

Tuesday, November 12, 2024

6:00PM - 7:30PM

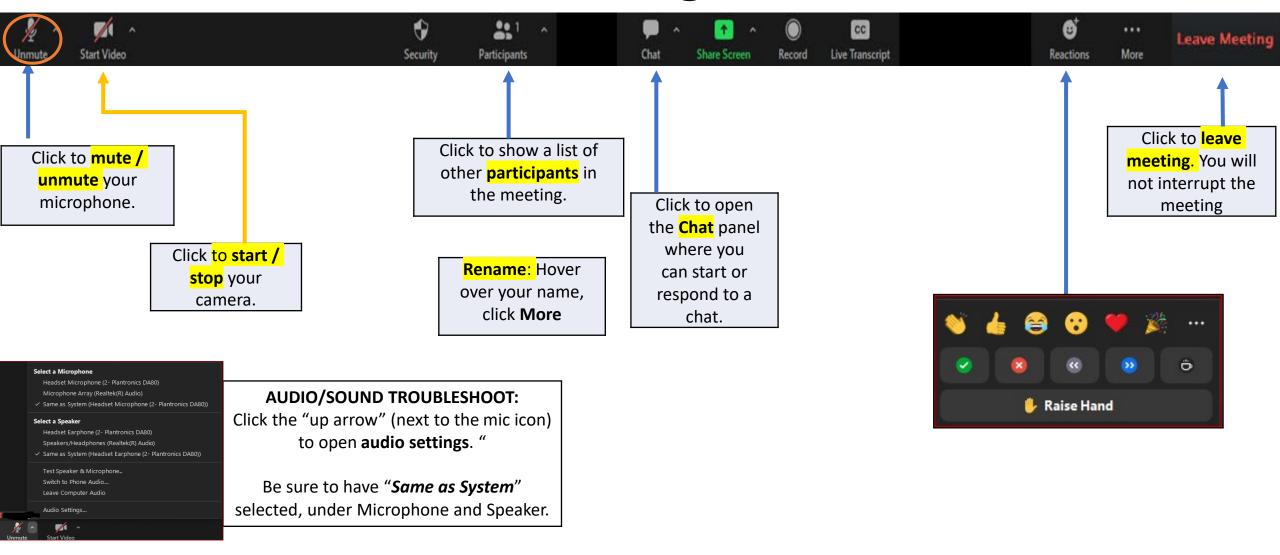
Zoom and In-Person Participation

This is a hybrid public meeting, which means that:

- This meeting will be recorded and added to the <u>Lower Neponset River Superfund Site</u> <u>website</u> (<u>www.epa.gov/neponsetriver</u>).
- Zoom Participants are joining online to follow the presentation. If on Zoom, you can
 add questions throughout the meeting via chat and we'll go through the chat box
 during the Q&A session.
- For those here in-person, you have notecards on your chairs. We will collect cards towards end of meeting for the Q&A session. Please add your name or email to the card so in the event we are unable to get to your question tonight due to time, we can follow-up with you via email.
- For those online, as an FYI in order to capture virtual participation, upon the start and prior to ending of the meeting a poll will appear with the same general questions we have on our in-room sign in sheet for you to fill out. If you miss it or happen to 'X' out of it by accident, it will re-appear at the end.



Zoom Meeting Controls



Calling via phone, dial *6 to Mute/Unmute | Dial *9 to Raise virtual hand

Zoom Meetings Expectations



If you cannot hear, please make sure your computer audio is turned on.



Use the chat and/or 'raise hand' features to type or speak questions to participate.



Be respectful of those who are speaking.



Aim to speak slowly and clearly into the microphone.



If you have technical difficulties type in the chatbox.



Be flexible and understanding! We're all adapting to these times together.



Feel free to get up as needed.



Hold questions until the end of the presentation.

Agenda

- Introductions
- Superfund overview
- What progress was made in 2024?
 - Lewis Chemical Removal Site
 - Lower Neponset River Superfund Site
- What is planned for 2025?
 - Riverside Square Removal Site
 - Lower Neponset River Superfund Site
- Community involvement and resources
- Summary
- Points of contact

Introductions

U.S. Environmental Protection Agency (EPA) Remedial Program

- ZaNetta Purnell, Community Involvement Coordinator (CIC)
- Natalie Burgo, Remedial Project Manager (RPM)
- Tristan Pluta, RPM
- Sam Pham, RPM

EPA Removal Program

- Emma Dixon, On-Scene Coordinator (OSC)
- Liz McCarthy, CIC

EPA Environmental Justice Program

Talia Feldscher, Environmental Justice Specialist

Massachusetts Department of Environmental Protection

Jennifer McWeeney, Project Manager

Agency for Toxic Substances and Disease Registry (ATSDR)

- Tarah Somers, Regional Director
- Chris Mugford, Environmental Health Scientist



Meeting Objectives





WHO IS
PERFORMING THE
WORK?

WHAT PROGRESS HAS BEEN MADE?



WHAT IS PLANNED?



Who Is Performing The Work?



Superfund Program Overview



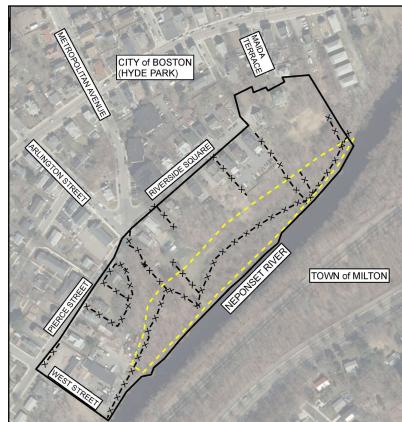


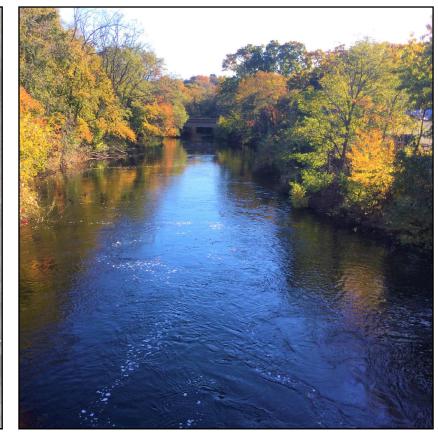
Superfund's Goals

- Protect human health and the environment by cleaning up contaminated sites;
- Make responsible parties pay for cleanup work;
- Involve communities in the Superfund process; and
- Return Superfund sites to productive use.









Three Distinct Sites

- 1. Lewis Chemical Site
- 2. Riverside Square Site
- 3. Lower Neponset River Superfund Site



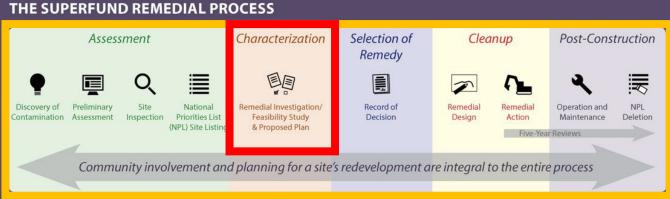
There are Different Superfund Processes Based on the Type of Action

Riverside Square and Lewis Chemical

Lower Neponset River Phase I Area

Lower Neponset River (full 3.7 miles)





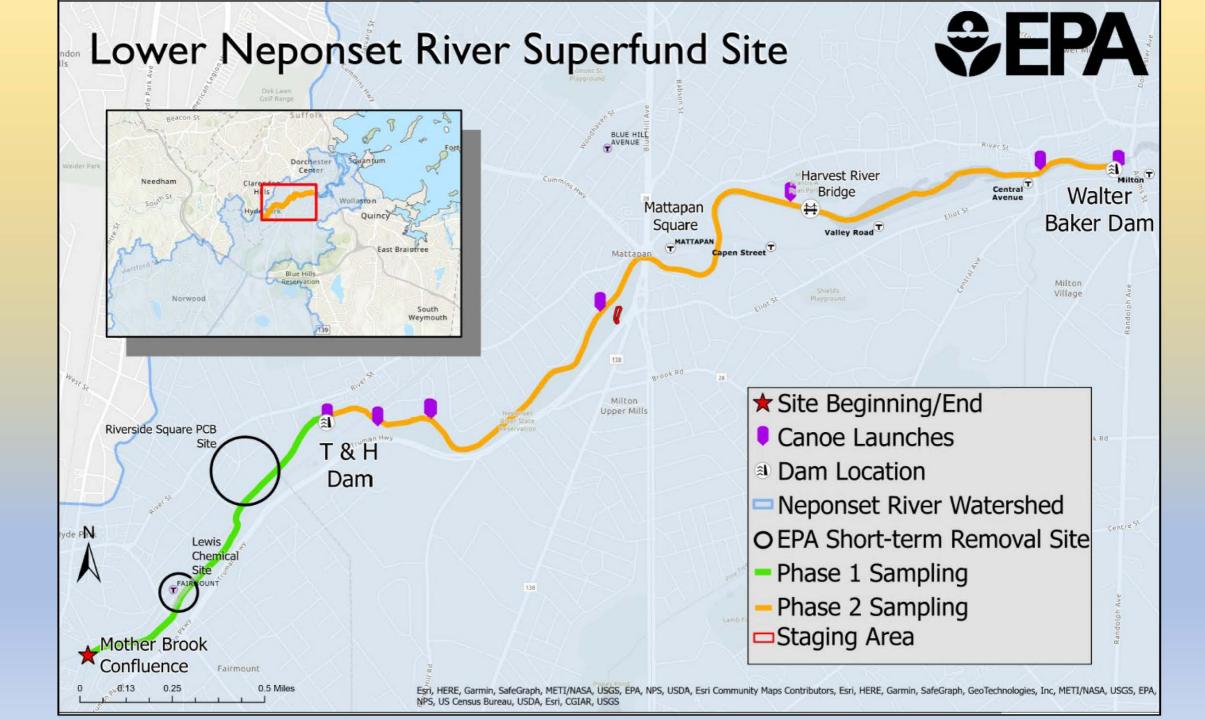


What Progress Was Made In 2024 to Date?





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SUPERFUND REMOVAL PROCESSES

EMERGENCY RESPONSE - INITIATED WITHIN HOURS OR DAYS

Assessment



Discovery/ Notification of Contamination



Site Evaluation



Removal Action Determination

Removal



Action Memorandum

> (Removal Action may occur before the Action Memorandum)

Removal

Action

Post-Removal



Post-Removal Site Control (if needed)



Additional Site Evaluation (if needed)

TIME-CRITICAL REMOVAL - SIX-MONTH PLANNING PERIOD AVAILABLE

Assessment



Discovery/ Notification of Contamination



Removal Site Evaluation



Removal Action Determination

Action Memorandum

Removal



Removal Planning

Removal Action

Post-Removal



Post-Removal Site Control (if needed)

Additional Site Evaluation (if needed)

NON-TIME-CRITICAL REMOVAL - GREATER THAN SIX-MONTH PLANNING PERIOD AVAILABLE

Assessment



Discovery/ Notification of Contamination



Site

Evaluation

Removal Action Determination



Engineering Evaluation/ Cost Analysis

ull

Removal

Action Removal Memorandum Planning

2

Removal Action

Post-Removal



Post-Removal Site Control (if needed)



Additional Site Evaluation (if needed)

Community involvement is integral to the entire process



ewis Chemical (Removal Action) Travel Route

Removal Site: Lewis Chemical

- \$4.9 million cleanup began in April 2023 and completed October 2024.
- 5,704 tons of PCB/metals/volatile organic compound (VOC) contaminated soil was excavated and shipped to EPA approved landfills.
 - Trucks in and out totaled 752.
- Geotextile fabric laid over all excavated areas, backfilled and brought up to grade with clean soil.
- Coordinated with the Massachusetts Department of Conservation, Massachusetts Department of Environmental Protection, City of Boston, City Police and Fire Departments to develop traffic plan.





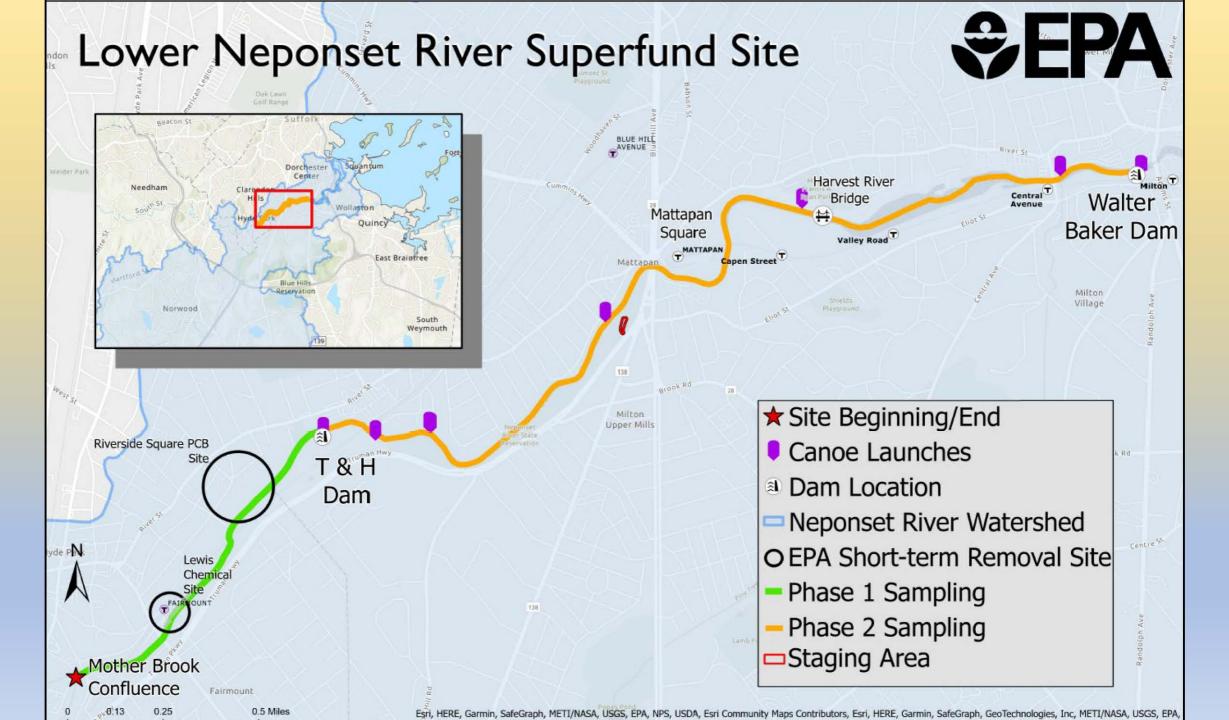






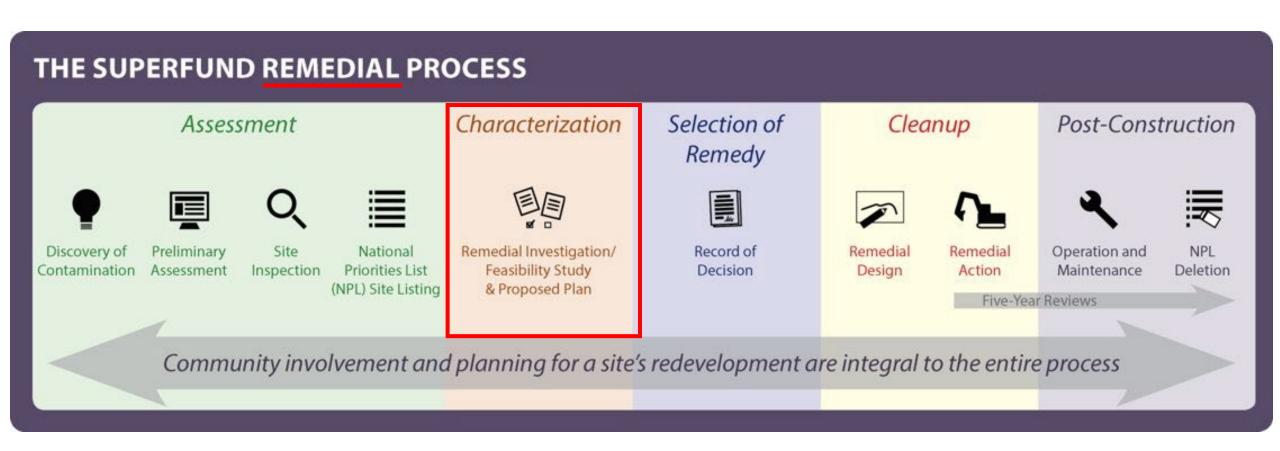
Lower Neponset River Superfund Site Progress







Where is the Lower Neponset River Superfund Site in the Superfund Remedial Process?



Early actions can occur using time-critical removal actions and non-time critical removal actions



What Progress was Made In 2024?



May - July 2024

Phase II Soil Sampling



August 2024

Receive ALL Phase I Data



August - December 2024

Drafting EE/CA

Mussel Cage Deployment (Full 3.7 Miles)

June - September 2024

Phase II Sediment Sampling

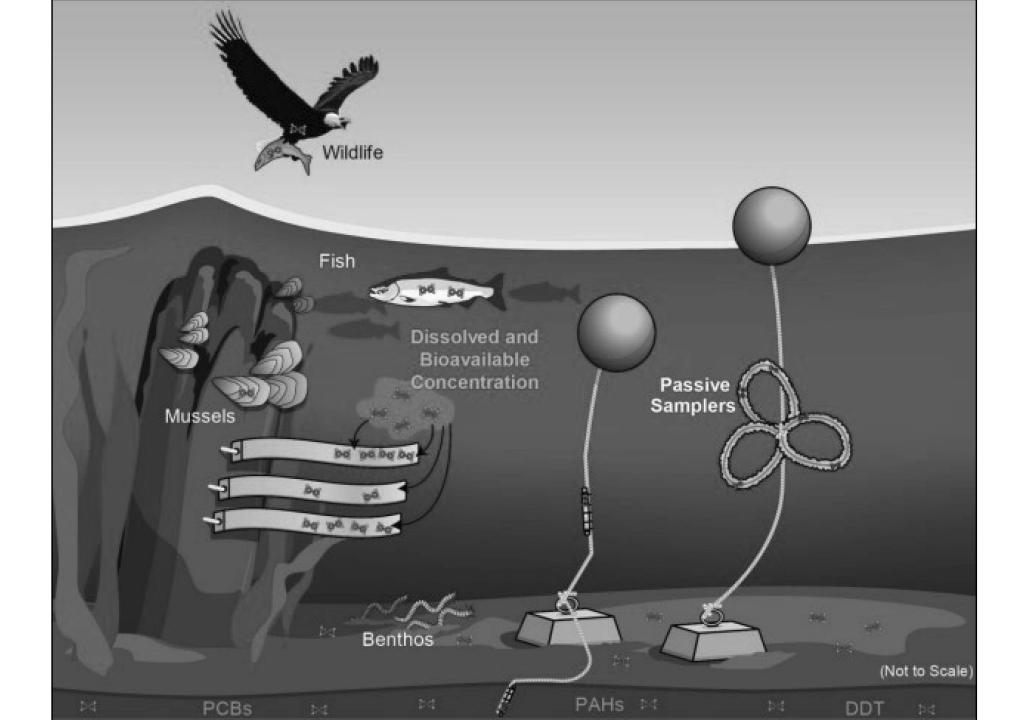
September – October 2024

What did EPA sample for During Phase I?

Media	Analytical Group
Sediment	Surface samples: Volatile organic compounds, semi-volatile organic compounds, pesticides, PCB congeners, polychlorinated dioxins and furans, metals, cyanide, total organic carbon, grain size, and acid volatile sulfide/simultaneous extracted metals. Subsurface samples: Volatile organic compounds, semi-volatile organic compounds, pesticides, PCB congeners, polychlorinated dioxins and furans, metals, cyanide, total organic carbon, and Grain Size.
Surface Water	Samples from all depth intervals: Volatile organic compounds, semi-volatile organic compounds, Pesticides, PCB congeners, polychlorinated dioxins and furans, hexavalent chromium, total and dissolved metals, and cyanide.
Pore Water	Samples from target depth intervals: PCB congeners, polychlorinated dioxins and furans, metals, Polycyclic aromatic hydrocarbons, total and dissolved metals, and dissolved organic carbon.
Soil	Surface and subsurface samples: PCB congeners, polychlorinated dioxins and furans, volatile organic compounds, Semi-volatile organic compounds, and asbestos.
The Phase I Data Evaluation Memo and associated attachments are publicly available.	

To look up chemical specific information, please refer to the <u>ATSDR Index</u>







CAUTION

PCBs

(Polychlorinated Biphenyls)

A toxic environmental contaminant requiring special handling and disposal in accordance with U.S. Environmental Protection Agency Regulations 40 CFR 761. For Disposal Information contact the nearest U.S. E.P.A. Office.

In case of accident or spill, call toll free the U.S. Coast Guard National Response Center: 800-424-8802.

Also Contact _____

Polychlorinated Biphenyls (PCBs)

- Man-made chemicals.
- Manufactured from 1929 1979.
- Used in hundreds of industrial and commercial applications.



Polychlorinated Biphenyls - ToxFAQs™

This fact sheet answers the most frequently asked health questions (FAQs) about polychlorinated biphenyls. For more information, call the CDC Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It's important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Polychlorinated biphenyls (PCBs) are a mixture of individual chemicals which are no longer produced in the United States, but are still found in the environment. Health effects that have been associated with exposure to PCBs include acne-like skin conditions in adults and neurobehavioral and immunological changes in children. PCBs are known to cause cancer in animals. PCBs have been found in at least 500 of the 1,598 National Priorities List (NPL) sites identified by the Environmental Protection Agency (EPA).

What are polychlorinated biphenyls?

Polychlorinated biphenyls are mixtures of up to 209 individual chlorinated compounds (known as congeners). There are no known natural sources of PCBs. PCBs are either oily liquids or solids that are colorless to light yellow. Some PCBs can exist as a vapor in air. PCBs have no known smell or taste. Many commercial PCB mixtures are known in the U.S. by the trade name Aroclor.

PCBs have been used as coolants and lubricants in transformers, capacitors, and other electrical equipment because they don't burn easily and are good insulators. The manufacture of PCBs was stopped in the U.S. in 1977 because of evidence they build up in the environment and can cause harmful health effects. Products made before 1977 that may contain PCBs include old fluorescent lighting fixtures and electrical devices containing PCB capacitors, and old microscope and hydraulic oils.

What happens to PCBs when they enter the environment?

- PCBs entered the air, water, and soil during their manufacture, use, and disposal; from accidental spills and leaks during their transport; and from leaks or fires in products containing PCBs.
- PCBs can still be released to the environment from hazardous waste sites; illegal or improper disposal of industrial wastes and consumer products; leaks from old electrical transformers containing PCBs; and burning of some waster in incincature.
- PCBs do not readily break down in the environment and thus may remain there for very long periods of time. PCBs can travel long distances in the air and be deposited in areas far away from where they were released. In water, a small amount of PCBs may remain dissolved, but most stick to organic particles and bottom sediments. PCBs also bind strongly to soil.

PCBs are taken up by small organisms and fish in water.
 They are also taken up by other animals that eat these aquatic animals as food. PCBs accumulate in fish and marine mammals, reaching levels that may be many thousands of times higher than in water.

How might I be exposed to PCBs?

- Using old fluorescent lighting fixtures and electrical devices and appliances, such as television sets and refrigerators, that were made 30 or more years ago.
 These items may leak small amounts of PCBs into the air when they get hot during operation, and could be a source of skin exposure.
- Eating contaminated food. The main dietary sources of PCBs are fish (especially sportfish caught in contaminated lakes or rivers), meat, and dairy products.
- Breathing air near hazardous waste sites and drinking contaminated well water.
- In the workplace during repair and maintenance of PCB transformers; accidents, fires or spills involving transformers, fluorescent lights, and other old electrical devices; and disposal of PCB materials.

How can PCBs affect my health?

The most commonly observed health effects in people exposed to large amounts of PCBs are skin conditions such as acne and rashes. Studies in exposed workers have shown changes in blood and urine that may indicate liver damage. PCB exposures in the general population are not likely to result in skin and liver effects. Most of the studies of health effects of PCBs in the general population examined children of mothers who were exposed to PCBs.

Animals that ate food containing large amounts of PCBs for short periods of time had mild liver damage and some died. Animals that ate smaller amounts of PCBs in food over

Agency for Toxic Substances and Disease Registry
Division of Toxicology and Human Health Sciences



Public Health Information

- PCBs have been demonstrated to cause a wide variety of adverse health effects:
 - Neurological Effects
 - Endocrine Effects
 - Cancer
 - Immune Effects
 - Other Non-Cancer Effects
 - Reproductive Effects



Superfund Law Requires ATSDR to Conduct a Public Health Assessment

Public Health Assessments evaluate:

- Concentrations of hazardous substances;
- Whether people might be exposed to contamination and how they may come in contact with it;
- What levels of a toxic substance might cause harm to people;
- Whether working or living near a hazardous waste site might affect people's health;
- Other dangers to people such as physical hazards.







PUBLIC HEALTH ADVISORY

NEPONSET RIVER

(Between the Hollingsworth and Vose Dam in Walpole and the Walter Baker Dam in Boston)



Fish Contaminated with PCBs and DDT

CHILDREN UNDER 12, PREGNANT WOMEN, NURSING MOTHERS, AND WOMEN OF CHILDBEARING AGE WHO MAY BECOME PREGNANT:

- · Do not eat any fish: catch & release
- ALL OTHER PEOPLE:
- Do not eat American eel or white sucker: catch and release
- Limit consumption of all other fish to two meals per month

Issued by the Massachusetts Department of Public Health
This advisory does not apply to fish that are stocked. MDPH has issued
other important health recommendations for fish consumption.
To find out more information, please call 617-624-5757 or
visit our website at http://www.mass.gov/dph/fishadvisories

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

Recreational Use of the Neponset River Community Fact Sheet 2022

On March 16, 2022, the Environmental Protection Agency (EPA) listed the Lower Neponset River on the National Priorities List (NPL). <u>This means that certain activities</u>, <u>like eating fish caught in the river, may</u> not be safe for certain people. For more information visit: epa_gov/superfund/lowerneponset.

Can I fish in the Neponset River?

Anyone can catch fish, but not everyone should eat the fish. The Massachusetts Department of Public Health (DPH) has specific advice about who can safely eat the fish that is caught from the Neponset River.

Why can't I eat fish caught in the Neponset River? Eating freshwater fish that you catch from the Neponset River may be harmful because of chemicals in the fish. It is important to follow the information below for:

- the stretch of Neponset River between the Hollingsworth & Vose Dam in Walpole and the Walter Baker Dam in the Dorchester/Milton Lower Mills Industrial Complex
- the Mother Brook between the Knight Street dam and the Neponset River.



Children under 12, pregnant women, nursing mothers, and women that may become pregnant should NOT eat any fish caught from these areas. Chemicals in these fish can harm a developing fetus, infants, and young children. These groups may be at higher risk than other people of being harmed.

All other people should:

- NOT Eat any American Eel or White Sucker fish from this area. These types of fish have high amounts of chemicals that are not safe for anyone to eat.
- LIMIT Eating all other freshwater fish from this area to no more than two meals per month. Other freshwater fish from the Neponset River have lower amounts of chemicals than the American Eel or White Sucker, but they still should not be consumed more than twice a month.



An adult's uncooked meal size is about 8 ounces (the size of an adult's hand)

A child's <u>uncooked meal</u> size is about 4 ounces (the size of an adult's palm)

For more information on fish consumption advisories, please contact the MDPH Bureau of Environmental Health's Environmental Toxicology Program: 617-624-5757 DPHToxicology@state.ma.us or visit www.mass.gov/dph/fishadvisories.



How can I safely use the Lower Neponset River?



It is safe to use the Lower Neponset River for activities such as walking, biking, boating, rowing, kayaking, and visiting parks/playgrounds.



These types of activities are considered safe because it is unlikely that you will come in close or prolonged contact with contaminated water, soil, or mud at the bottom of the river during these types of activities.

It is also safe to go fishing and release fish unharmed back into the river.

Do Not Swim or Wade in the Lower Neponset River.



Sometimes when people are swimming, they accidentally swallow small amounts of water, and the water in the Lower Neponset River may be contaminated with chemicals that can be harmful to your health. It may also contain high levels of harmful bacteria, especially after storms with a lot of rainfall. These bacteria can make people sick if they are swallowed.



While swimming and wading, people may also contact the soil and the mud at the bottom of the river or along the riverbank. This could be harmful because the mud in some stretches of the Lower Neponset River has high levels of chemicals. Soil in some areas along the river may also be contaminated with chemicals.

Steps to minimize potential exposure to chemicals in soil in the Lower Neponset River:

- Wear shoes so that your feet don't touch areas with mud or bare soil
- Clean off mud/soil from shoes prior to leaving the river area to prevent bringing mud or soil into the car or home
- Wash feet if they contact mud or bare soil
- Wash hands after touching the mud or soil, especially before eating so you don't accidentally swallow the mud or soil
- Avoid sitting or playing in bare soil or mud along the riverbank
- Monitor young children to prevent swallowing mud or soil
- Keep dogs leashed and away from the river and muddy areas of the riverbank

What if I contact water from the Lower Neponset River while boating or fishing?

Touching the water while boating, rowing, kayaking, or fishing is not likely to harm your health. The amount of chemicals in river water is expected to be less than the amount in fish or mud at the bottom of the river. Also, the amount of chemicals that you may be exposed to from touching the water is much less than the amount you may be exposed to from accidentally swallowing water while swimming. Although there may be bacteria in the water, bacteria are most harmful if swallowed. Simply washing your hands after touching the water will reduce the chance that bacteria will be swallowed or remain in open wounds on your skin.



Children under 12, pregnant women, nursing mothers, and women of childbearing age who may become pregnant:

• **Do NOT eat any fish from this area**. Chemicals in these fish can harm a developing fetus, infants, and young children.

All other people:

- <u>Do NOT Eat any American Eel or White Sucker fish from this</u>
 area. These types of fish have high amounts of chemicals that
 are not safe for anyone to eat.
- LIMIT eating all other freshwater fish from this area to no more than two meals per month. Other freshwater fish from the Neponset River have lower amounts of chemicals than the American Eel or White Sucker, but they still should not be consumed more than twice a month.



Steps to Minimize Potential Exposure to Chemicals in Soil in the Lower Neponset River

- Wear shoes so that your feet don't touch areas with mud or bare soil;
- Clean off mud/soil from shoes prior to leaving the river area to prevent bringing mud or soil into the car or home;
- Wash feet if they contact mud or bare soil;
- Wash hands after touching the mud or soil, especially before eating so you don't accidentally swallow the mud or soil;
- Avoid sitting or playing in bare soil or mud along the riverbank;
- Monitor young children to prevent swallowing mud or soil;
- Keep dogs leashed and away from the river and muddy areas of the riverbank.

- (4) Cleanup levels. For purposes of cleaning, decontaminating, or removing PCB remediation waste under this section, there are four general waste categories: bulk PCB remediation waste, non-porous surfaces, porous surfaces, and liquids. Cleanup levels are based on the kind of material and the potential exposure to PCBs left after cleanup is completed.
 - (i) Bulk PCB remediation waste. Bulk PCB remediation waste includes, but is not limited to, the following non-liquid PCB remediation waste: soil, sediments, dredged materials, muds, PCB sewage sludge, and industrial sludge.
 - (A) High occupancy areas. The cleanup level for bulk PCB remediation waste in high occupancy areas is ≤1 ppm without further conditions. High occupancy areas where bulk PCB remediation waste remains at concentrations >1 ppm and ≤10 ppm shall be covered with a cap meeting the requirements of paragraphs (a)(7) and (a)(8) of this section.
 - (B) Low occupancy areas.
 - (1) The cleanup level for bulk PCB remediation waste in low occupancy areas is ≤25 ppm unless otherwise specified in this paragraph.
 - (2) Bulk PCB remediation wastes may remain at a cleanup site at concentrations >25 ppm and ≤50 ppm if the site is secured by a fence and marked with a sign including the M₁ mark.
 - (3) Bulk PCB remediation wastes may remain at a cleanup site at concentrations >25 ppm and ≤100 ppm if the site is covered with a cap meeting the requirements of paragraphs (a)(7) and (a)(8) of this section.

Toxic Substances Control Act

40 CFR §
761.61
(a)(4)

Human Health Risk

- The EPA uses an acceptable risk range of 1 in 1,000,000 to 1 in 10,000 (1×10-6 to 1×10-4) for carcinogens.
- This range is used to make cleanup decisions at Superfund sites and to determine if people can be exposed to a contaminant without health problems.

• The EPA often uses 1 in 1,000,000 as a de minimis risk level for policy development.

 The EPA uses a hazard quotient (HQ) to assess the health risks of noncarcinogens. The HQ is the ratio of the potential exposure to a substance to the level at which no adverse effects are expected. A HQ of 1 or less indicates that adverse effects are not likely to occur.



Human Health Risk Related to the Recreational Receptor at the Lower Neponset River Superfund Site

Endpoint Units		Total PCB Removal Action Levels (RALs) – Sediment Recreational Receptor (Direct Contact)			
Target Cancer Risk:		1E-04	1E-04	1E-05	1E-06
Target Hazard Quotient:		3	1	1	1
Cancer based RAL (lifetime, adult/child)	ppm	88	88	8.8	0.88
Noncancer based RAL (child)	ppm	14	5	5	5
Noncancer based RAL (adult)	ppm	84	28	28	28
Selected RAL (lower of cancer/noncancer)	ppm	14	5	5	0.88

EPA uses an acceptable risk range of 1 in 1,000,000 to 1 in 10,000 (1×10-6 to 1×10-4) for carcinogens.



• 14 samples in Mother Brook

• Min: 0.0089 ppm

• Median: 0.0868 ppm

• Max: 0.391 ppm

• Mean: 0.125 ppm

10 samples in Upper Neponset

• Min: 0.093 ppm

Median: 0.391 ppm

• Max: 1.13 ppm

• Mean: 0.465 ppm

24 Total Background Samples

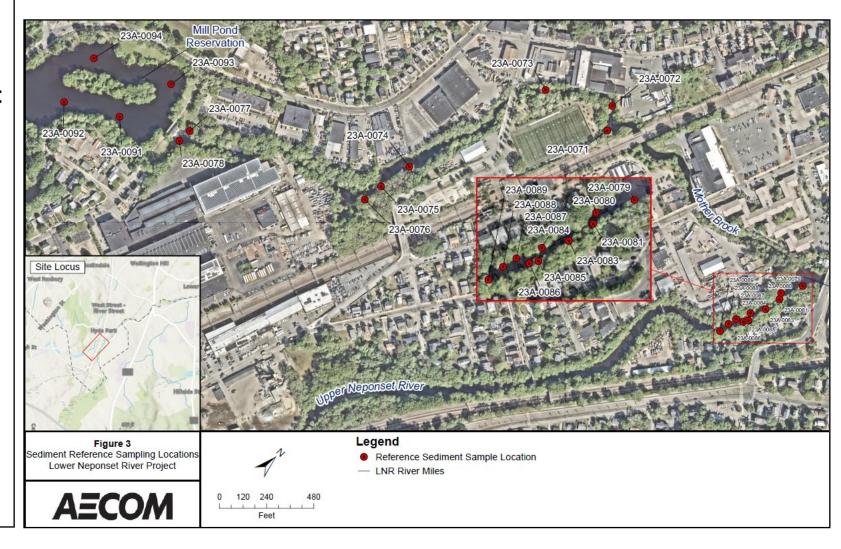
• Min: 0.0089 ppm

• Max: 1.13 ppm

• Median: 0.208 ppm

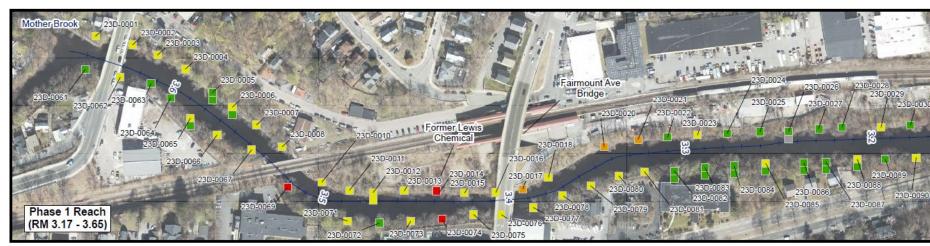
• Mean: 0.3 ppm

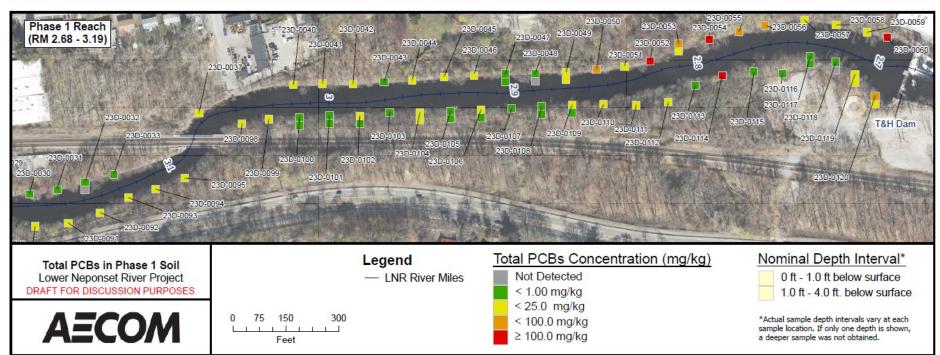
Background / Reference Samples: 24 sample locations collected in 2023





Key Phase I Soil Riverbank Information





General Information:

 109 soil borings from 0.5 ft to 4 ft;

Soil PCBs (0 to 1 foot)

- Total concentration range:
 <1 ppm to 173 ppm;
- 7 locations exceeded 100 ppm;
- Average concentration is 12.1 ppm.



Key Phase I Sediment Data

General Information:

63 sediment cores achieved.

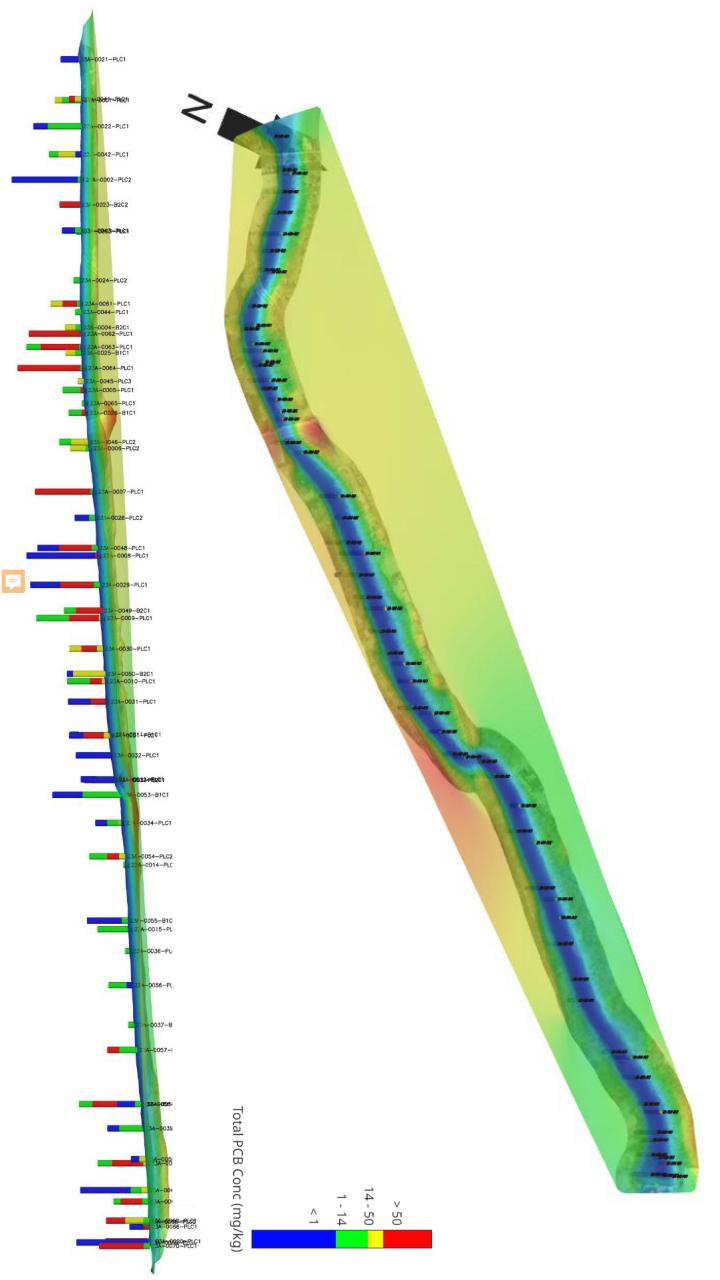
Surface Sediment PCBs (0 to 0.5 feet)

- Total concentration range: <1 ppm to 436 ppm;
- Maximum concentration adjacent to Lewis Chemical;
- Average concentration is 37.9 ppm.

All Sediment (0 – 6.3 feet)

- Total PCBs range: <1 ppm to 2,646 ppm;
- Maximum concentrations adjacent to the *Lewis Chemical* (0.5 to 3.7ft) and **T&H dam impoundment** (5 ft 6ft)
- Average concentration is 117 ppm.







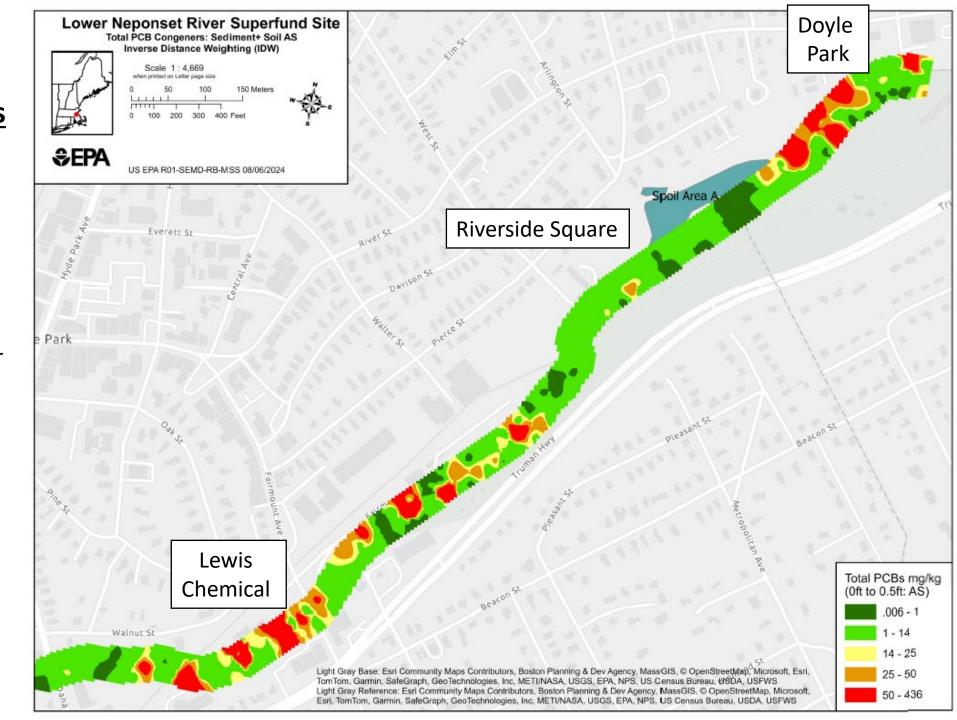
Surface Sediment PCBs (0 to 0.5 feet)

Total concentration range: <1 ppm to 436 ppm;

Maximum concentrations near

Lewis Chemical and slightly
downstream,
Riverside Square,
Doyle Park,
and T&H dam

Average concentration is 37.9 ppm.





Second Depth Interval of PCBs (0.5 – 3 ft)

Total concentration range: <1 ppm to 2,646 ppm;

Maximum concentrations near

Mother Brook,

Lewis Chemical and

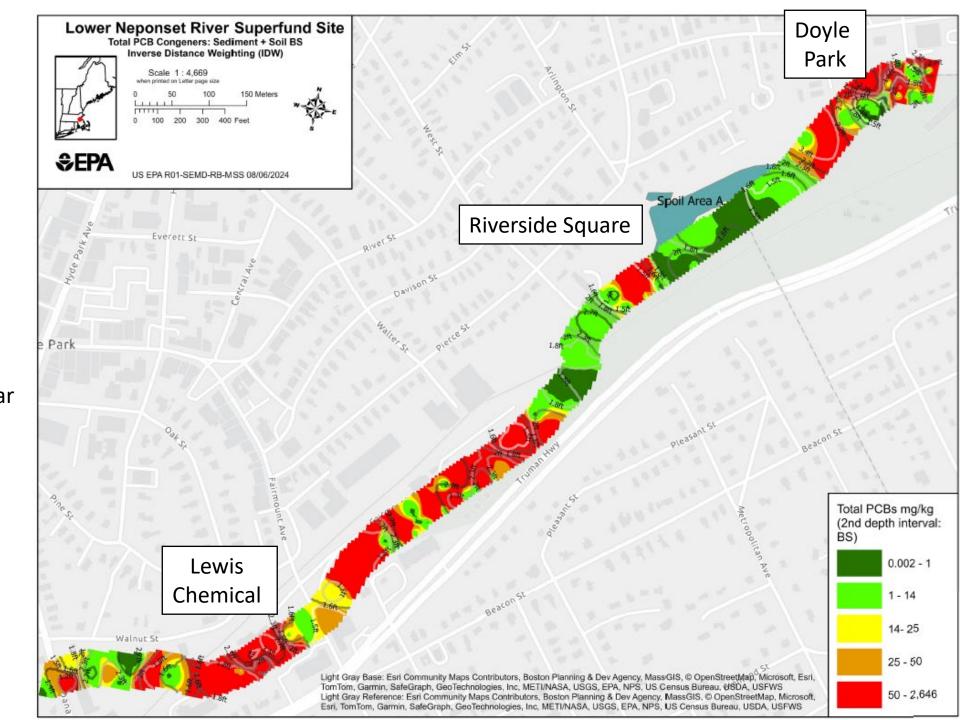
slightly downstream,

Riverside Square,

Doyle Park,

and

T&H dam





Third Depth Interval of PCBs (3 to 6.3 feet)

Total concentration range: <1 ppm to 2,048 ppm;

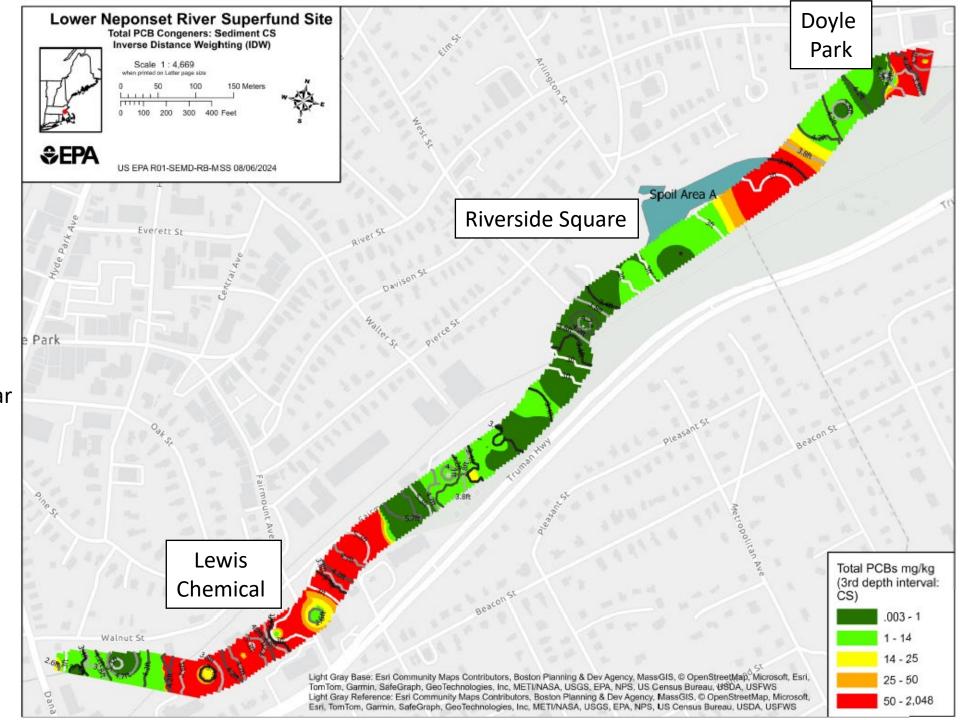
Maximum concentrations near

Lewis Chemical

and slightly downstream,

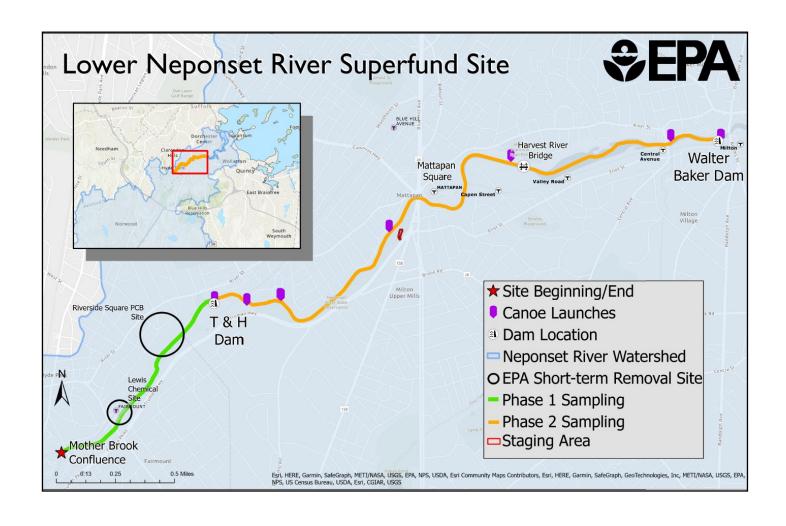
Riverside Square,

and T&H dam





Publicly Available Project Deliverables

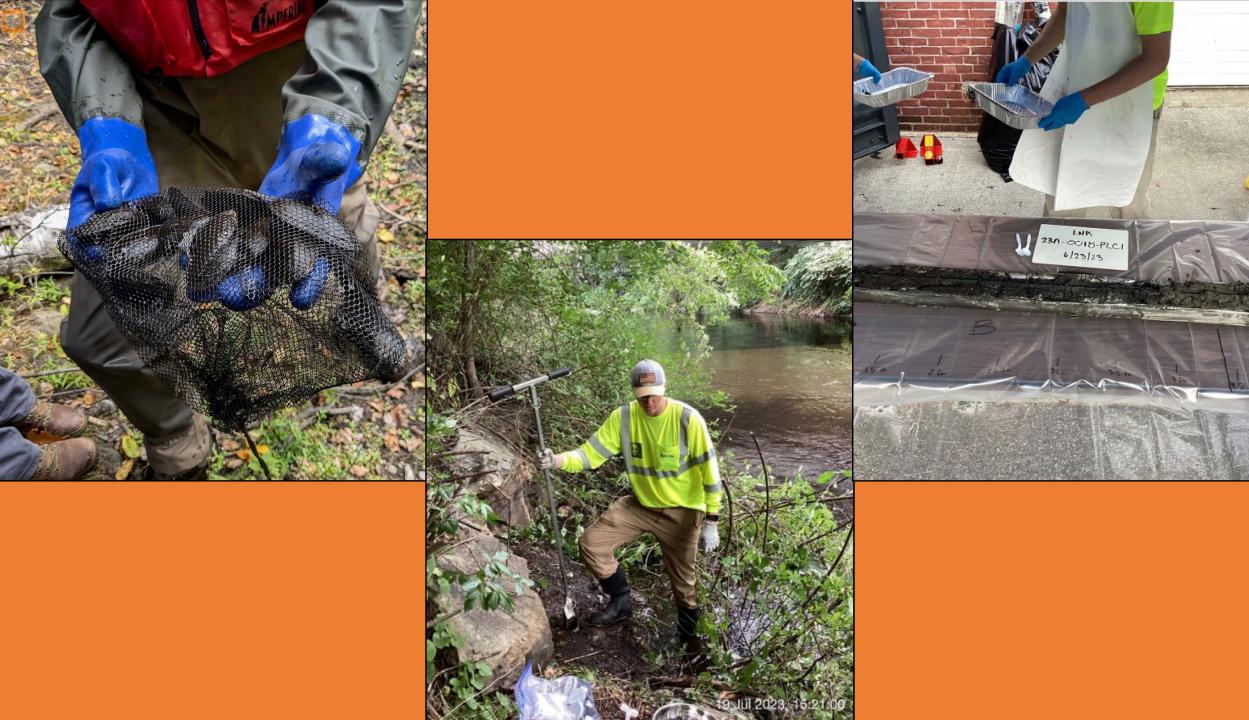


- Phase I Data Evaluation <u>Memo</u> and <u>associated</u> <u>attachments;</u>
- Phase 1 Data Tables;
- Phase 1 GIS Files;
- Phase I Site Reconnaissance Memo;
- Reuse Assessment Report; and
- Community Involvement Plan.

What Has EPA Sampled for in the Phase II Area During 2024?

Media	Analytical Group				
Sediment	Surface samples: Volatile organic compounds, semi-volatile organic compounds, pesticides, PCB congeners, polychlorinated dioxins and furans, metals, cyanide, total organic carbon, grain size, and acid volatile sulfide/simultaneous extracted metals.				
	Subsurface samples : Volatile organic compounds, semi-volatile organic compounds, pesticides, PCB congeners, polychlorinated dioxins and furans, metals, cyanide, total organic carbon, and grain Size.				
Soil	Surface and subsurface samples: PCB congeners, polychlorinated dioxins and furans, volatile organic compounds, semi-volatile organic compounds, metals, and asbestos.				
Fish Tissue	Predatory/gamefish and bottom feeding fish were collected from two reaches of the Site: the upper one mile stretch of the Site (Phase 1 reach) and the lower 2.7-mile stretch between the Tileston and Hollingsworth Dam and the Walter Baker Dam (Phase 2 reach): PCB congeners, PCDD/F, lipids, percent moisture, TCL pesticides, TAL metals, mercury, and methyl mercury.				
Mussel Tissue	Shellfish cages were deployed at eight locations throughout the 3.7-mile Site in late June 2024: PCB congeners, PCDD/Fs, lipids, TAL metals, mercury, PAHs, methyl mercury, TCL pesticides, and moisture.				

To look up chemical specific information, please refer to the <u>ATSDR Index</u>

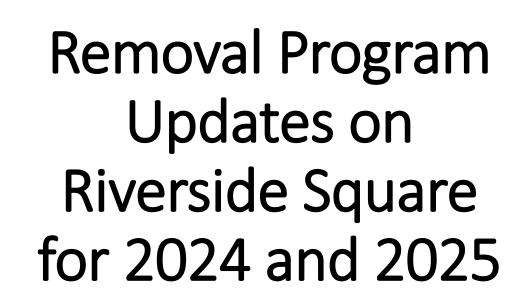






What is planned for the rest of 2024 and 2025?







SUPERFUND REMOVAL PROCESSES

EMERGENCY RESPONSE - INITIATED WITHIN HOURS OR DAYS

Assessment



Discovery/ Notification of Contamination



Site Evaluation



Removal Action Determination

Removal



Action Memorandum

Action (Removal Action may occur before the Action Memorandum)

Post-Removal



Post-Removal Site Control (if needed)



Additional Site Evaluation (if needed)

Riverside Square PCB Site

TIME-CRITICAL REMOVAL - SIX-MONTH PLANNING PERIOD AVAILABLE

Assessment



Discovery/ Notification of Contamination



Removal Site Evaluation



Removal Action Determination

Action Memorandum

Removal



Removal Removal Planning Action

Removal

Post-Removal



Post-Removal Site Control (if needed)



Additional Site Evaluation (if needed)

NON-TIME-CRITICAL REMOVAL - GREATER THAN SIX-MONTH PLANNING PERIOD AVAILABLE

Assessment



Discovery/

Notification of

Contamination

Evaluation



Determination

Removal Action



Engineering Evaluation/ Cost Analysis

Removal

Action Memorandum



Removal

Removal Planning

Action

Post-Removal



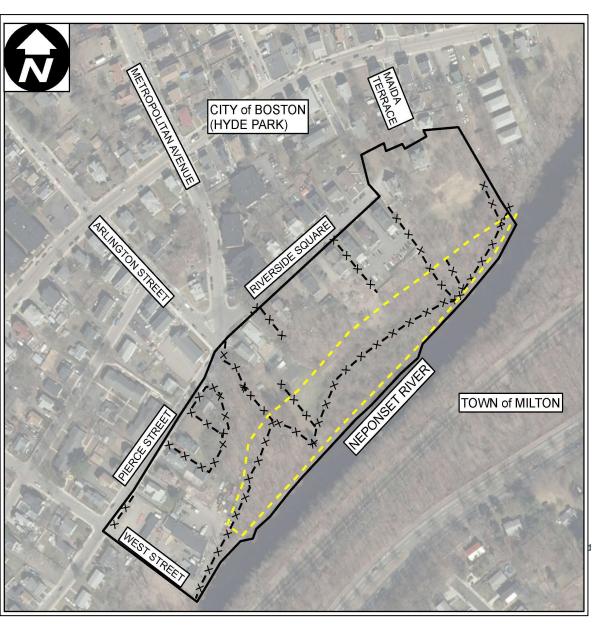


Post-Removal Site Control (if needed)

Additional Site Evaluation (if needed)

Community involvement is integral to the entire process

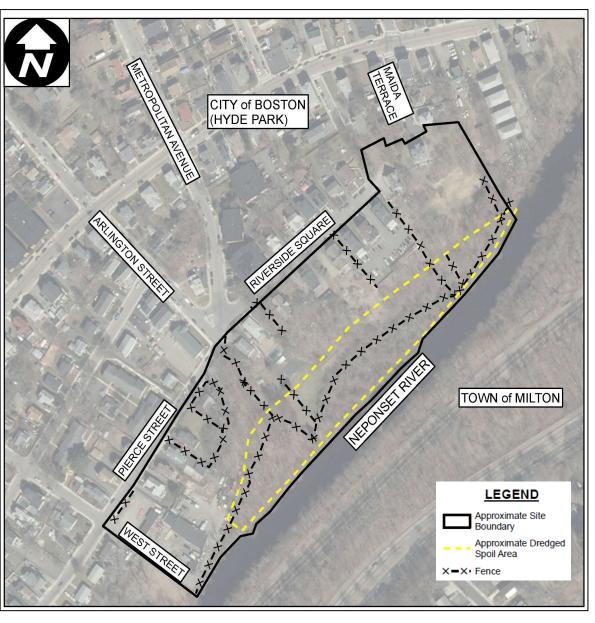




Removal Site: Riverside Square PCB

- 8-acre Site: residential areas, a commercial property, and areas created by dredge spoils that lie between the residences and the northern bank of the Neponset River.
- In 1962 and 1964, river was dredged to deepen channel.
- 17,800 cubic yards of dredged spoils were placed along this section of the river, essentially creating new land.
- Riverside Square PCB Site is one of those locations.
- Sampling has found PCB and metal contamination in soil within this area.





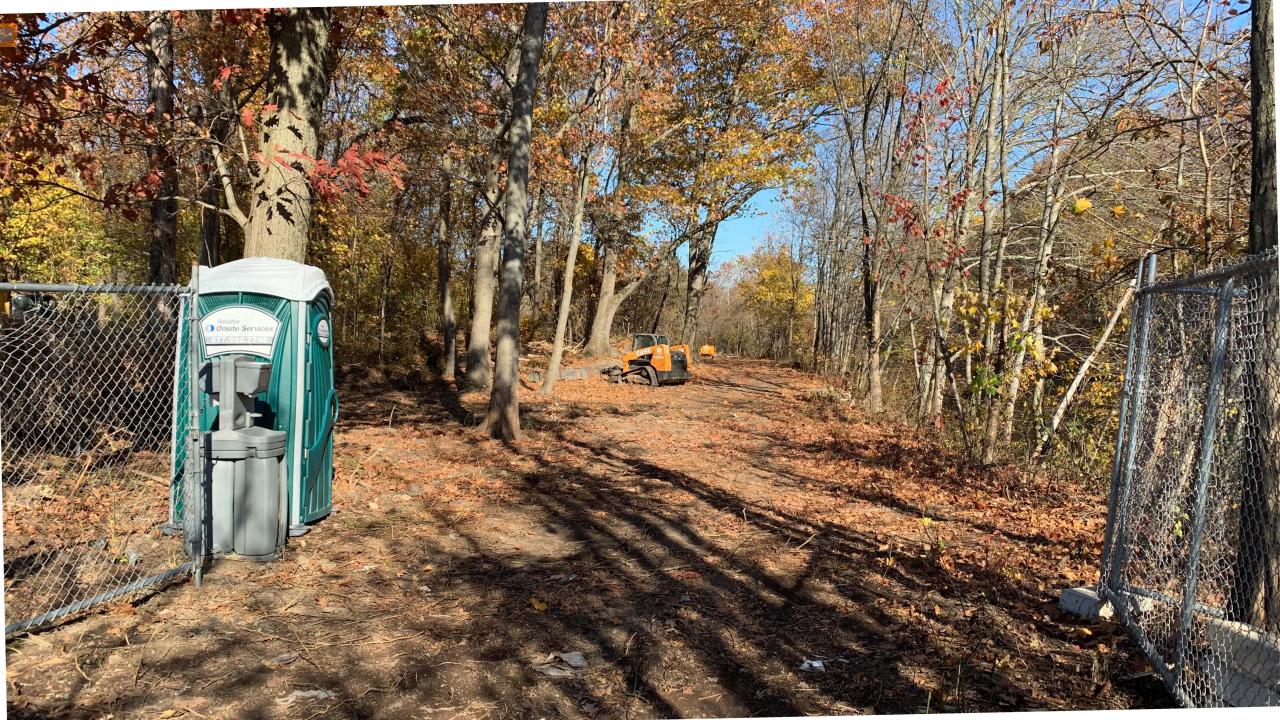
Removal Site: Riverside Square PCB Cont'd

- \$4.9M Removal Action
- Field work began in October 2024.
- Estimated duration about 1.5 years.
- Excavate, transport/dispose (T&D) of soils contaminated with PCBs and other hazardous substances.
- T&D will be performed following a traffic plan developed with Boston Fire and Police Departments.
- All excavated areas will be capped with a geotextile fabric and backfilled to grade with clean soil.
- The entire Site will be covered by an additional 1foot of clean soil as a protective measure and reseeded.
- Refer Site back to MassDEP for long term measures.

Riverside
Square
Access
Restrictions

Temporary metal fencing at 3 entrances to the site with signs posted – this is for safety of residents / equipment







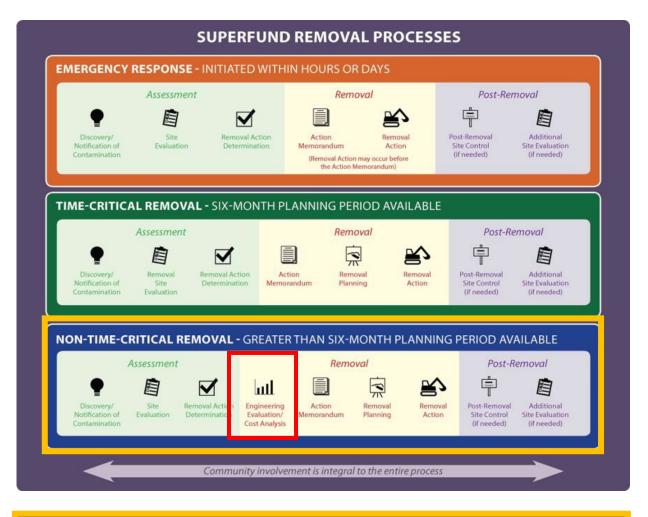
Lower Neponset River Superfund Site Remedial Updates for 2024 and 2025



The Lower Neponset River
Superfund Site is utilizing the
Non-Time Critical Removal Action
Process AND
the Superfund Remedial Process

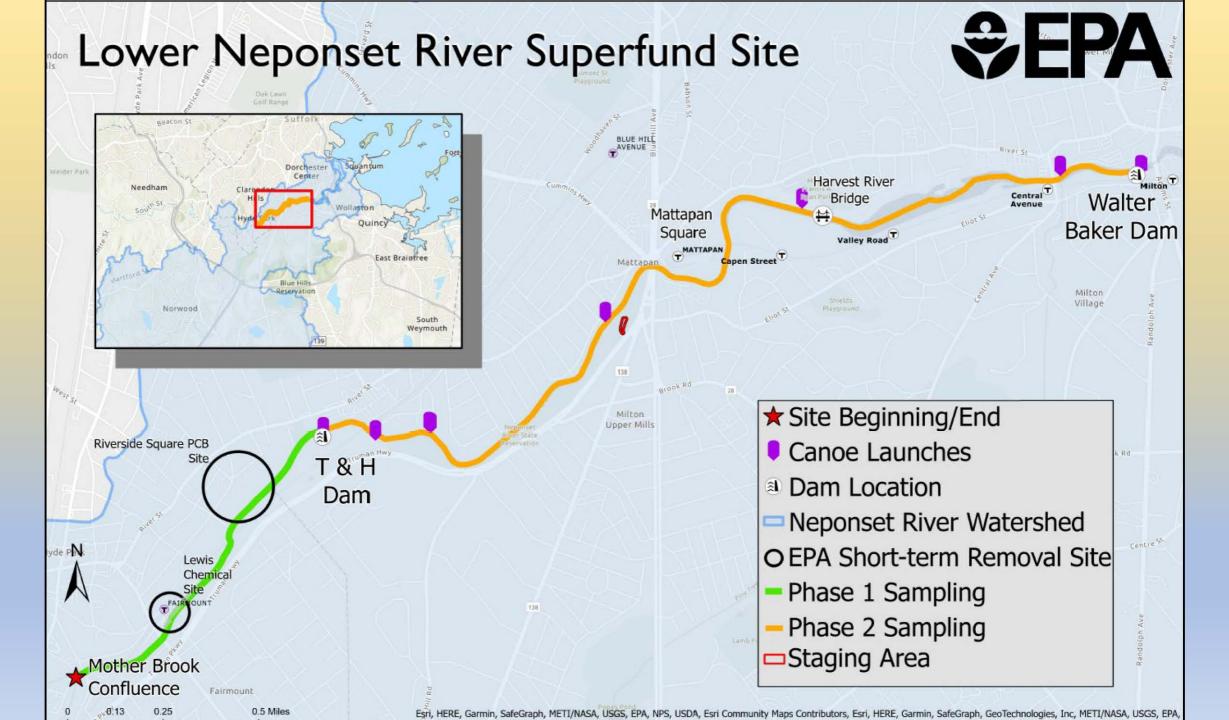
Lower Neponset River Phase I Area

Lower Neponset River (full 3.7 miles)











Planned work for the Remainder of 2024 and 2025



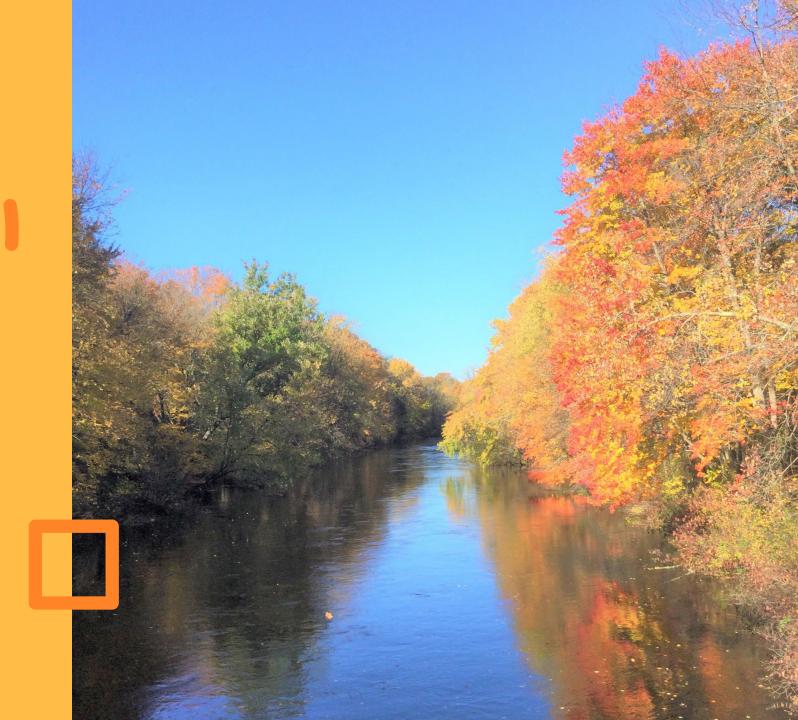
Groundwater investigation planned for 2025. Date TBD.

Planned Sampling Events for Phase II

Media	Analytical Group
Surface Water	Samples from all depth intervals: Volatile organic compounds, semi-volatile organic compounds, pesticides, PCB congeners, polychlorinated dioxins and furans, total and dissolved metals, and cyanide.
Pore Water	Samples from target depth intervals: PCB congeners, polychlorinated dioxins and furans, metals, polycyclic aromatic hydrocarbons, total and dissolved metals, and dissolved organic carbon.
Ground Water	Overburden monitoring wells will be installed at select locations throughout the entire 3.7-miles of the Site with the following objective: Install wells that will be used as part of a larger hydrogeologic investigation to determine how groundwater is interacting with the Site.
	The Phase 2 Data Evaluation is expected to be published in Spring 2025

To look up chemical specific information, please refer to the <u>ATSDR Index</u>

Engineering
Evaluation and Cost
Analysis Information



Early Action via a Non-Time Critical Removal Action

01

Can be selected before the Remedial Investigation and Feasibility Study is completed

02

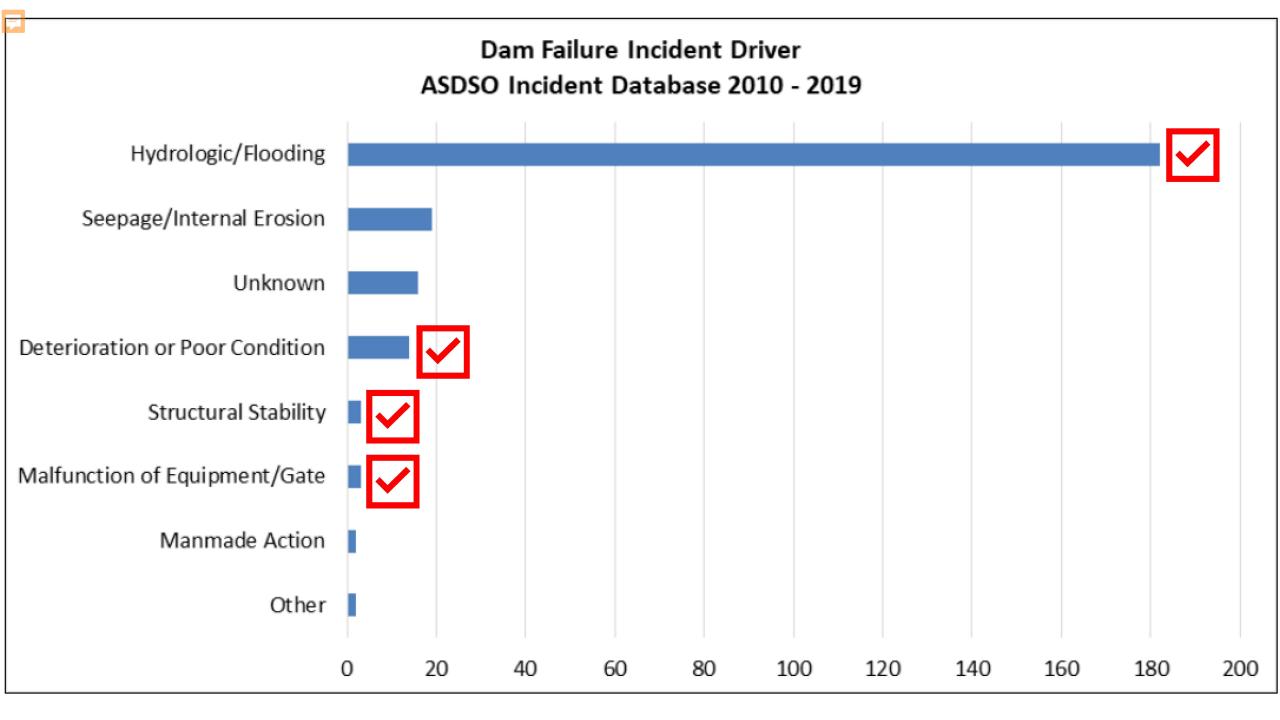
significant risk
reduction, address
immediate risks, or
to control migration
of contamination

03

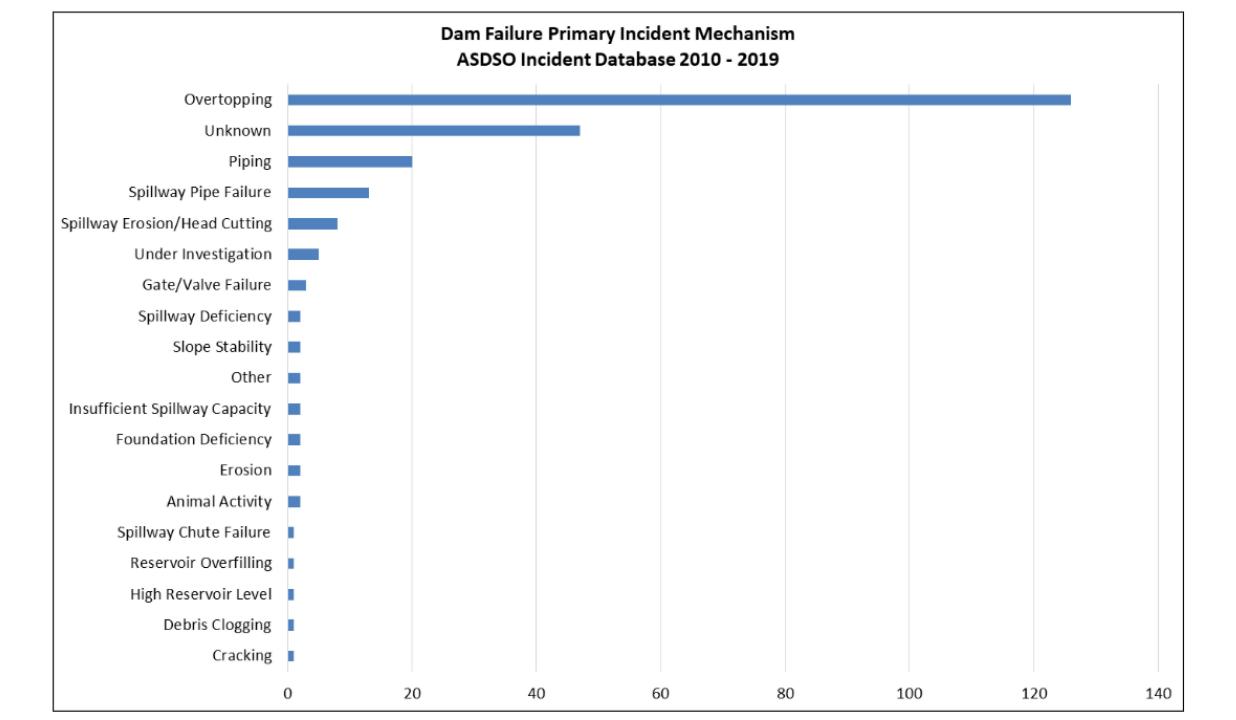
Sufficient information is available to support a response













Flood Design: 100-year

- T&H Dam can only have a peak inflow of 3,500 cubic feet per second (cfs) before overtopping.
- Modeled the inflow for various weather events.

Event	Modeled Inflow (cubic feet per second)
Mean April	550
10-year	2,450
50-year	3,410
100-year	3,730
500-year	4,750

Hazard Classification: Significant

 Failure of dam at maximum pool may result in property damage and possible loss of life.



Photo credit: An old refrigerator is caught in the Tileston & Hollingsworth Dam in Hyde Park along the Neponset River trail in Lower Mills. ERIN CLARK/GLOBE STAFF/FILE

Why is EPA Conducting an EE/CA When Contamination Was Identified Years Ago?

Section 300.415(b)(4)(i) of the National Contingency Plan requires an EE/CA for all non-time-critical removal actions.

Primary EE/CA Components

- Identify removal action scope, goals, and objectives.
- Present several relevant and viable removal alternatives for evaluation and comparison.
- Analyze removal alternatives for effectiveness, implementability, and cost.
 - **Effectiveness** = protectiveness and ability to achieve removal objectives.
 - Protectiveness = how well the alternatives protect public health and the community, protect workers during implementation, protect the environment, and comply with applicable or relevant and appropriate requirements (ARARs).
 - **Implementability** = technical feasibility, the availability of necessary resources to support the alternatives, and their administrative feasibility.
 - Cost = capital costs, costs for post-removal site controls, and present worth cost.



Following the EE/CA is the Public Comment Period



A public notice describing the EE/CA and announcing a public comment period must be published in a major local newspaper.



30-day public comment period required



Soliciting and responding to public comments is required



Based on public comment, the recommended alternative may not always be the final alternative selected in the Action Memorandum.

Following the Public Comment Period is the Action Memorandum (Decision Document)

The Action Memorandum describes proposed removal action and secures management approval to conduct the action.

Community Involvement and Resources

What is a Community Advisory Group (CAG) and Why We Have One?

- A way for all parts of the community to participate actively in outcomes about site cleanup and other environmental issues.
- Have a real voice in decision-making.
- Discuss full range of community concerns about cleanup.
- Present community views and concerns to EPA, state and tribal agencies, and others.
- Get up-to-date information about the status of cleanup and other activities at the Site.

Who Should Participate On The CAG?

- Residents/owners of property near the site
- Minority and low-income groups
- Environmental or public interest groups
- Local government representatives and planning agencies
- Facility owners
- Local business community members
- Local government and planning agencies
- Advocates of community interests
- Transportation organizations
- Environmental coalitions
- Local school districts and local religious representatives
- Neighborhood groups
- Area residents
- Local businesses
- Others that have an interest in the project



- CAG membership is voluntary.
- Members should be willing to commit to attending regular CAG meetings.
- Members should be willing to work with, and respect the views and opinions of others.
- Attend each CAG meeting and participate in group-facilitated activities.
- Participate openly and honestly, while respecting the opinions of all group members.
- Represent his or her organization and community interests.
- Work to achieve general agreement among all interested parties and the public/community interests.

F

Who are the Current Lower Neponset River Superfund Site CAG Members?

October 15, 2024 - CAG Meeting #9 at the Shops at Riverwood in Hyde Park, MA during an Ice-Breaker activity to start-off the meeting



What Progress is the Lower Neponset River CAG Making?

- The CAG has been meeting since April 2, 2024.
- To-date, the CAG has held over 10 meetings.
- Meetings take place on the 3rd Tuesday of every month.





CAG NEEDS:

- The CAG needs a variety of additional members from all four communities adjacent to the Site (Hyde Park, Mattapan, Dorchester, and Milton), but in particular would love to have additional folks from Mattapan, Milton and Dorchester to join/volunteer as EPA prepares to engage with the CAG and community throughout the cleanup process.
- If you have any questions or have interest in joining to be a member of the Community Advisory Group (CAG), please reach out to me via email at: purnell.zanetta@epa.gov or R1Neponset@epa.gov.

Technical Assistance Services for Communities (TASC)

CAG Utilization of Community Involvement Tools and Resources

- TASC services can include information assistance and expertise, community education, information assistance needs evaluation and plan development, and assistance to help community members work together to participate effectively in environmental decision-making.
- TASC at this Site is planned to be used for assistance reviewing:
 - Environmental Engineering/Cost Analysis (EE/CA)
 - Phase I Sampling Data Memos
 - Phase II Sampling Data Memos
 - LNR first public comment period



EE/CA Formal Public Comment Period Assistance

- EE/CA Summary Factsheet
- Community Advisory Group TASC to assist
- "Making Your Voice Heard" handout
- EPA staff is available to answer any questions



Making Your Voice Heard

Step-by-step tips for writing effective public comments

May 2012

This booklet, adapted from the leading text *The Art of Commenting*, provides an introduction to writing comments to government agencies. Commenting on proposed environmental actions is a way to make your voice heard and to influence decisions on the issues you care about. In these pages, you will find an overview of the public written comment process and suggested tips and techniques for creating thorough and convincing comments.

Adapted from Elizabeth D. Mullin, The Art of Commenting: How to Influence Environmental Decisionmaking With Effective Comments (Envtl L. Inst. 2000).

WHAT IS A COMMENT?

Every time a federal, state, or local government agency undertakes a significant environmental action—such as adopting regulations, preparing an environmental assessment, or developing a new plan or program—the agency has to put something in writing. These documents, which range from background information to records of decisions, can be complicated to produce, and the resulting conclusion or action can have far-reaching effects on individuals, communities, economies, and ecosystems.

Commenting is a process that allows individuals, organizations, agencies, and businesses to provide written input on proposed environmental decisions. While commenting may first happen internally within the lead agency, this booklet focuses opportunities for the public to comment on a public draft. For many federal-level actions, public notice and an opportunity to comment is required by law before the action can be finalized.

WHY COMMENT? Commenting is an important way to make your voice heard in decision-making. Public comments can strengthen an environmental decision by providing the authoring agency with facts or perspectives that were lacking in the original draft. The goal of commenting is to help the agency create an accurate and comprehensive document to support appropriate and informed decision-making.

Community Resources



<u>U.S. EPA – Region 1 Community Ambient Air Sensor Loan Program</u>

What: "PurpleAir" particulate matter (PM) air sensors may be available for up

to a year-long loan from the U.S. EPA Region 1 Laboratory Services and

Applied Science Division (EPA Region 1).

Who: Public and academic institutions, non-profit organizations, community

groups, and other organizations in Connecticut, New Hampshire,

Maine, Massachusetts, Rhode Island, and Vermont may borrow these, if

available.

Why: EPA Region 1 wants to support people who are curious about local

ambient (outside) air quality. These sensors can increase basic awareness of what the PM levels are where people live, work, and play; help educators teach students about PM pollution; or help empower local communities to investigate air quality and take an active role in

improving public health.

How: An application must be submitted before equipment is loaned. Data

gathered by these sensors are to increase the awareness of air pollution

and are not for regulatory purposes, or confined space or other

health and safety evaluations. Training is required for sensor operation/care, quality assurance procedures, and data collection (materials will be provided). EPA will also be available to provide

technical assistance.

When/Where: This loan program is not yet available, but we anticipate it will

be soon. The program launch announcement will be sent via

email as well as in the EJ newsletter.

Email R1 EPA Environmental Justice@epa.gov to be added.

What is Particulate Matter?

PM is a mixture of extremely small solid particles and liquid droplets that are emitted into the air from various sources including industries, automobiles, wood smoke, and cigarettes. Once inhaled, these particles can negatively affect the heart and lungs and cause serious health effects.



Interested in More Information?

Contact: Michelle Coombs, EPA Region 1

coombs.michelle@epa.gov

Disclaimer

Mention of trade names or commercial products does not constitute U.S. EPA endorsement or recommendation for use.



In Summary

- ✓ Phase I Sampling is complete, and all data is available.
- ✓ Lewis Chemical work is complete.
- ➤ Phase II sampling, excluding groundwater, is planned to be completed by end of 2024.
- ➤ Riverside Square removal action is active and is planned to occur over the next 1.5 years.
- ➤ EE/CA goal completion is December 31, 2024.

Make your voice heard through public comment!







Questions and Answers

Points of Contact

EPA

- <u>burgo.natalie@epa.gov</u> and (617)
 512 5644
- <u>pluta.alexander@epa.gov</u> and (617)-918-1258
- <u>purnell.zanetta@epa.gov</u> and (857) 286-6766
- McCarthy.Elizabeth@epa.gov and 617-918-1136

Public Health Agencies

- Agency for Toxic Substances and Disease Registry Tarah S. Somers: tvs4@cdc.gov and (617) 918-1493
- Massachusetts Department of Public Health:

617-624-5757

- For cancer specific cancer concerns: MADPH Epidemiology Division (617) 624-5757;
 DPHToxicology@mass.gov
- Boston Public Health Commission: environment@bphc.org



Stay Updated

Website:

epa.gov/neponsetriver

Mailbox:

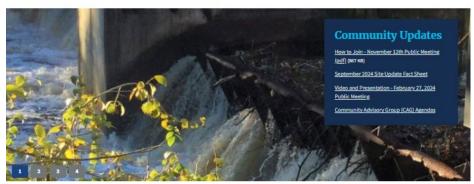
R1Neponset@epa.gov

Join our email list!

We will continue to send out information in coordination with community groups, newspapers, paper mailings, etc.



Urban Waters - Neponset River



Lower Neponset River Remedial Work



- Why clean up the Lower Neponset River Superfund Site?
- What progress has been made in the remedial investigation?

Community Corner

- Technical Assistance, Tools and Resources, and Commun Advisory Groups information
- Meeting Information Materials
- Neponset River Watershed Report Cards
- Stay Updated, Get Involved
- · Difference Between Removal vs Remedial Work

Understanding **Polychlorinated Biphenyls** (PCBs)



- Health Effects of PCBs
- Agency for Toxic Substances and Disease Registry (ATSDR)

Site Map



Stay Updated!

- Events, Meetings, and Updates
- Join Mailing List
- Reuse Assessment

Popular Documents and Resources

- NEW How to Jain November 12th Public Meeting (pdf) (867 KB)
- September 2024 Site Update Fact
- Sheet (pdf) (3.2 MB)
- NEW CAG Meeting Agenda #7 -

- Community Involvement Plan (pdf) Plan de Participación Comunitaria

(pdf) (4.9 MB) Plan Patisipasyon Kominotė (pdf) (3

Informe de evaluación de