Hudson River PCBs SUPERFUND SITE

Region 2: NJ, NY, PR, VI • 290 Broadway, New York, NY 10007

EPA's Third Five-Year Review of the Upper Hudson River Cleanup

Hudson River PCBs Superfund Site

January 2025

Third Five-Year Review Report Overview

The U.S. Environmental Protection Agency reviewed the last five years of monitoring data from the cleanup of polychlorinated biphenyls (PCBs) from the Upper Hudson River and provided an opportunity for the public to comment on its findings.

The PCB levels in water and fish are going down overall, but more fish data is needed before a determination can be made about whether the cleanup in the upper river is meeting the expectations of the original cleanup plan. The EPA expects to make a determination in an addendum to be issued no later than the end of 2027.

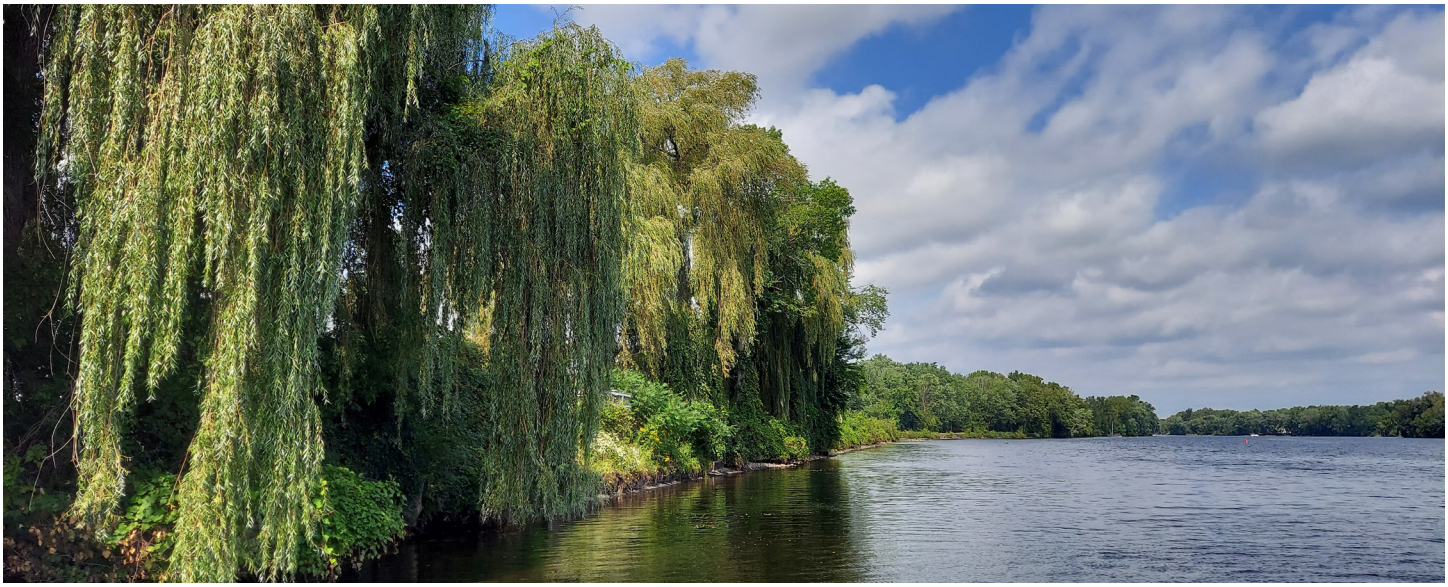
The EPA's cleanup plan included fish, water and sediment sampling after dredging to track the recovery of the river over time. During the review, the EPA looked at all of the water, fish and sediment data collected between 2016-2021, and the fish data from 2022.

The cleanup plan also included reconstructing habitats impacted by the dredging, which involved extensive seeding and planting. The EPA is continuing to require habitat monitoring until project goals are met.

General Electric Company (GE) conducted the cleanup work in the Upper Hudson River between 2009-2015 under EPA oversight.

Third Five-Year Review Report: At a Glance

- The EPA needs a minimum of eight years of fish data after dredging to begin to draw science-based conclusions about the rate of recovery in the fish and the EPA still does not have that.
- The eighth year of fish data was collected in 2024. The results of that sampling will be available in 2025.
- The EPA will also be collecting additional sediment data to evaluate the rate of recovery of river bottom sediment. The next sediment sampling is in 2026.
- However, the EPA could make a protectiveness determination sooner based on the fish data. Evaluating the water and sediment data helps the EPA evaluate the overall recovery of the river.
- The concentration of PCBs in Hudson River water coming into the dredged area from upstream are very low, as expected.
- The stone and gravel caps placed on some areas of the river bottom during dredging to isolate PCBs from the surrounding environment remain in place.
- Because the latest report identifies several uneven patterns of recovery, the EPA is proposing special studies to look more closely at water, fish and sediment in specific areas of the river.
- Fish consumption advisories and fishing restrictions are a part of the cleanup plan the EPA selected for the Upper Hudson River in 2002 and will continue to be necessary to protect people's health.



What is a Five-Year Review?

The EPA reviews Superfund cleanups every five years to make sure that they are working as intended and protect people's health and the environment. These regular reviews are required by federal law when contaminants remain at a site and begin five years after cleanup construction work starts on a project.

During the review, the EPA determines if the cleanup work is functioning as intended, if the assumptions made at the time of the cleanup decision are still valid, and if new information calls into question the effectiveness of the cleanup work.

If the EPA identifies any issues during the review that could affect the protectiveness of a cleanup, the EPA makes recommendations to address them. These recommendations could include additional studies to gather more information or specific cleanup actions.

This is the third five-year review for the Upper Hudson River cleanup.

What part of the river does this review cover?

The EPA selected its two-part cleanup plan for the Upper Hudson River in 2002, which called for targeted environmental dredging in a 40-mile section of the Upper Hudson River, followed by an extended period of natural recovery – a gradual period of improvement in water, fish and sediment that EPA projected would occur over a more than 50-year timeframe.

The first part of the cleanup – dredging – substantially reduced the mass of PCBs in the Upper Hudson River. GE removed about 2.7 million cubic yards of PCB-contaminated sediment between 2009 and 2015 under a legal agreement with the Agency.

The second part of the cleanup – natural recovery – is ongoing. Long-term monitoring is underway to track the recovery of the river over time. This includes ongoing water, fish and sediment sampling, and monitoring of reconstructed habitats (plantings) and the stone and gravel caps that were placed in some areas of the river bottom after dredging where PCBs remained.

The EPA also looked at areas of PCB-contaminated sediment that became exposed after river water level dropped when the Fort Edward Dam was removed in 1973. These areas, called the remnant deposits, are now capped, maintained, and monitored.

Other EPA investigations for the Superfund site (Upper Hudson River floodplain and Lower River investigation) are ongoing and are not part of this Five-Year Review.

What is the cleanup goal? Reducing PCB Levels in Fish

The primary purpose of the Upper Hudson River cleanup plan that the EPA selected in 2002 was to reduce PCB levels in fish and protect the people and wildlife that eat the fish. The cleanup plan set a goal for people being able to fish from the river once a week. The EPA projected that meeting that goal will require more than 50 years of natural recovery time after dredging was completed.

Why does the EPA need more fish data?

The EPA uses statistical analysis to evaluate water, fish and sediment sampling data to identify patterns and trends. EPA has good quality data, but we need at least eight years of fish data to see a trend.

As expected, some fish are recovering faster than others. A statistical analysis provides a better understanding of how the cleanup actions are working. This is important so that the EPA can tell if the project is on track to meet the goals of the original cleanup plan.

In the Third Five-Year Review, the EPA is Proposing Follow-Up Actions

During the five-year review process the EPA identified several areas where the Agency determined more information is needed. The report also includes additional follow-up items. The issues, recommendations, and follow-up items are discussed below.

Additional Information Needed

There is not enough data available since dredging ended in 2015 to draw scientifically reliable conclusions about the rate of recovery in the fish, water and sediment. The project will continue to collect data as part of the long-term monitoring phase of the cleanup.

Special Studies – Potential Differences in Fish Recovery

The current data shows that some types of fish and certain areas of the river are recovering differently. The EPA will conduct special studies to look into why this is occurring.

Special Studies – Localized Areas of Remaining PCBs in Soil/Sediment

The EPA will look more closely at floodplain soil and river bottom sediment in certain areas. The EPA's focus will be areas with elevated PCBs that could contribute to the uneven recovery of the river.

Supplemental Fish Collection to Inform Fish Advisories

The NYSDOH fish consumption advisories and restrictions are designed to help inform people about the risks from eating fish contaminated with PCBs to reduce the risk from people eating the fish that they catch. For NYSDOH to make adjustments to the advisories and restrictions, the project will need to collect and test additional types of fish for PCBs. The EPA also recommends testing the whole fish, rather than just the part that people typically eat (the fillet), to evaluate potential exposure to PCBs by animals like mink and otter.

Ecological Risk: Collection of Additional Fish

The EPA needs more PCB data on largemouth bass (the whole fish) and spotttail shiner. The EPA is planning to collect this fish data over the next few years.

New York State Hudson River Fish Consumption Restrictions & Advisories

Fish consumption advisories and fishing restrictions are a part of the cleanup plan the EPA selected for the Upper Hudson River in 2002 and are often needed during the recovery period at Superfund sites.

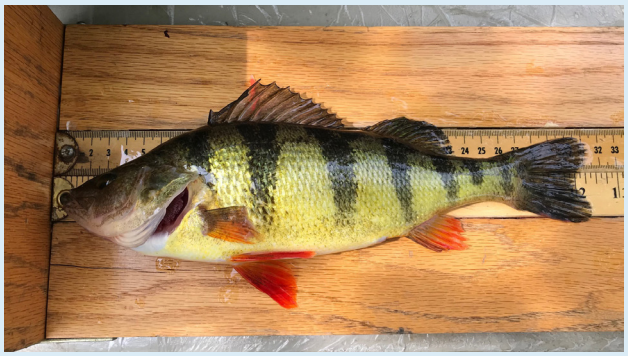
New York State has fishing advisories and restrictions in place to help inform the public of the health risks associated with eating fish contaminated with PCBs in the Upper Hudson River (between the Federal Dam at Troy and Bakers Falls in the Village of Hudson Falls).

The EPA's 2002 cleanup plan established interim targets for PCB concentrations in fish that may allow New York State to loosen the fishing advisories and restrictions over time.

New York State advises that the general population can eat some types of fish and crab that they catch in the Lower Hudson River. However, sensitive populations, including people who can have children and children under 15, should not eat any fish from the Upper and Lower Hudson River (between the South Glens Falls Dam in Warren County and the Battery in New York City). The New York State advice about the type and amount of fish and crab that people can eat is available on the New York State Department of Health webpage.

Fish consumption restrictions and advisories are only effective if people follow them. The EPA is supporting the New York State fish advisory education and outreach program.

Visit the NYSDOH Hudson Fish Advisory Outreach Project webpage for the latest advisory information and to learn more about the outreach program.



Additional Follow-Up Items: Ongoing/Planned

Protecting the Caps

During dredging, workers placed stone caps on some areas of the river bottom to isolate PCBs from the surrounding environment. The EPA will coordinate with New York State to ensure that information about the location of the caps is available to the public to limit the potential for damage to the caps or planted areas.

Rogers Island High Flow Study

The Rogers Island water monitoring station is located upstream of the area where dredging took place and downstream of the former GE plant sites and remnant sites. Understanding PCB concentrations in water when the river is flowing high in this area is important to understanding the overall recovery of the river. This area is currently monitored regularly during normal river flows. The EPA will do a special study of the water near Rogers Island during high-flow conditions.

Mohawk River Sampling Study

The Mohawk River is a tributary that flows into the Upper Hudson River at its downstream end near Waterford, New York. The EPA will get more samples from this tributary to support the EPA's evaluation of the recovery of the river.

Passive Sampler Study

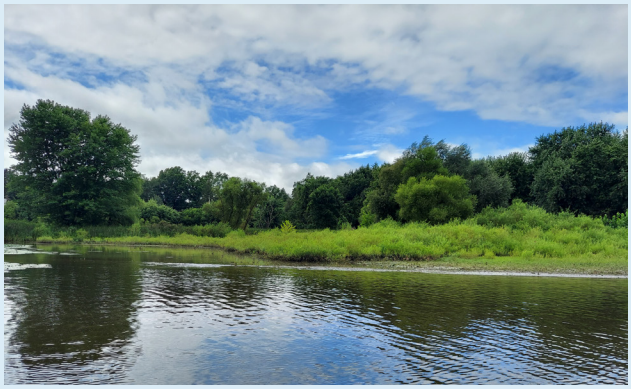
PCB levels in water after dredging are low and declining. Additional information about PCB levels in water in certain areas of the river will help the EPA with its evaluation of any uneven recovery of the river. Passive sampling devices are used to measure PCB levels in water. GE conducted a passive sampler study in 2023 and the EPA is evaluating that data.

Dissolved and Particulate Organic Carbon Study

PCBs tend to attach to organic particles in the river. The EPA will evaluate the amount of PCBs that move downstream attached to the organic particles.

About the Hudson River PCBs Superfund Site

Over a 30-year period, ending in the late 1970s, General Electric Company (GE) discharged PCBs from two manufacturing plants located in Hudson Falls and Fort Edward, New York. PCBs contaminated river sediment, surface water, groundwater, wildlife, and floodplain soil of the Hudson River. In 1984, 200 miles of river, between Hudson Falls and the Battery in New York City, was placed on EPA's National Priorities List of the country's most contaminated hazardous waste sites.



The Hudson River PCBs Superfund site encompasses a nearly 200-mile stretch of the Hudson River from Hudson Falls, New York, to the Battery in New York City. The site is divided into two major areas: the Upper Hudson River, which runs from Hudson Falls to the Federal Dam at Troy (a distance of approximately 40 miles); and the Lower Hudson River, which runs from the Federal Dam at Troy to the southern tip of Manhattan at the Battery in New York City.

The EPA is working on multiple fronts throughout the Superfund site to continue to hold GE accountable for the PCBs that came from its manufacturing plants in Hudson Falls and Fort Edward, New York.

For More Information

For more information, call toll-free or email the EPA Region 2 Hudson River Office. More information about the Hudson River PCBs Superfund site is also available online: www.epa.gov/hudsonriverpcbs.

Larisa Romanowski, Public Affairs Specialist
Gary Klawinski, Project Director
EPA Region 2 Hudson River Office
187 Wolf Road, Suite 303, Albany, NY 12205
(518) 407-0400 or (866) 615-6490 Toll-Free
www.epa.gov/hudsonriverpcbs
romanowski.larisa@epa.gov or klawinski.gary@epa.gov