NOAA Damage Assessment and Restoration Program

Natural Resource Damage Assessment

Three tanker ships collide, spilling more than 300,000 gallons of oil near Tampa Bay—injuring mangroves, oyster reefs, marshes, fish, birds, and other wildlife. PCBs contaminate the Hudson River, restricting fishing and degrading water quality and river sediments for decades. Mining activity contaminates the Salmon River, decimating chinook salmon and steelhead populations in Idaho.

The National Oceanic and Atmospheric Administration (NOAA) acts as a trustee on behalf of the public to restore coastal and marine resources injured after such events. Through its Damage Assessment and Restoration Program (DARP), NOAA conducts a natural resource damage assessment (NRDA) after an oil spill or hazardous substance release.

What is NRDA?

NRDA is a process to determine the nature and extent of injuries to natural resources and the restoration actions needed to reverse these losses. Although the concept of assessment and restoration may sound simple, understanding complex ecosystems, the services these ecosystems provide, and the injuries caused by oil or hazardous substances takes time—often years. NOAA's goal in an assessment is to restore natural resources.

Who are trustees?

Trustees protect, manage, and restore the natural resources that are held in trust for current and future generations. Trustees include the U.S. Departments of Commerce, Interior, Defense, Agriculture, and Energy; state agencies; and Native American tribes.

NOAA is the lead federal trustee for coastal and marine natural resources. NOAA's trust resources include—

- Commercial and recreational fisheries,
- Fish like salmon that spawn in freshwater and migrate to the sea,
- Endangered and threatened marine species,
- Marine mammals,
- Wetlands, mangroves, seagrass beds, coral reefs, and other coastal habitats, and
- All natural resources associated with National Marine Sanctuaries and National Estuarine Research Reserves.

How does NRDA work?

After a spill or hazardous substance release, experts from NOAA's DARP identify—

- Injured natural resources and the loss of their services (e.g., recreational uses),
- Type and amount of restoration required, and
- Best methods to achieve restoration.

NOAA works cooperatively with other natural resource trustees and, when possible, the party responsible for the pollution. The NRDA process promotes cost-effective assessment and restoration—benefiting the public, the responsible party, and the environment.

After an oil spill or hazardous substance release, NOAA conducts the following steps to identify injuries and restore resources:

1 >>>> Preliminary Assessment

Natural resource trustees determine whether injury to public trust resources has occurred. Their work includes collecting time-sensitive data and reviewing scientific literature about the released substance and its impact on trust resources to determine the extent and severity of injury. If resources are injured, trustees proceed to the next step.

2 >>>> Injury Assessment/Restoration Planning

Trustees quantify injuries and identify possible restoration projects. Economic and scientific studies assess the injuries to natural resources and the loss of services. These studies are also used to develop a restoration plan that outlines alternative approaches to speed the recovery of injured resources and compensate for their loss or impairment from the time of injury to recovery.

3 >>>> Restoration Implementation

The final step is to implement restoration and monitor its effectiveness. Trustees work with the public to select and implement restoration projects. Examples of restoration include replanting wetlands, improving fishing access sites, and restoring salmon streams. The responsible party pays for the costs of assessment and restoration and is often a key participant in implementing the restoration.

NOAA acts as a trustee on behalf of the public to restore coastal and marine resources injured by oil spills and hazardous substance releases. To learn more, please contact—

Lisa Pelstring, NOAA–DARP
1305 East-West Highway, SSMC4
Silver Spring, MD 20910
301.713.3038 x195
fax 301.713.4387
Lisa.Pelstring@noaa.gov

www.darp.noaa.gov

2002

Printed on recycled paper.