

Environmental Restoration Through Natural Resource Damage Assessments

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Though not in widespread use throughout the Southwest United States, natural resource damage assessments (NRDA), which provide mandated funds to restore contaminated natural resources, are being employed more and more frequently throughout the country. As environmental restoration becomes an increasingly important goal for public agencies charged with natural resource use, conservation, and preservation, we expect to see the use of NRDA's continue to increase.

Congress authorized NRDA's in 1977, giving public agencies the authority to restore natural resources with funds collected from parties responsible for the contamination. Although this statutory authority has existed and expanded for 25 years, the growing need for, and popularity of, environmental restoration has focused new attention on NRDA's, especially because the statutes require that monies recovered from responsible parties be used for restoration or to pay for assessment costs.

Under the Clean Water Act, the Superfund Law, and the Oil Pollution Act, public plaintiffs designated as natural resource trustees by the president, the governors, or tribes can bring suit against parties responsible for releasing oil or hazardous substances that cause damage to natural resource. An NRDA is the legal or regulatory basis for bringing

such a claim. Natural resource trustees often follow optional federal regulations written by the U.S. Department of the Interior (DOI) (see related article on p. 19) and the National Oceanic and Atmospheric Administration (NOAA) when conducting an NRDA. Usually, an NRDA includes detailed descriptions of responsible parties, hazardous substances released, environmental pathways to natural resources, injuries to natural resources, economic damages to the public, and environmental restoration necessary to make the public resource whole.

NRDA Authorities

The federal government, every state, and every federally recognized tribe has the authority to conduct NRDA's and seek damages in federal court; some states have also passed parallel statutes. The U.S. Fish and Wildlife Service (FWS) and NOAA are the two federal agencies that are delegated the most responsibility to conduct NRDA's, because they manage coastal and migratory natural resources that can be affected at many sites throughout the United States. However, federal land management agencies, such as DOI bureaus and the Departments of Agriculture, Defense, and Energy are also trustees. The governors of each state delegate state trustees, who typically have trusteeship over all natural resources within the state. Usually, departments of natural resources, environmental

protection, or justice are delegated, and multiple agencies may share trusteeship. Tribes usually have trusteeship over all natural resources within a reservation, but may also have trusteeship based on treaty rights. The level of NRDA activity varies widely among federal, state, and tribal agencies and regions.

Throughout the past, dramatic pollution events have often prompted Congressional actions that resulted in NRDA authorities. For instance, the flames of the Cuyahoga River in Ohio helped motivate enactment of the Clean Water Act; the discovery of a hazardous landfill below schoolchildren at Love Canal, New York enacted the Superfund Law; and the grounding of the Exxon Valdez in Prince William Sound, Alaska enacted the Oil Pollution Act. Each of these statutes emphasized source control or remediation but also included NRDA provisions in recognition that controls and remedies are often incomplete or time-consuming. In essence, NRDA's use environmental restoration to offset services lost through injury of resources that cannot be avoided through controls and remediation.

NRDA History

While work at a handful of high-profile sites has established much of the momentum and standard practice for conducting NRDA's, trustees have quietly reached many hundreds of settlements at the same time. A

history of prominent NRDA cases would probably start with New Bedford Harbor, Massachusetts, a 1980s case about PCBs and lobster consumption advisories in which NOAA established case law even before regulations were promulgated. One of the earliest and most prominent NRDA trials was led by the State of Montana regarding mining impacts to the Clark Fork River ecosystem in southwest Montana (see articles on pages 23-25). Additional phases of the trial may still take place, but over \$215 million is already available for restoration. The single largest NRDA, in terms of study and settlements, is the Exxon Valdez case, with approximately \$1 billion spent on assessment and restoration. Currently, negotiations and litigation are most prominent in the Coeur d'Alene Basin in Idaho (another mining site), in the Lower Fox River/Green Bay region in Wisconsin (a PCB site), and the Hudson River in New York, another PCB site.

Today, NRDA activities are being conducted in almost every region of the United States, led by various federal, state, and tribal agencies. The size and complexity of contamination at a site, the number of governmental jurisdictions, and the amount of consensus between trustees and responsible parties dictate a variety of scientific, economic, and legal approaches. Small sites with obvious sources of contamination and few jurisdictions almost always settle without litigation. Preparation for litigation is more common at larger, more complex sites, but actual litigation is rare even in these cases. At many sites, responsible parties pay monetary damages in exchange for covenants-not-to-sue, and trustees then determine how to spend the money on restoration. However, it is becoming more common for responsible parties to offer direct restoration as part of settlements, both to decrease uncertainties about cost and to participate more directly in providing the public with environmental restoration.

Issues in Southwest

In the Southwest, water quantity can be just as important as water quality in an NRDA. Although contamination of land, air, water, or biota can result in natural resource damages, water, in particular, provides some of the most important pathway mechanisms for hazardous substances, which can greatly expand the extent of injuries and damages. Furthermore, water attracts biota, which are the natural resources most likely to experience injuries of great importance

to the public. Finally, in arid regions, the best and most effective restoration opportunities often involve increasing the amount, duration, and accessibility of water to fish, wildlife, and humans.

In conclusion, NRDA's are likely to continue to be an important tool for public agencies to address contamination problems through environmental restoration in the 21st century. Many agencies have already developed programs to take advantage of these authorities, but at least as many have not. The juxtaposition of environmental contamination problems with restoration opportunities may provide agencies in

the Southwest with a significant opportunity to develop and use NRDA's, building on the experience of other agencies throughout the United States.

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Photo from Office of Response and Restoration, National Ocean Service, National Oceanic and Atmospheric Administration.