

**Natural Resource Damage Assessment and Restoration
Federal Advisory Committee Final Report**

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Natural Resource Damage Assessment and Restoration Federal Advisory Committee Final Report

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Natural Resource Damage Assessment and Restoration Federal Advisory Committee Final Report

Executive Summary

In May 2005, the Department of the Interior (DOI) chartered a Federal Advisory Committee to provide recommendations regarding its Natural Resource Damage Assessment and Restoration (NRDAR) activities, authorities, and responsibilities. The Committee, comprised of 30 members, represents a diverse group of interested stakeholders including state, tribal, and federal trustee agencies, and representatives of industry, academia, and environmental and public interest organizations.

The Committee Charter identified a number of specific objectives for advice on actions that can be undertaken to achieve faster, more efficient, and more effective restoration of injured natural resources and to promote cooperation among interested parties. The Committee has focused on actions within the purview of DOI's own authorities and responsibilities, rather than on actions involving obligations imposed on non-trustee federal agencies, or state or tribal entities.

DOI asked the Committee to consider four major parts of the NRDAR process: 1) Natural Resource Injury Determination and Quantification; 2) Restoration Action Selection; 3) Compensating for Public Losses Pending Restoration, and; 4) Timely and Effective Restoration *after* NRDAR Claims are Resolved. These four issue areas were chosen because they address persistent critiques and contention surrounding the NRDAR program and they represent specific provisions in the current DOI NRDAR Regulations.

Subcommittees were formed to analyze each of the above topics and presented detailed reports with recommendations to the full Committee. The full Committee considered and discussed the Subcommittee reports in two public meetings. The Subcommittee reports were not adopted by the full Committee, but contain additional valuable discussions and are attached as appendices to this report. A drafting team was charged with synthesizing consensus recommendations derived from the Subcommittee reports and preparing a final draft report. The full Committee reviewed, revised, and adopted this report at a public meeting.

In brief, key full Committee recommendations are that DOI should:

- Explicitly authorize trustees to use a "restoration-based approach" for all natural resource damages, including interim losses.
- Adopt procedures that promote coordination between response and NRDAR activities.
- Encourage early and continued consideration of appropriate restoration options in the NRDAR process.

- Sponsor a series of workshops, research papers, and symposiums to inform guidance on explicitly linking the scale of restoration to the nature and extent of the injury.
- Ensure that compliance by federal trustees with the requirements of the National Environmental Policy Act (NEPA) occurs concurrently with restoration planning.
- Identify and adopt department-wide categorical exclusions from NEPA for appropriate types of restoration actions.
- Revise the existing criteria for evaluating restoration alternatives to provide clearer guidance that will enhance trustee decision-making.
- Enhance its NRDAR partnerships, through improvements in grants, cooperative agreements, and contracting, consistent with the goals of Cooperative Conservation.
- Encourage the use of existing local and regional restoration plans and databases for use in NRDAR.

The Committee strongly urges DOI to implement these recommendations expeditiously through the tiered approach described in the final section of the report.

Overview

Introduction:

Natural Resource Damage Assessment and Restoration

Natural Resource Damage Assessment and Restoration (NRDAR) is the process used to determine whether public natural resources have been injured, destroyed, or lost as a result of a release of hazardous substances or oil and to identify the actions and funds necessary to restore such resources. NRDAR is authorized by federal statutes such as the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Clean Water Act (CWA), and the Oil Pollution Act (OPA). These statutes designate Federal, State, and Tribal government officials to act as “trustees” on behalf of the public to recover damages from responsible parties to restore injured, destroyed or lost natural resources.

NRDAR is not a fine or punishment. It is a process to address the cost of certain types of environmental harm. “Fault” and “negligence” are not an issue under the above-referenced NRDAR statutes. In fact, damages are strictly compensatory, and are measured by the cost to restore, replace, or acquire resources equivalent to those injured or by the economic value of the injury. Trustees are also authorized to seek compensation for the losses the public sustains pending the completion of restoration actions. These losses consist of impairments in public use and enjoyment of natural resources. All recoveries must be used to restore, replace or acquire the equivalent of injured natural resources.

DOI’s Authorities and Responsibilities

The Secretary of the United States Department of the Interior (DOI) is designated to act as trustee, on behalf of the public, for NRDAR claims involving natural resources managed or controlled by DOI. This includes federally owned minerals and federally managed water resources, migratory birds, anadromous fish, endangered species, marine mammals, national parklands, wilderness areas, national wildlife refuges, and the supporting ecosystems associated with these resources – as well as Indian reservations and tribal resources when DOI is acting on behalf of a federally recognized tribe. Additionally, the President has designated DOI – by virtue of its resource management expertise – to publish regulations pursuant to CERCLA, specifying “the best available procedures” for determining injury and appropriate restoration for natural resources harmed by releases of hazardous substances.

NRDAR Federal Advisory Committee

In May 2005, DOI chartered the NRDAR Federal Advisory Committee to provide advice and recommendations to DOI regarding its NRDAR activities, authorities, and responsibilities. The Committee was comprised of 30 members -- representing a diverse group of interested stakeholders – including state, tribal, and federal trustee agencies,

industry groups and potentially responsible parties, scientists and economists, and environmental and public interest organizations. The Committee Charter and DOI Deputy Secretary P. Lynn Scarlett identified a number of specific overall objectives regarding the advice that DOI would seek from the Committee.

Objectives:

The Committee has been asked to advise DOI on actions that can be undertaken to achieve faster, more efficient, and more effective restoration of injured natural resources by promoting cooperation – in lieu of costly and time consuming adversarial processes – among natural resource trustees and potentially responsible parties. A key component of such an approach is emphasizing restoration of injured resources over litigation and monetary damages. Other important issues that the Committee has been asked to examine in support of DOI's overall objective include coordination of NRDAR activities with other environmental protection authorities, the provision of clear procedures and standards for assessment reliability, and trustee accountability for the restoration and protection of public natural resources. A clear charge to the Committee from the outset was to focus on actions within the purview of DOI's authorities and responsibilities, rather than on actions that would require commitments of non-trustee federal, state, or tribal entities.

Recommendations and Analysis

Introduction:

The Four Questions

At the first meeting in November, 2005, DOI asked the Committee to consider four discrete parts of the NRDAR process: 1) Natural Resource Injury Determination and Quantification; 2) Restoration Action Selection; 3) Compensating for Public Losses Pending Restoration, and; 4) Timely and Effective Restoration after NRDAR Claims are Resolved. In order to focus discussions, DOI proffered a specific practical question related to each phase of NRDAR.

1. Natural Resource Injury Determination and Quantification

What are the best available procedures for quantifying natural resource injury on a population, habitat, or ecosystem level, as set forth in the DOI NRDAR Regulations at 43 CFR 11.71(l)? What guidance is appropriate for the utilization of these procedures?

2. Restoration Action Selection

Should DOI's NRDAR Regulations provide *additional* guidance – beyond the current factors to consider found at 43 CFR 11.82 – for determining whether direct restoration,

rehabilitation, replacement, or acquisition of equivalent resources is the best strategy for addressing natural resource injury?

3. Compensating for Public Losses Pending Restoration

Should DOI revise the NRDAR Regulations to allow for compensating for interim losses with additional restoration projects in lieu of monetary damages for the economic value of the loss? If so, how should project-based interim loss claims be calculated?

4. Timely and Effective Restoration after NRDAR Claims are Resolved

What measures should DOI consider to expedite restoration planning and ensure cost effective and efficient restoration *after* awards or settlements are secured?

Four Questions Background

The four specific questions representing each phase of the NRDAR process arose in the context of over 20 years of NRDAR practice experience at DOI. That experience includes input from a broad spectrum of NRDAR stakeholders and recognition of legislative, regulatory, and policy developments since DOI promulgated the current version of the CERCLA NRDAR Regulation. Particular issues considered include:

NRDAR Practice Evolution:

The federal statutes that authorize NRDAR provide a framework that relies ultimately on an adversarial legal process for resolving claims. Nevertheless, more than twenty years of practice experience has shown – with few exceptions – that restoration of injured resources can be achieved more quickly, more efficiently, and more effectively by focusing on restoration in lieu of monetary damages, and on cooperative approaches to assessing and addressing injury. As NRDAR practice has evolved, consensus-based approaches to dealing with scientific uncertainty, clear restoration-based objectives, and close coordination with a broad spectrum of environmental protection and natural resource conservation interests and authorities have proven to be the most successful strategies for achieving restoration and resolving claims.

Ohio v. DOI:

After DOI promulgated the original CERCLA NRDAR Regulations in 1986, they were challenged by a group of states, environmental groups, and industries. Ultimately the D.C. Circuit Court of Appeals invalidated a key component of the rule that set damages as the lesser of restoration costs or the lost “value” of the resource. The Court concluded that “CERCLA unambiguously mandates *a distinct preference for using restoration cost as the measure of damages.*” The Court also rejected the idea of a rigid hierarchy of permissible assessment methods. *See Ohio v. DOI*, 880 F.2d 432 (D.C. Cir. 1989).

Kennecott v. DOI:

In 1994 DOI promulgated a revised CERCLA NRDAR Regulation conforming to *Ohio v. DOI*. In 1996, the D.C. Circuit Court of Appeals upheld nearly all aspects of the revised rule over challenges by industry groups and the State of Montana. The Court did find, however, that references to measuring appropriate restoration by looking at both the functions (or “services”) the injured resources provided and the injured resources themselves were not adequately explained. DOI did state in the preamble to the 1994 regulation that it was not attempting any substantive change to its original approach – which provided that restoration is *performed* on resources themselves, but that the level of resource services provided is the yardstick for *measuring* how much restoration is needed. Therefore, the Court reinstated the original approach, while inviting DOI to clarify the issue. See *Kennecott v. DOI*, 88 F.3rd 1191 (D.C. Cir. 1996).

1990 OPA Regulations:

In 1996, NOAA issued final regulations for natural resource damage assessments for injuries resulting from oil spills, which are excluded from CERCLA. The Oil Pollution Act (OPA) Regulations at 15 C.F.R. Part 990 share many conceptual similarities with the CERCLA Regulations. A significant difference exists in how the respective rules treat compensation for interim losses pending restoration. Rather than including a damages component representing the economic *value* for interim losses, the OPA Regulations seek to focus the entire claim on the cost of implementing restoration projects that will both restore injured resources *and* compensate for lost human and ecological resource services pending restoration. Additionally, the OPA Regulations include specific guidance on integrating National Environmental Policy Act (NEPA) analysis into restoration planning and the utilization of existing restoration projects and regional restoration plans to address natural resource injuries when appropriate.

The CERCLA Reform Debate:

In years past, as Congress has considered legislative proposals to reform CERCLA, interested parties have suggested modifications to the statute’s natural resource damage provisions. These have included proposals to more explicitly link natural resource injury determination and quantification efforts to reliable and relevant data, to increase coordination of natural resource restoration and hazardous substance response actions, and to encourage a focus on restoration in lieu of economic damages.

CERCLA NRDAR Regulatory Review Issues:

CERCLA requires DOI to review and revise the NRDAR Regulations as appropriate, every two years. A consistent theme in biennial reviews has been the utility of the basic framework of the CERCLA NRDAR Regulations. There has been support for conforming the regulations more closely to actual case practice – which includes a high percentage of negotiated settlements – and to increase coordination of restoration and response actions, but not for dramatic changes to the regulations. There has also been considerable interest in clarifying that the design and scale of restoration actions need not

be based on economic studies if reliable, cost effective ecological metrics are available for all losses.

Cooperative Conservation:

In 2004 President Bush issued an Executive Order calling for the integration of Cooperative Conservation principles into resource management agency missions, policies, and regulations. For NRDAR that means taking steps to ensure that restoration actions are closely coordinated with the conservation efforts of local governments, landowners, communities, environmental groups, land trusts, industry, and other parties to protect, enhance, and restore water, air, fish, wildlife, and other natural resources. The integration of NRDAR and Cooperative Conservation has great potential to leverage success and result in more effective, efficient, and sustainable natural resource restoration and protection.

Consideration of the Four Questions:

Question 1: Natural Resource Injury Determination and Quantification

What are the best available procedures for quantifying natural resource injury on a population, habitat, or ecosystem level, as set forth in the DOI NRDAR Regulations at 43 CFR 11.71(l)? What guidance is appropriate for the utilization of these procedures?

Background

Reliable natural resource injury determination and quantification are basic steps in the implementation of practical and successful NRDAR. Although there is significant consensus among scientists concerning the use of increasingly sophisticated techniques for detecting the presence and effects of hazardous substances on biota, NRDAR injury determination and quantification issues can still generate controversy at some sites. Although the mere presence of hazardous substances or oil is not sufficient to support a claim for NRDAR, there are disagreements as to the types and levels of adverse affects that are appropriate to address.

The CERCLA NRDAR Regulations define a wide variety of biological responses at the organism, or even the sub-organism level as “injury.” After the presence of injury has been determined, the regulations then provide for “quantification” of the injury for use in determining appropriate restoration (43 CFR 11.71(l)(4)(ii)).

The concept of “baseline” is critical to quantifying natural resource injury. The regulations define baseline as “the condition or conditions that would have existed *at the assessment area* had the discharge of oil or release of the hazardous substances under investigation not occurred”, and suggest that the extent to which an injured biological resource differs from baseline should be determined by analysis of “the population or the habitat or ecosystem levels.”

There has been considerable confusion and uncertainty among practitioners over the application of these terms to the NRDAR paradigm. The regulations do not define “population, habitat, or ecosystem” -- and although these terms represent well known concepts in ecological science, their precise meaning can be highly contextual. At any site, it can be difficult to determine the relevant “population, habitat, or ecosystem”. For example, one may refer to the entire population of a species, or to the population of a species that lives and reproduces in a region, or in a single pond or lake. Similarly, habitat can be identified in a discrete localized area or in a forest that spans two time zones; and ecosystems may be contained within a discrete boundary or span an entire ocean.

Some suggest that the words “population, habitat, or ecosystem” represent a “bright-line test” for NRDAR because these higher levels have greater ecological relevance. While it is inappropriate to extrapolate injury to individual organisms to population or ecosystem levels without supporting evidence, the main purpose of injury quantification is to determine the amount of restoration appropriate to compensate for the magnitude of the injury, not to conduct unnecessary studies that do not inform decision-making. Accordingly, some believe that assessments should be conducted at a level of biological scale – whether individual organisms, populations, sub-populations, communities, habitats, or ecosystems – that is reliable, cost effective, and relevant to appropriate restoration to address the injuries manifested at the site.

Injury quantification at simpler levels of biological scale generally is less costly and time consuming than studies conducted at higher levels of complexity – such as populations, communities, or ecosystems. Although quantification at simpler levels yields data that can be interpreted with greater certainty regarding some losses, it may be less informative regarding losses at a more complex level of biological scale. Accordingly, injuries at lower levels of biological scale are addressed with restoration commensurate with that level, and injuries at higher levels of biological scale are addressed with more comprehensive restoration.

Recommendations

- DOI should sponsor a series of technical workshops, research papers, and symposiums to assist in the development of guidance documents – and potential regulatory revisions -- on injury quantification. These efforts should focus on providing the information needed for the development of guidance to NRDAR practitioners on selecting the appropriate level of biological scale (i.e., individual organisms (particularly in the case of threatened or endangered species, or tribal natural resources), populations, communities, ecosystems, as well as habitats manifested at a site) for quantifying injury for the purpose of determining appropriate restoration at particular sites.
- Under the current CERCLA NRDAR Regulations, injury quantification should provide a foundation for restoration action selection. Any guidance proposals put forward by DOI should clearly direct NRDAR efforts towards

reliably connecting injury quantification information developed for a site to determinations regarding appropriate restoration actions.

- DOI should provide guidance on how to define variable terms -- such as population, community, ecosystem, and habitat – in the context of NRDAR which focuses on conditions at impacted sites.
- Guidance issued by DOI on injury determination and quantification should not be overly prescriptive, and should be issued in a form that is easily updated to account for the evolution and development of scientific and technical methodologies. To ensure accuracy and broad acceptance, guidance should be subject to peer review, and be sufficiently flexible to address the diversity of habitats, natural resources, and contaminants that are manifested at NRDAR sites.

Analysis

The CERCLA NRDAR Regulations and the underlying statute make clear that the purpose of injury quantification is the provision of useful data for restoration planning. (*See, e.g.*, 43 CFR 11.70(b)). Quantifying natural resource injury in a manner that supports reliable restoration planning can be a highly complex, technical issue. Hazardous substance releases that result in nominal habitat impairments, affecting a relatively small number of organisms at a site, can in most cases, be addressed with a nominal amount of corresponding habitat improvement. At larger, more complex sites, however, confounding factors can come into play. Individual organisms may migrate or disperse into and out of a site at various intervals. Adverse impacts to habitat or organisms at a site may be caused by a combination of factors – such as development, pesticide use, and soil erosion – in addition to hazardous substance releases. Disagreements may arise over what quantity of impacted organisms or habitat functions are necessary to support a proposed scale of restoration activities.

Some believe that the regulation’s endorsement of “population, habitat, or ecosystem” analyses represents a “bright-line” test for whether an injury is ecologically relevant -- and thus appropriate to be addressed with restoration actions. Others believe that position is contradicted both by the collective phrase “population, habitat, or ecosystem” and -- more importantly -- the regulation’s definition of “baseline.” They note that baseline is defined as the conditions that would have existed *at the assessment area* had the releases in question not occurred. In their view, the regulation sets the appropriate context for analyzing “populations, habitats, or ecosystems” as conditions at the *assessment area* itself, not conditions at the outer bounds of what could be defined as a “population” or an “ecosystem.” They also believe the parallel regulatory suggestion to utilize “habitat” analyses undercuts the argument for focusing exclusively on more complex or comprehensive levels of biological scale since habitat can be provided by extremely small geographic units, which can be reliably determined to be degraded if their productivity – in terms of food, cover, resting areas, etc. -- is reduced, or if they become a source of toxicity to living organisms. More importantly, they assert, CERCLA does not establish a significance threshold for injury that must be met before restoration can be undertaken.

The workshops recommended by the Committee can help resolve some of these issues by focusing on reliable injury assessment and quantification that is clearly and transparently tied to appropriate restoration objectives. The workshops may also result in rectifying some issues regarding the generation and utilization of data for ecological risk assessment purposes for CERCLA response actions, and the generation and utilization of the same data for the NRDAR.

Question 2: Restoration Action Selection

Should DOI's NRDAR Regulations provide *additional* guidance – beyond the current factors to consider found at 43 CFR 11.82 – for determining whether direct restoration, rehabilitation, replacement, or acquisition of equivalent resources is the best strategy for addressing natural resource injury?

Background

CERCLA provides that trustees must use natural resource damages to “restore, replace, or acquire the equivalent” of injured natural resources. The CERCLA NRDAR Regulations do not express a preference among these various types of restoration actions. Instead, the regulation includes a list of relevant factors for trustees to consider in evaluating proposed restoration actions. These factors and the process they represent have been judicially reviewed and upheld. More importantly, they provide trustees with broad discretion to tailor restoration actions to the unique circumstances of a site. Nevertheless, over 20 years of practice experience suggests that DOI can provide additional constructive guidance on developing and selecting among potential restoration alternatives.

Recommendations

- DOI should revise the CERCLA NRDAR Regulations list of relevant factors to clarify the importance of “threshold” factors regarding legality, reasonable likelihood of success, and a demonstrable relationship between the restoration alternative and the injury. The remaining “balancing factors” should be revised to: (a) require trustees to consider the strength of the relationship between a restoration alternative and injured natural resources; (b) incorporate a preference for actions that have long-term, sustainable benefits to natural resources and services; (c) clarify other criteria in light of the trustees’ experience since the criteria were promulgated; and (d) where practicable, conform selection factors to those in the OPA rule.
- In order to encourage a restoration focus in the NRDAR process, trustees should begin thinking about potential opportunities for appropriate restoration and the information needed to develop and assess restoration alternatives from the early phases of the NRDAR process. In order to highlight the need to encourage an initial focus on restoration, several parts of the regulation should be revised to encourage early scoping of restoration opportunities.

- DOI should consider changes to the NRDAR rule and provide guidance to improve coordination between hazardous substance response and damage assessment and restoration activities – including efforts to achieve a common database and collective identification of data needs and gaps.
- DOI should publish additional guidance -- informed by actual case experiences -- to further assist trustees in developing and evaluating both on and off-site restoration alternatives.
- DOI should develop guidance on the appropriateness of human use (including cultural) service restoration projects – such as research or educational programs, recreational amenities, and the stocking of sport fish.
- DOI should affirmatively recognize that projects providing cultural services may be appropriate where cultural uses are lost, even with a more attenuated link to natural resource enhancement or protection than would be appropriate in other circumstances.
- DOI should undertake an initiative to promote “Cooperative Assessments” emphasizing joint injury determination and quantification and restoration selection activities with potentially responsible parties.

Analysis

Some restoration proposals have raised questions about consistency with the trustees’ statutory mandate to restore, replace, or acquire the equivalent of injured resources. For example, proposals to build community centers, parking lots, education facilities, or aquariums have attracted strong support from local community members or trustees, but may require careful analysis to determine whether they have an appropriate relationship to injured natural resources. Similarly, there have been suggestions that additional guidance on evaluating the appropriateness of on-site and off-site restoration of natural resources would be helpful. In addition, some have expressed uncertainty about how to restore cultural uses of natural resources consistent with applicable NRDAR requirements.

The Committee generally supports a restoration selection approach that provides the discretion necessary to deal with conditions at individual sites, and does not involve wholesale overhaul of existing regulations. However, a few targeted revisions may be desirable to improve the quality of decision-making. If DOI undertakes a comprehensive revision of the current CERCLA NRDAR Regulations, the Committee recommends that refinements to the existing selection factors should be included. The Committee also recommends a number of targeted revisions to the regulations to encourage an earlier focus on appropriate restoration alternatives. Lastly, the Committee believes guidance on some specific restoration action selection issues could improve and accelerate trustee decision-making.

Question 3: Compensating for Public Losses Pending Restoration

Should DOI revise the NRDAR Regulations to allow for compensating for interim losses with additional restoration projects in lieu of monetary damages for the economic value of the loss? If so, how should project-based interim loss claims be calculated?

Background

CERCLA authorizes natural resource trustees to recover damages not only for the cost of restoring injured resources to the “baseline” condition that would have existed had the hazardous substance releases in question not occurred, but also for the loss of natural resource services that otherwise would have been provided to the public by the resources pending the re-establishment of baseline (“interim losses”). Under the existing CERCLA NRDAR Regulations promulgated by DOI, damages for interim losses are equal to the *economic value* the public loses until the baseline condition is re-established. The existing regulations call this “compensable value” (*See* 43 CFR 11.83(c)). CERCLA requires trustees to spend any compensable value recoveries to restore, replace, or acquire the equivalent of an injured natural resource.

In 1996, the NRDAR regulations under OPA authorized trustees to identify the restoration actions they intend to take to address interim losses before a demand is presented to potentially responsible parties. Damages for interim losses are then computed based on the cost of those actions, rather than on the monetary value of the interim losses. This promotes an early focus on feasible restoration rather than monetary damages, and can result in lower over-all restoration costs when high-value, cost-effective projects are utilized to address interim losses.

Recommendations

- DOI should undertake a targeted revision of the regulation to make clear that it is appropriate to calculate compensation for interim public losses pending natural resource restoration based on the cost of restoration projects that can provide human and ecological services equivalent to those that have been lost, rather than requiring economic studies of the monetary value of the lost services as the exclusive measure of damages.
- The flexibility to adopt a restoration-based approach for interim losses should not, however, modify the current regulation’s focus on baseline, causation, services (both human and ecological), and utilization of reliable assessment methodologies. Because methodologies evolve, DOI should not specifically sanction or bar any particular methodology for calculating interim losses, but should set out general principles of reliability that all methodologies are expected to satisfy. It is important for DOI to consider the standards for reliability embodied in the Federal Rules of Evidence and the often novel scientific and technical issues confronted in NRDAR.

Analysis

The current CERCLA NRDAR Regulations specifically provide that interim public losses pending restoration are measured by “changes in consumer surplus, economic rent, and any fees or other payments collectable by a federal or State agency or an Indian tribe ... and any economic rent accruing to a private party ...” 43 CFR 11.83(c)(1). This could arguably be read to preclude the use of restoration-based approaches to resolve claims for interim losses. Many NRDAR practitioners believe that the ability to utilize restoration-based approaches to resolve claims for interim public losses pending restoration – as the OPA rule provides – can have many advantages. It can promote an early focus on restoration actions to address natural resources, and provide the flexibility to use simpler, more cost effective, and more transparent methods to relate natural resource damage claims to restoration, rather than monetary damages. Moreover, a restoration-based approach to interim public losses better comports with CERCLA’s overall restoration objectives.

It is important, however, for DOI to ensure that any regulatory revisions to promote flexibility to utilize restoration-based damage assessment methodologies not be perceived as an invitation to utilize unreliable or irrelevant assessment methodologies, simply because their endpoints can be described as a restoration action. Accordingly, our recommendation provides for both flexibility to utilize restoration-based approaches, and general principles for trustees to consider when evaluating the reliability of all damage assessment methodologies.

Question 4: Timely and Effective Restoration after NRDAR Claims are Resolved

What measures should DOI consider to expedite restoration planning and ensure cost effective and efficient restoration *after* awards or settlements are secured?

Background

The ultimate objective of NRDAR is the restoration of injured resources, not the development of legal claims. However, the current CERCLA NRDAR Regulations have relatively little to say about restoration planning and implementation *after* natural resource damage awards or settlements are secured. The CERCLA statute requires trustees to develop and adopt restoration plans before funds are expended for restoration (42 USC 9611(i)). The regulations provide that restoration plans should be made available for public comment before implementation (43 CFR 11.93). There is little additional guidance, however, on dealing with restoration planning and implementation obligations that exist outside of the CERCLA framework– such as the requirements of the NEPA, trustee agency procurement, grant, and cooperative agreement protocols for restoration implementation actions, and the relationship of NRDAR to pre-existing resource management plans and priorities.

Recommendations

- DOI should create and maintain an accessible and easily updated inventory of restoration actions and categories of restoration actions that trustees can use for

- restoration planning activities. This inventory could include data and information from existing regional restoration plans, species recovery plans, watershed plans, habitat action plans, local and regional conservation group priorities, etc.
- DOI should develop NRDAR-specific guidance to integrate Cooperative Conservation principles into restoration planning and implementation. The process to develop this guidance should include initiatives to minimize any barriers to partnerships with local governments, conservation groups, land trusts, and other entities that share trustee restoration goals and have the capability to assist in restoration implementation. DOI should consolidate restoration planning and implementation guidance in a publicly available “Restoration Handbook” that could include chapters on the restoration planning process, integrating restoration planning with other statutory, regulatory, and administrative requirements, partnering, financial and business practices, etc.
 - DOI should take affirmative steps to ensure that compliance by federal trustees with the requirements of the NEPA occurs *concurrently* with restoration planning, and is not undertaken as a consecutive, repetitive administrative burden. Accordingly, DOI should consider revising the CERCLA NRDAR Regulations at 43 CFR Part 11.93 to clarify that completion of the restoration planning process set forth in the regulations was intended to meet the requirements of NEPA. Additionally, any regulatory revisions should make clear that when trustees utilize restoration actions from pre-existing plans that have already undergone NEPA analysis, that analysis can be incorporated into the NRDAR restoration planning process.
 - To further reduce administrative redundancy and inconsistency regarding the integration of restoration planning and NEPA compliance, DOI should review the current relevant bureau-specific categorical exclusions for natural resource restoration, and consider adopting them department-wide. This will promote NRDAR-program specific consistency, transparency, and efficiency in restoration planning involving DOI.

Analysis

The goals and objectives of NRDAR and NEPA are strongly in accord. The NRDAR process promotes the restoration of natural resources injured or destroyed by releases of hazardous substances or oil. The express purpose of NEPA is to “prevent and eliminate damage to the environment” and to enrich the understanding of “ecological systems and natural resources.” The Council on Environmental Quality’s NEPA Regulations provide that the intent of the NEPA process is to assist public officials in taking actions that “protect, restore, and enhance the environment” (40 CFR 1500.1(c)). Moreover, the NEPA Regulations specifically call for NEPA analysis to run “concurrently rather than consecutively” with other planning and environmental review procedures, as recommended in this report (40 CFR 1500.2(c)).

DOI should endeavor to provide trustees with a detailed road map for getting from shared overarching goals and concurrent processes to effective and efficient restoration planning. DOI should consider revising the CERCLA NRDAR Regulations’ restoration

planning provisions to provide enough detail to make clear that the CERCLA restoration planning process is also “functionally equivalent” to NEPA analysis.

Of course, the restoration and protection of natural resources and ecological integrity are not only matters of statutes, laws, and regulations. That is why DOI should take steps – consistent with the President’s Executive Order on Cooperative Conservation -- to ensure that NRDAR restoration actions are coordinated – and to the extent practical, integrated – with the conservation efforts of local governments, landowners, communities, environmental groups, land trusts, industry, and other parties to protect, enhance, and restore water, air, fish, wildlife, and other natural resources. This integration of NRDAR and Cooperative Conservation has great potential to leverage success and result in more effective, efficient, and sustainable natural resource restoration and protection.

Implementation of Recommendations

Priorities and Timing

At the outset, DOI told the FACA Committee that it should concentrate on issues and reforms that were within the purview of DOI’s authorities and responsibilities, so DOI could focus its efforts on taking beneficial actions rather than formulating positions on how other governmental entities exercise their authorities. This pragmatic approach could also serve DOI well in undertaking implementation of the recommendations put forward in this report – which include a mix of administrative, guidance-based, and regulatory reform actions. Prioritizing recommendations according to the ability to execute them in a timely manner will allow DOI to continue the momentum created by the Committee’s activities, and most accurately reflects the major theme of this report – the application of incremental improvements to a fundamentally sound process.

To that end, we would recommend that DOI consider “tiering” implementation of the recommendations found herein. Tier 1 represents activities that could be undertaken immediately. It would include sponsoring technical workshops, research papers, and symposiums to assist in the development of guidance documents on injury determination and quantification (Question 1); the promotion of cooperative assessments through initiatives like developing model agreement language with PRP groups, creation of an inventory of pre-existing plans for restoration actions and categories that trustees can use for restoration planning, and the publication of NRDAR-specific guidance on integrating Cooperative Conservation principles into restoration planning and implementation activities (Question 4).

Tier 2 actions should also be undertaken almost immediately, but may require more time to fully implement. Tier 2 activities include ensuring that NEPA compliance occurs concurrently with restoration planning. It also includes the adoption of Department-wide NRDAR-specific categorical exclusions from NEPA analysis (Question 4); and a targeted regulatory revision to clarify the appropriateness of a restoration-based approach for all natural resource damages (Question 3). This revision could also provide DOI with the

opportunity to more clearly explain issues regarding the difference between restoration to address injured or destroyed resources and restoration to compensate for lost services pending resource restoration that led to confusion when the D.C. Circuit Court of Appeals last reviewed the CERCLA NRDAR Regulations in the *Kennecott* decision.

Tier 3 actions – which would entail a longer timeline for implementation – include many of the Question 2 recommendations and a more extensive revision of the CERCLA NRDAR Regulations, to make the regulation more understandable, while maintaining consistency with sound scientific and economic principles.

Conclusion

The history of the NRDAR Program has shown that cooperative approaches result in faster, more efficient, and more effective natural resource restoration. This FACA Committee’s intensive examination of NRDAR practice, methodologies, and protocols among representatives from all interested stakeholders, in an open public forum, has been an example of the kind of thoughtful interaction that Cooperative Conservation involves. As this Committee completes its charge and draws to a close, we encourage DOI to continue to reach out to state and local governments, tribes, other federal agencies, industry, environmental groups, and academics, and extend the spirit of our efforts and to establish its NRDAR Program as a model of Cooperative Conservation in action.

Glossary of Key Terms:

All terms used in this report are as defined in the current CERCLA/CWA NRDAR Regulations, CERCLA, or the NCP. The glossary below includes a working definition, for the purpose of this report only, of terms not otherwise defined.

Assessment - a natural resource damages assessment.

Baseline - the condition or conditions that would have existed at the assessment area had the discharge of oil or release of the hazardous substance under investigation not occurred.

Baseline restoration - action to address the impaired condition of natural resources themselves by restoring those resources to their baseline condition through direct restoration, replacement, or acquisition of equivalent resources. Baseline restoration is one of two potential components of a restoration action (interim loss restoration being the other).

CERCLA - the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601, 9607).

Clean Water Act or CWA - the Federal Water Pollution Control Act (33 U.S.C. 1251, 1321).

Community - a group of populations of plants and animals in a given place.

Economic value - the quantity of something, usually dollars, that a person is willing to forego to obtain something else. There are two types of economic values: active use values and passive use values.

Ecosystem - a biotic community and its abiotic environment.

Federally permitted release – a category of release exempt from liability under CERCLA, 42 U.S.C. 9607(j). The term covers, for example releases authorized by a permit issued under a federal pollution-control statute (e.g., a National Pollution Discharge Elimination System--NPDES--permit under the Clean Water Act.).

Interim loss - the loss of services that would have otherwise been provided to the public by injured natural resources during the period before baseline conditions are achieved.

Interim loss restoration - action to address interim loss. Interim loss restoration is one of two potential components of a restoration action (baseline restoration being the other).

National Contingency Plan or NCP - the National Oil and Hazardous Substance Contingency Plan, promulgated by EPA pursuant to section 105 of CERCLA and codified in 40 C.F.R. Part 300

National Environmental Policy Act or NEPA - 42 U.S.C. 4321.

Nonbiological resources - geologic resources, groundwater, surface water, sediment, and air under trusteeship.

Oil Pollution Act or OPA - 33 USC 2701-61.

Passive use values - one of two types of economic values (the other being active use value). Passive use values are economic values a person holds for knowing a natural resource exists or will be available for future generations, regardless of whether that person actively uses the resource.

Population - Organisms of a particular species in a relevant area.

Potentially responsible party - a person who may be liable for natural resource damages under CERCLA, 42 U.S.C. 9607(a), or the Clean Water Act, 33 U.S.C. 1321(f)(1)-(3).

Release - this term is defined in CERCLA, 42 U.S.C. 9601(22). This report generally uses release to mean both “release” as used in CERCLA and “discharge” as used in OPA and the Clean Water Act.

Restoration - any of the actions – including “restoration,” “replacement,” “rehabilitation,” or “acquisition of equivalent resources” -- that CERCLA, OPA, or the Clean Water Act authorize trustees to fund with recovered natural resource damages. Restoration potentially includes both a baseline restoration component and an interim loss restoration component.

Services - the physical and biological functions performed by resources, including the human use of those functions. These services are the result of the physical, chemical, or biological quality of the resources.

Appendices

A. *Subcommittee Reports*

A1. *Natural Resource Injury Determination and Quantification*

A2. *Restoration Action Selection*

A3. *Compensating for Public Losses Pending Restoration*

A4. *Promoting Timely and Effective Restoration after NRDAR Claim Resolution*

B. *Bibliography: NRDAR Statutory Provisions*

B1. *CERCLA NRDAR Regulations*

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B3. *References*

C. *NRDAR FACA Committee*

C1. *Committee Charter*

C2. *Bylaws*

C3. *Biographies*

D. *Acknowledgements*

Appendix A

1. *Natural Resource Injury Determination and Quantification*

Appendix A

2. *Restoration Action Selection*

Appendix A

3. *Compensating for Public Losses Pending Restoration*

Appendix A

4. *Promoting Timely and Effective Restoration after NRDAR Claim Resolution*