

# FACT SHEET

## HUDSON RIVER REMEDIAL INJURY DETERMINATION



The Hudson River Natural Resource Trustees – New York State, the U.S. Department of Commerce, and the U.S. Department of the Interior – are conducting a natural resource damage assessment (NRDA) to determine how polychlorinated biphenyls (PCBs) released from the General Electric Company (GE) plants at Fort Edward and Hudson Falls, New York harm the Hudson River’s natural resources.

### **GE’s Dredging Injured Natural Resources**

Following the 2002 Record of Decision (ROD) issued by the U.S. Environmental Protection Agency (EPA) and subsequent consent decrees between EPA and General Electric, GE was required to dredge PCB contaminated sediments from parts of the Hudson River PCB Superfund Site between Fort Edward and Troy, NY. While dredging was important and necessary to remove harmful PCBs from the Hudson River, the physical dredging of sediments also had significant adverse ecological effects on the river’s natural resources. The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and its implementing regulations, which outline the NRDA process, include injuries that result from the “response action” (i.e., “the cleanup”). The cleanup, which included dredging and subsequent capping and/or backfilling of the Hudson River, harmed wetlands, aquatic vegetation beds, and native freshwater mussels. As part of the dredging remedy, GE also trimmed and removed trees to safely access nearshore areas. Each of these harmed natural resources plays an important role in the environment of the Hudson River and the Trustees are releasing an injury determination report titled, [\*Determination of Injury to Natural Resources from Remedial Activities on the Hudson River: Riverine Fringing Wetlands, Aquatic Vegetation Beds, Shoreline Trees, and Native Freshwater Mussels\*](#)

### **How Did the Trustees Determine Injury?**

GE was required to design, reconstruct, monitor, and adaptively manage habitat disturbed or destroyed during the cleanup. The Trustees primarily used GE’s 2016 Habitat Reconstruction Ledger and other GE technical documents to determine that wetlands, aquatic vegetation beds, and shoreline trees were injured. The Habitat Reconstruction Ledger showed how much area of wetlands and aquatic vegetation beds were removed during the dredging and how much area of these habitats were reconstructed by GE. In other technical documents, GE recorded the location, species, condition, and size of trees that were removed or trimmed to access nearshore areas for dredging. To determine that native freshwater mussels were injured, the Trustees conducted surveys in 2013 and 2015 of the native freshwater mussel community in five of the eight Hudson River pools affected by remediation and in an upstream reference pool. The Trustees used mussel density in dredged areas relative to previous conditions and areas outside of the dredging boundaries to make an injury determination.

## What was injured?

Any wetlands or aquatic vegetation beds that overlapped with areas of sediment dredging were destroyed. According to GE's Habitat Reconstruction Ledger and other technical documents, 30 acres of wetlands and 133 acres of aquatic vegetation beds were destroyed during the remedy, and more than 3000 trees were trimmed or removed. The Trustees' mussel surveys in the Upper Hudson River generally found very high densities of mussels in areas surveyed before they were dredged and in areas outside of dredging boundaries. GE's dredging of sediment resulted in the death of mussels through physical removal or burial by subsequent backfilling and capping activities. In areas that had been dredged, the Trustees found that the backfill and cap material was generally unsuitable for native mussels to recolonize, survive, grow and reproduce, and very few mussels were present. Based upon the observed mussel densities in the Hudson River, the Trustees preliminarily determined that the number of mussels destroyed by GE's dredging is over 50 million.

## Didn't GE Fix the Habitat After Dredging?

GE was required to reconstruct wetlands through placement of backfill, seeding, and planting. GE placed backfill in some areas supporting aquatic vegetation beds prior to dredging but the reconstruction effort intentionally left some areas of the river deeper. GE actively planted some aquatic vegetation beds while others were left to passively recolonize through natural processes. Monitoring of the reconstructed habitats along the Hudson River indicates that many wetlands and aquatic vegetation beds are not recovering as planned. GE was not required to replace most of the trees and shrubs that were cut along the Hudson River shoreline, and many of these areas have reduced canopy cover compared to nearby uncut shorelines. GE was not required to do any benthic habitat enhancement or restoration specifically for native freshwater mussels destroyed during the cleanup. Reconstructed habitats (wetlands, aquatic vegetation beds, shorelines) and other natural resources impacted by the remedy (e.g., mussels) will take decades before they provide the same ecological function as they did prior to their removal. GE is still liable for injury to and damages compensating the public for restoration of these natural resources under the DOI regulations covering NRDA, even though a habitat reconstruction program was part of the ROD.

## What Happens Next?

GE's dredging harmed the natural resources of the Hudson River to varying degrees and the loss of these resources constitutes a natural resource injury under federal law and regulation. A final quantification of the amount of injury, including interim losses, will be provided in a subsequent report.

## New Hudson River Natural Resource Damage Assessment Documents Website:

<https://www.diver.orr.noaa.gov/web/guest/diver-admin-record/6306>





**Contact Us:**

**Tom Brosnan, National Oceanic and Atmospheric Administration**

[Tom.Brosnan@noaa.gov](mailto:Tom.Brosnan@noaa.gov); 240-533-0431

<https://darrp.noaa.gov/hazardous-waste/ Hudson-river>

**Kathryn Jahn, U.S. Fish and Wildlife Service**

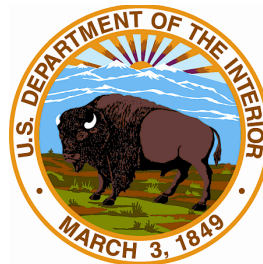
[Kathryn\\_Jahn@fws.gov](mailto:Kathryn_Jahn@fws.gov); 607-753-9334

<http://www.fws.gov/northeast/ecologicalservices/hudson.html>

**Sean Madden, New York State Department of Environmental Conservation**

[Sean.Madden@dec.ny.gov](mailto:Sean.Madden@dec.ny.gov); 518-402-8977

<http://www.dec.ny.gov/lands/25609.html>



**NEW YORK**  
STATE OF  
OPPORTUNITY.

**Department of  
Environmental  
Conservation**