Background

The National Oceanic and Atmospheric Administration (NOAA), the New York State Department of Environmental Conservation (DEC), and the U.S. Fish and Wildlife Service (USFWS) are assessing the impacts from polychlorinated biphenyls (PCBs) on the Hudson's natural resources. This process is called a "Natural Resource Damage Assessment."

Are PCBs in the Hudson still a problem?

PCBs (a class of chemicals previously used in manufacturing) have polluted the Hudson River environment since the late 1940s. Two General Electric facilities located in Fort Edward and Hudson Falls, New York, released between 209,000 and 1.3 million pounds of PCBs into the Hudson River. GE stopped using PCBs in 1977 because the manufacture and sale of PCBs in the U.S. was banned under the Toxic Substances Control Act. Unfortunately, high levels of PCBs remain in river sediments and PCBs are still seeping from the bedrock beneath the GE Hudson Falls facility into the river. Humans, fish, birds, and mammals living in or near the Hudson River continue to be exposed to PCBs.

PCBs are a major concern because they last in the environment for many decades and accumulate in living creatures, posing health hazards to mammals, fish, birds, and wildlife habitat. Monitoring studies estimate that PCBs will continue to contaminate fish for many years. PCBs also affect the public's use and enjoyment of the river. From 1976 to 1995, all fishing was banned in the Hudson for 40 miles between Hudson Falls and the Troy dam; this area is now catch and release only. For the remainder of the river, the New York State Department of Health continues to advise women and children not to eat fish from the river and various consumption advisories are in effect for the general population. Commercial fishing in the Hudson also remains banned today.

What is a Natural Resource Damage Assessment?

It is an investigation performed by federal, state, and tribal governments whose goal is to identify and measure injuries to natural resources—and the services these resources provide. The primary goal of a natural resource damage assessment is to restore injured resources. For the Hudson, NOAA, DEC, and USFWS are natural resource "trustees" serving on the public's behalf to assess and restore injured natural resources.

Which natural resources and services are injured?

Trustees have identified possible ecological injuries to fish, birds, wildlife, sediments, groundwater, surface water quality, and floodplains. In addition, trustees are also examining potential injury to lost uses of the Hudson, such as recreational fishing.

NOAA, DEC, and USFWS have already begun some studies to assess injuries; other studies are still being considered.

How does the trustees' work differ from EPA's?

EPA and the trustees have distinct, though complementary, objectives at a hazardous waste site. EPA's efforts focus on cleaning up or containing the hazardous substances and protecting human health and the environment. The trustees-in this case, NOAA, DEC, and USFWS-focus on the protection and restoration of natural resources and the services these resources provide. Trustees are assessing the past, current, and potential future harm to the resources and planning restoration actions. Restoring injured natural resources is the goal of a NRDA. The trustees also have been working closely with EPA in the Superfund remedial process to develop a comprehensive remedy for the Hudson River site that will protect and enhance natural resource recovery.



What kind of restoration might occur for Hudson River?

The exact type and amount of restoration depends on data and results developed from the injury assessment. Possible restoration projects might include habitat improvements such as wetlands enhancement or creation, reduction of pollutant loads, enhancing fish populations, developing nature trails and acquiring land to enhance river access and address injuries to lost uses.

NRDA Next Steps

In late Fall 2000, trustees will have a better sense of all of the types of studies that will be done to evaluate and document injuries to natural resources and will release a draft Natural Resources Damage Assessment Plan. Below is a graphic that depicts the entire NRDA process. The Hudson River trustees are currently in the Injury Assessment/Restoration Planning phase of the Hudson River damage assessment.

We need your help

The trustees would like to hear your ideas for possible restoration projects in the Hudson Valley. Please tell us about habitats (wetlands, streams, etc.) or resources (species of fish, birds or other wildlife, for example) that could be restored or enhanced. We'd also like to hear about specific sites that you think require restoration or protection.

If you have ideas about possible restoration projects, want more information about the Hudson River NRDA, or have specific questions please contact:

Lisa Pelstring at NOAA

(301) 713-3038 x195 Lisa.Pelstring@noaa.gov

Larry Gumaer at NYSDEC

(518) 457-7765 lwgumaer@gw.dec.state.ny.us

or visit the websites below and fill out a restoration proposal form:

www.dec.state.ny.us/website/dfwmr/habitat/nrd/index.htm www.darp.noaa.gov/neregion/hudsonr.htm

Natural Resource Damage Assessment: A Three-Phase Process

I. Preliminary Assessment

After an oil spill or hazardous substance release, trustees examine data collected by the emergency response agency, use aerial photography to estimate the extent and duration of the injury, and/or refer to scientific literature about the released substance and impact on resources. Trustees determine whether natural resources have been injured. If injuries and restoration options exist, trustees proceed to the next phase. Those responsible for the release are invited to participate.

II. Injury Assessment/ Restoration Planning

Trustees quantify injuries to natural resources and their services, and use that information to determine the need for and scale of restoration actions. This phase provides the link between injury and restoration and has two components: (see sidebar, right).

Restoration actions are either primary or compensatory. Primary restoration projects return the injured natural resources and their services to the condition they were in before the release. Compensatory restoration projects compensate the public for the loss of natural resources and services from the time of the release to full recovery.

The trustees seek public input on restoration options and the restoration plan.

a. Injury Assessment: determine the full nature and extent of injuries to natural resources and their services

b. Restoration Planning: develop a plan for restoring the injured natural resources and services—identifying, evaluating and selecting from a range of restoration options

III. Restoration Implementation

Trustees, often working with those responsible for the release and interested citizens, implement restoration plans. Restoration may include a wide range of projects, such as replanting marshes or wetlands, stabilizing injured coral reefs, or improving water quality by increasing submerged aquatic vegetation. Trustees are responsible for ensuring that restoration gets done - either by directly implementing projects or overseeing the responsible party's implementation of projects. NRDA restores natural resources with funding from those responsible for the harm making sure the polluter pays for injuries to public natural resources.