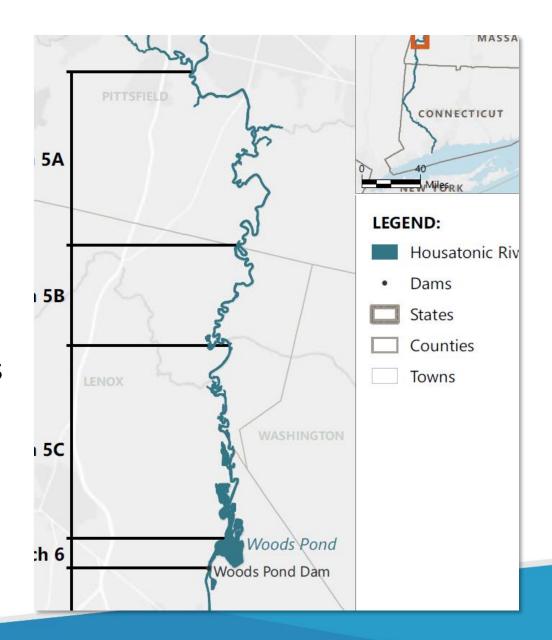
- Eight of Nine Mediation Parties Settled including: EPA,
 GE, Pittsfield, BEAT and Mass Audubon
- Hybrid Disposal Approach
- Focus on Innovative PCB Treatment Technologies
- Economic Development for Pittsfield--\$8M plus land and improvements
- Enhanced Coordination w/Stakeholders & Municipalities

Summary of 2020 Remedy

- Removal of over 1,000,000 cubic yards of contaminated sediment and floodplain soils
- 89% Reduction of downstream transport of PCBs
- Upland Disposal Facility located near Woods Pond & offsite disposal
- Removal of Eagle Mill & Columbia Mill Dams
- Estimated cost of \$576 million & approx. 13 years to complete once construction begins

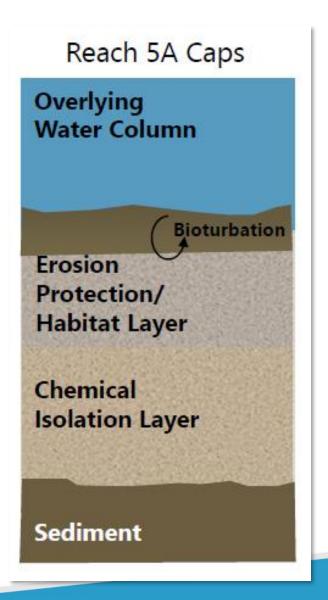
Overview of Reach 5A

- Extends from confluence to Pittsfield wastewater treatment plant.
- Includes river channel, banks, backwaters, and floodplain.
- River channel approximately 5 miles in length.
- 325 acres of floodplain.



River Sediment

- Entire channel to be removed and replaced by an engineered cap.
- Process
 - Cap design and material selection.
 - Dredging of contaminated sediments.
 - Placement of cap.



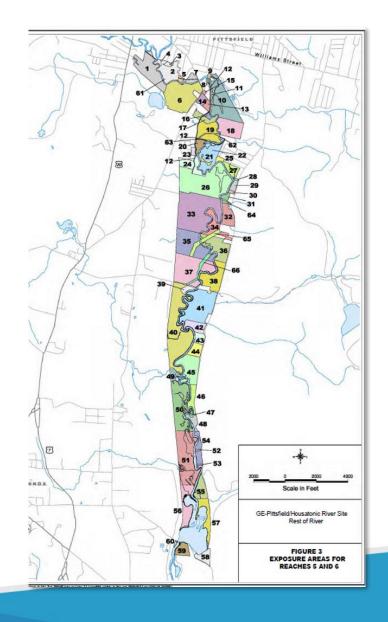
Backwaters

- Areas of water located adjacent to river channel.
- Dredging, backfilling, and capping.



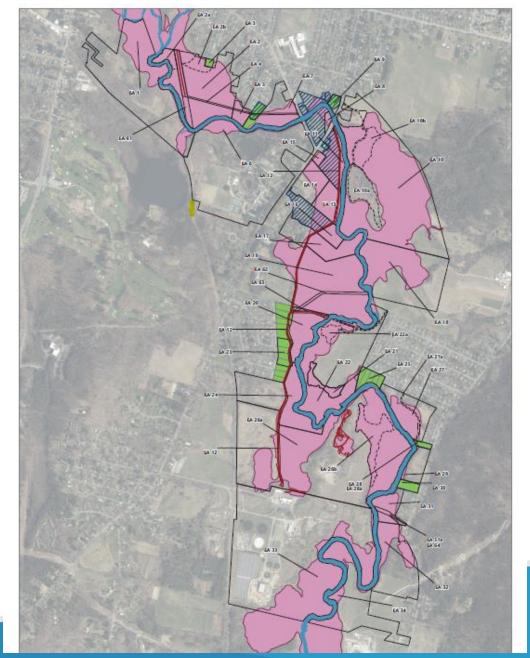
Floodplains (Non-Residential)

- Different cleanup standards for different Exposure Areas (EA). 32 non-residential EAs in Reach 5A.
- Protections for critical habitats.
- Remove contaminated soils to achieve standard in each EA.
- Excavation and backfill of ~10,000 cy of soil.



Residential Floodplain Properties

- 13 properties in Reach 5A require remediation.
- Cleanup will achieve residential standards.
- Property owners have been notified.
- GE will have to negotiate access agreements prior to remediation.



Vernal Pools

- Seasonal pools of water providing key habitat for amphibians.
- Pilot study to test amendment vs. excavation approach.
- 48 vernal pools require remediation in Reach 5A.



Estimated Reach 5A Schedule

- Conditional Approval of Conceptual Work Plan Spring 2024.
- Additional data collection throughout 2024.
- Final Work Plan (plus supporting documents) submitted in 2025.
- Revised Final Plan and other required pre-construction documents submitted throughout 2025.
- Construction beginning in 2026/2027 and estimated to last five years.

Management of the Remediation, Coordination and Outreach

- GE will implement the remediation.
- EPA will monitor and oversee all aspects of the remediation:
 - On-site field inspectors throughout activities.
 - Collection of independent samples as a quality control measures.
 - Ensure GE meets all requirements.

Management of the Remediation, Coordination and Outreach

- EPA will coordinate closely with the Cities and Towns.
- Periodic updates to the public:
 - EPA web page: https://www.epa.gov/ge-housatonic
 - GE project web page: In development

Transportation of Contaminated Material

- Final quantities to the local Landfill and to off-site facilities will be included in the Final Work Plans.
- Clean backfill will be transported to work areas.
- Trucking of contaminated material <u>prohibited</u> on numerous residential streets:

	Brunswick Street	Shetland Drive	Quirico Drive
	Kenilworth Street	Clydesdale Drive	Joseph Drive
	Warwick Street	Pinto Drive	Eric Drive
	Chester Streets	Palomino Drive	
	Noblehurst Avenue	Anita Drive	
N. N. W.	Revilla Terrace	Lucia Drive	

Transportation of Contaminated Material

- GE submitted first draft of Transportation Plan in October 2023.
- EPA is still reviewing the Plan and anticipates significant revisions, including better evaluation of rail.

The current version of the Plan:

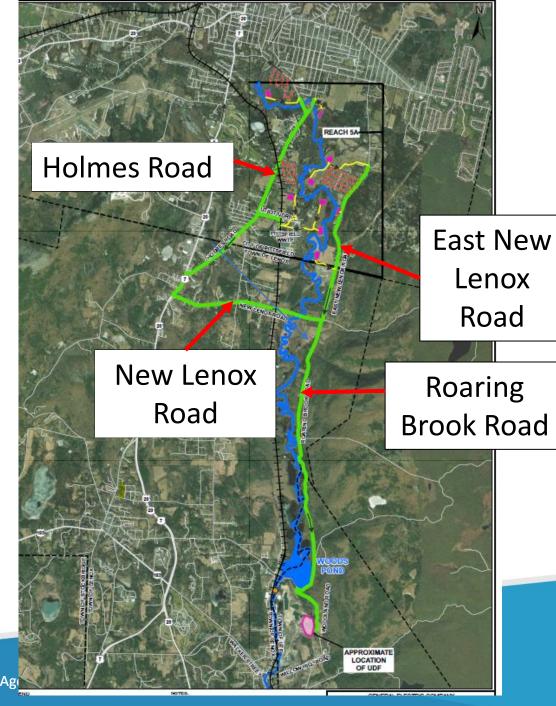
- Assumes transport only by trucks, current estimate is an average of 15 trucks per day to the landfill in Lee.
- Assumes transport only by trucks, current estimate is an average of one truck per day to out of state landfills.

Transportation of Contaminated Material to Landfill near Woods Pond – DRAFT

Two primary routes proposed in DRAFT plan:

- 1. Holmes Road to New Lenox Road to Roaring Brook Road.
- 2. East New Lenox road to Roaring Brook Road.

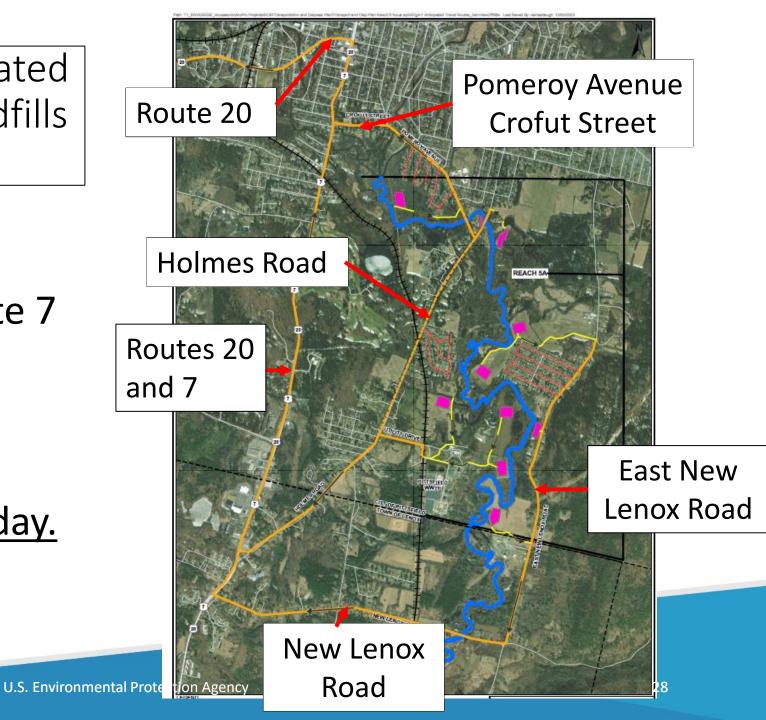
Average of 15 trucks per day; some from Holmes Road route and remainder from East New Lenox Road route.



Transportation of Contaminated Material to out-of-state landfills - DRAFT

Proposed routes are to transport material to Route 7 and 20 and then Route 20 West towards New York.

Average of one truck per day.



Typical truck with secure tarp typically used to transport material locally



- Trucks and rail cars will be tarped or covered and cleaned prior to exiting site onto public roads.
- Material will be kept damp to minimize the potential for airborne PCBs.





Intermodal containers Can go on rail cars or trucks





Road Assessment and Repair

- Assessments of roads will be performed prior to construction start, during construction, and post-construction.
- Assessments will include:
 - Assess and quantify cracks in road pavements.
 - Use of high-resolution cameras.
 - Use of Global Positioning Systems (GPS).
- If road stress or damage is observed and attributed to the Cleanup, GE will perform appropriate maintenance and/or repairs.

Quality of Life Plan

- Provides details regarding air quality, noise, odor and lighting standards.
- Defines notification/action standards and includes example control measures.
- Quantitative air and noise monitoring will be conducted to ensure compliance.
- Public input open until March 29, 2024.

Coordination with City of Pittsfield

- GE will coordinate with local municipalities as necessary to discuss potential issues that might affect communities.
- Will be done by periodic meetings and conference calls on updates on remediation activities and other relevant projectrelated issues.
- Coordination will occur during the planning, design, and construction phases.

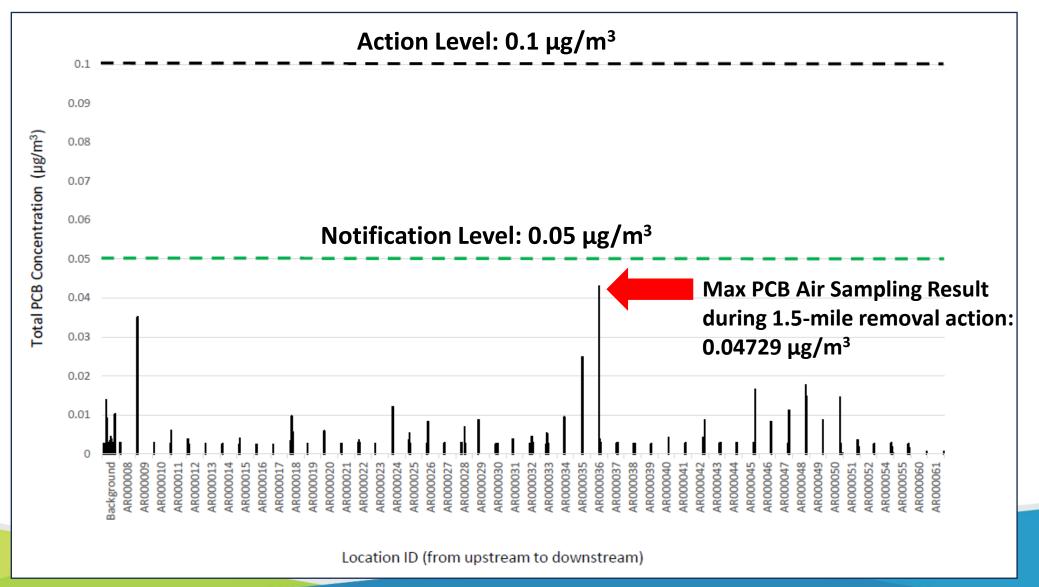
Coordination with the Community

- GE will contact residents and landowners affected by the remediation to explain upcoming work, activities, and schedule.
- GE will establish a:
 - Community liaison
 - Project website
 - Complaint Management System
 - Email distribution list.

Air Monitoring

- GE will conduct air monitoring for PCBs weekly and dust daily when there is active remediation.
- EPA will conduct air monitoring at a select number of GE locations.
- Air monitoring done over the past 20 years by EPA and GE demonstrates that the project can be done safely.

Air Monitoring Results During 1.5 Mile Removal Action



Noise Standard and Monitoring

Type	Numerical Standard (Maximum Hourly Average)
Residential Nighttime (9:00 pm to 7:00 am)	65 dBA
Residential Daytime (7:00 am to 9:00 pm)	80 dBA
Non-Residential (day or night)	80 dBA

- Most work will occur between 7am and 9pm, with some overnight work occurring in certain circumstances.
 - Work occurring overnight will be subject to more strict noise standards.
- Noise Examples
 - 60 dB: having a normal conversation or using an electric toothbrush.
 - 70 dB: operating a washing machine or a dishwasher.
 - 80 dB: noisy restaurant setting or using a vacuum cleaner.

Odor and Light Standards

Odor standard: mitigate presence of project-related odors identified by project workers, GE, or EPA, or via an odor complaint.

Light standard: mitigate project-related lighting impacts based on complaints from nearby receptors.

Standards for both odor and light will be considered not met if frequent, recurrent complaints occur or if nuisance odor/light are not mitigated in a timely manner.

Example Control Measures

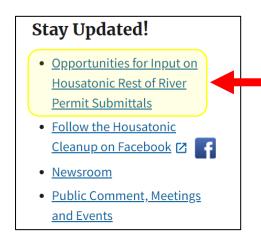
Parameter	Control Measures
Air Quality Standards	 Dust suppression measures (water trucks) Use covers on trucks Prevent tracking of soils onto haul roads
Noise Standards	 Noise shrouds or barriers Avoid construction near homes during early morning/nighttime Control speed equipment is operated Quieter backup alarms on equipment
Odor Standards	 Special handling of removed aquatic vegetation and organic debris Quick disposal of material as quickly as practicable
Light Standards	 Ensure proper positioning of lights, brightness, beam direction, height of light masts Shielding to reduce off-site impacts

Impacts to Recreational Activities

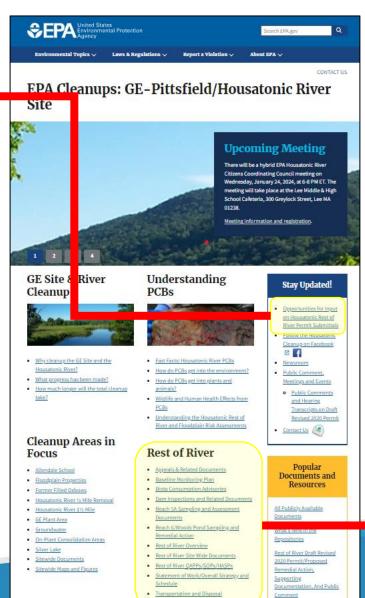
- GE will notify the community of affected recreational areas and uses.
- Restricted areas will be marked with appropriate signage and/or fencing.
- GE will work with the Cities and Towns to facilitate the future enhancement of recreational activities on properties affected by the remediation.

How to Stay Updated and Involved

EPA Web Page: https://www.epa.gov/ge-housatonic



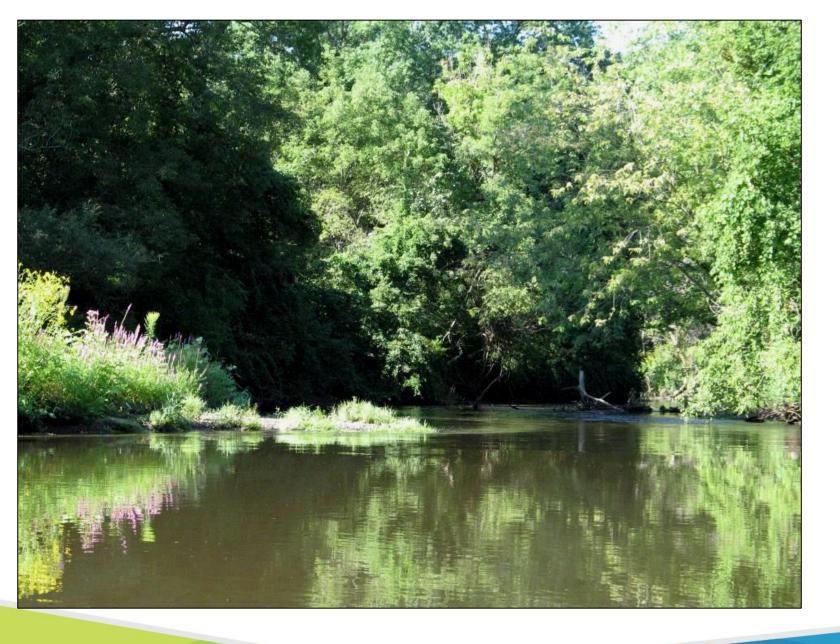
Ashlin Brooks, EPA
Community Involvement
Coordinator:
Brooks.Ashlin@epa.gov



EPA Website & Electronic Repository

Rest of River

- Appeals & Related Documents
- Baseline Monitoring Plan
- Biota Consumption Advisories
- Dam Inspections and Related Documents
- Reach 5A Sampling and Assessment Documents
- Reach 6/Woods Pond Sampling and Remedial Action
- · Rest of River Overview
- Rest of River Site Wide Documents
- Rest of River QAPPs/SOPs/HASPs
- Statement of Work/Overall Strategy and Schedule
- Transportation and Disposal
- <u>Upland Disposal Facility</u>



Questions?