

Fact Sheet: Hudson River PCBs Superfund Site Cleanup and Natural Resource Damage Assessment and Restoration

The Environmental Protection Agency and Hudson River Natural Resource Trustees work together, but have separate responsibilities under the Comprehensive Environmental Response, Compensation, and Liability Act, commonly referred to as “Superfund.”



The Environmental Protection Agency (EPA) is the lead agency for cleanup of the Hudson River PCBs Superfund site. EPA estimates that over a 30-year period ending in the late 1970s, an estimated 1.3 million pounds of PCBs entered the river from two General Electric (GE) capacitor manufacturing plants located in Fort Edward and Hudson Falls, New York. PCBs have contaminated the sediments, surface water, groundwater, wildlife, and floodplain soils of the Hudson River.

In February 2002, the EPA finalized a Record of Decision (ROD) for the Hudson River PCBs Superfund Site that calls for targeted environmental dredging of approximately 2.65 million cubic yards of PCB-contaminated sediment from a 40-mile section of the Upper Hudson River. The two-phase dredging project began in 2009.

- The EPA’s remediation (or cleanup) is designed to reduce present and future threats to human health and the environment.
- GE is performing the dredging under the terms of a 2006 legal agreement, under EPA oversight.



The Hudson River Natural Resource Trustees are conducting a natural resource damage assessment (NRDA). PCBs released from GE facilities in the Upper Hudson River have injured the public’s natural resources for over 200 miles, from Ft. Edward to New York City. The NRDA process measures environmental harm caused by PCB pollution, and seeks “damages” (e.g., funding, restoration projects) from the responsible party (GE) to restore injured habitats and resources.

- Natural Resource Trustees’ responsibility: Restoration of injured natural resources. The goal is to measure past, present and future resource injuries and lost uses from the PCBs and the cleanup remedy itself, and develop a plan to restore these resources.
- GE’s potential liability for natural resource damages will be resolved through a negotiated settlement or litigation. The actions taken by GE under the ROD do not resolve GE’s potential liability for natural resource damages.

Who are the Hudson River Natural Resource Trustees?

The New York State Department of Environmental Conservation, the Department of Commerce/ National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of the Interior/U.S. Fish and Wildlife Service (USFWS)





The EPA's focus is Remediation

What is the EPA doing now?

Overseeing the dredging project: The EPA is overseeing the second phase of dredging in the Upper Hudson River. Dredging occurs 24 hours a day, 6 days a week between May and November, when the Champlain Canal is open for the season. In the off-season the EPA reviews technical documents for the upcoming dredging season, which include plans for in-river dredging, habitat reconstruction, and cultural resources assessments.

What will the EPA do next?

Evaluate contamination in the floodplain:

As part of the Hudson River cleanup, the floodplain of the Upper Hudson River is also being evaluated for the presence of PCBs. Since 2002, the EPA and GE have collected over 7,000 soil samples from floodplain areas of the Hudson River between Fort Edward and Troy, New York. Under a September 2014 agreement with the EPA, GE will conduct a comprehensive study (Remedial Investigation/Feasibility Study) that will further evaluate PCB contamination in the floodplain. This study will include an evaluation of human and ecological risks and potential long-term cleanup solutions.

Next Steps: What happens when dredging ends?

Long-term monitoring and facility decommissioning: It is anticipated that dredging could be completed during the 2015 dredging season. The remaining in-river work associated with habitat reconstruction and the closing of the Fort Edward, New York, sediment dewatering



The Trustees' focus is Restoration

What are Trustees doing now?

Completing injury assessment work, measuring the injuries to natural resources caused by PCB contamination and the physical harm to habitat and biota (plants and animals) from the remedy. Trustees have already published multiple Injury Determination Reports describing harm caused by PCB contamination. Knowing the scope of injuries is essential to determining the restoration required.

Identifying, scaling and evaluating restoration alternatives and laying the groundwork for developing the restoration planning documents that will be prepared in the future. Trustees are engaged in the ongoing process of determining how much restoration is required to compensate for injuries to natural resources.

What will Trustees do next?

Resolve the claim: The Trustees will work to resolve the damage claim either by reaching a negotiated settlement with the responsible party, or through litigation. Most NRDA cases are settled without lawsuits.

Develop a Restoration Plan: The Trustees continue to invite the public to submit proposed restoration activities. The Trustees will consider the submittals in their restoration planning process. Once the claim is resolved, the restoration activities will be implemented according to the restoration plan.



and processing facility will follow the dredging. Once dredging activities are complete, the EPA and GE will initiate a long-term Operation, Maintenance, and Monitoring (OM&M) program. This program will include ongoing monitoring of the caps that were placed in some areas of the river to isolate remaining PCBs, as well as long-term water quality and fish sampling. Monitoring will also be conducted after habitat reconstruction activities are completed to assess the reestablishment and growth of any planted material and recolonization of these areas by local plants and macroinvertebrates. Once the last of the dredged material at the sediment processing facility has been transported off-site, decommissioning of the facility will begin.

Five Year Review: Under the Superfund law, five-year reviews are required when hazardous substances, pollutants or contaminants remain at the Site that would not allow for unrestricted use. The purpose of the five-year review is to ensure that implemented remedial actions are working as intended and are protective of human health and the environment. The first five-year review for the Hudson River dredging project occurred in 2012 and concluded that the cleanup is meeting, or is expected to meet, the goals that were set by the EPA for the project. The next five-year review is expected to be completed by April 2017.



Next Steps: What happens when dredging ends?

Trustees will continue to measure injuries from the remaining PCB contamination.

Trustees will also measure injuries that resulted from the remedial action. Injuries can arise from dredging and subsequent capping or backfilling as well as habitat reconstruction. For example, habitat areas reconstructed after dredging, capping, and/or backfilling require time to attain the same quality and characteristics and usage as existed prior to remediation, so there are losses associated with the recovery period. These losses also apply to organisms, such as freshwater mussels that die from being removed or buried during dredging, and that take time to re-populate areas affected by the remediation.

Even with the remediation and habitat reconstruction and replacement ongoing in the Hudson River, natural resources will continue to be exposed to the PCBs that remain unremediated in the river and on the floodplain and will continue to be adversely affected as a result of that exposure. The public's use of those resources will continue to be impaired.

Remaining PCB Contamination:

A closer look at the role of the EPA and the Trustees

The objectives of the Hudson River PCBs Superfund cleanup are to reduce risks to people and the environment (including wildlife) by lowering PCB levels in fish, reduce the level of PCBs in Hudson River water, reduce the mass of PCBs in sediment to which biota (plants and animals) can be exposed, and minimize the downriver transport of PCBs. However, PCB-contaminated sediments will remain in the Hudson River after the dredging remedy is complete, especially in River Sections 2 (from the Thompson Island Dam to the Northumberland Dam) and 3 (from the Northumberland Dam to the Federal Dam at Troy), where the PCB trigger level for cleanup is higher than in River Section 1 (from the former Fort Edward Dam to the Thompson Island Dam). The term “residual PCB contamination” is used to refer to those PCBs in sediments that will not be removed by dredging.

The EPA has determined that additional dredging is not necessary to achieve the Superfund cleanup goals. However, the EPA believes that the cleanup goals could be achieved more quickly if additional dredging were carried out, particularly where there are more PCBs in the surface sediment than originally known at the time of the ROD.

The EPA supports efforts by the Trustees to address such greater potential injury. The EPA and federal and state Natural Resource Trustees are continuing to cooperate and communicate on the Hudson River cleanup.

Contact us: Hudson River Natural Resource Trustees:



- **Tom Brosnan (NOAA), 301-713-3038 x186; Tom.Brosnan@noaa.gov**
www.darrp.noaa.gov/northeast/hudson
- **Kathryn Jahn (USFWS), 607-753-9334; Kathryn_Jahn@fws.gov**
www.fws.gov/contaminants/restorationplans/HudsonRiver/index/html
- **Sean Madden (NYSDEC), 518-402-8977; sean.madden@dec.ny.gov**
www.dec.ny.gov/lands/25609.html

Contact us: Environmental Protection Agency



If you would like information on general environmental concerns or the federal Superfund hazardous waste program, have concerns or complaints about the Superfund program, or if you seek assistance in resolving site-specific issues that were not fully addressed by the EPA, please contact:

- **George Zachos (EPA Regional Public Liaison), 732-321-6621 or toll-free 888-283-7626; zachos.george@epa.gov**
<http://www2.epa.gov/aboutepa/epa-region-2>

