



Ad-Hoc INDUSTRY

NATURAL RESOURCE
MANAGEMENT GROUP

WHITE PAPER

“Blueprint for the Post-Deepwater Horizon Era: Timely and Cost-Effective Restoration of Natural Resources that Works for Everybody”

Executive Summary

This White Paper presents some updated views on what constitutes a successful natural resource damage liability practice for the nation. Following after the largest NRD settlement in history (\$ 8.1 billion total NRD* for the Deepwater Horizon incident), it is a good time to pause and reflect on how NRD cases – large, small, instantaneous oil spills, longtime hazardous waste sites, transportation and industrial accidents – can be settled quickly and fairly. In some cases, settlement can also set the stage for broader opportunities for resource restoration and related actions for responsible parties (industrial companies, shippers, railroads, etc.) and/or government agencies or departments charged with representing the public’s interests and needs, as well as the affected local community. This Paper provides an historical view of NRD (over 800 cases and over \$10 billion committed in settlements to date), looks at current practice – the good, the not so good and especially, the sticking points that can stymie quick and fair settlement – and concludes that the tools and resources for success are there if all parties can commit to fundamental principles and rules of engagement that can guide the process.

I. Introduction

This White Paper -- which is intended for use by public officials, policy makers, and decision makers, corporate representatives, national and state and tribal trustees, legal, technical, economic and other practitioners -- aims to identify some of the crucial concerns of natural resource damage practice for future thought and research and sets out working principles that can guide all parties towards more favorable resolutions.

The Paper has four main objectives:

- To highlight key issues important to today’s natural resource damage liability, assessment and restoration practice under US laws;
- To present a core set of working principles as to how parties can best approach and resolve NRD liability and related issues;
- To identify and align expectations and needs among multi-stakeholders, especially in the post Deepwater Horizon era; and
- To simplify and render more effective the overall process of settling liability for NRDs and leveraging allied opportunities as appropriate.

This White Paper is important at this time due to many different factors, including the impending change in Administration, the increased emphasis on private-public partnerships, the increased need for economic efficiency and industrial productivity, and elevation of environmental, sustainability and ecosystem imperatives. The practice has also recently seen the largest settlement in US NRD history, which resolved claims for the Deepwater Horizon incident, making this an especially apt time to review how the practice arena operates.

This Paper assumes no major statutory changes; however, changes in statutory language or overall approach could be addressed in the future. While the current probability for statutory changes at the federal level seems low, changes at the state level are much more plausible. The State of Vermont in June 2016 passed its first law authorizing the State to pursue claims for natural resource damages.

II. What is NRD?

Liability for natural resource damages is embodied in federal and state laws¹. Federal, state, local and tribal officials (natural resource “trustees”²) may file claims on behalf of the public to seek compensation from responsible parties to restore injured, destroyed or lost natural resources (land, fish, wildlife, biota, air, water, groundwater, drinking water supplies and resources).

Liability for NRD is in addition to site remediation, “clean up”, removal or emergency response requirements. Statutes require that natural resources be restored to their baseline -- their state before injury. If natural resources are not restored, then compensation for the interim loss also may be sought by governmental bodies designated as “Trustees” from the party responsible for the release of the contaminants. Two sets of federal regulations provide an overall construct for performing natural resource damage assessments (NRDAs), both involving sequential phases of assessment and restoration. While the regulations are not mandatory, an NRDA conducted according to the regulations will be granted a rebuttable presumption of correctness in litigation.

III. How Has NRD Changed and What is Still Needed?

From 1980 to the present, a total of over 800 NRD claims have been filed by federal and state trustees. Nearly 600 of these claims were brought under federal law or pursuant to a combination of federal and state law, while approximately 200 were brought under state law only. At present, federal and state NRD claims are pending at least 100 sites—some of which were initiated in the early 1980s. Over the course of the 30-year-plus timeline of NRD, approximately 900 settlements have resulted, some involving multiple settlements at single sites. Over the last decade or more, there has been a move to define settlements in terms of restoration projects versus dollar value of damages collected. However, it is noteworthy that with the finalization of the natural resource damage settlement for the Deepwater Horizon Incident and Oil Spill, over \$10 billion has been committed to federal and state trustees in settlements with potentially responsible parties that in turn have resulted in the restoration of tens of thousands of acres of land and miles of streams nationwide, the donation or preservation through conservation easements of extensive acreage, and the establishment of various educational and other projects.

¹ Federal statutes authorizing natural resource damage claims include: Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as amended (42 U.S.C. §§ 9601, et seq.), Oil Pollution Act (OPA) (33 U.S.C. §§ 2701, et seq.), Clean Water Act (CWA) as amended (33 U.S.C. §§ 1251, et seq.), Marine Protection, Research and Sanctuaries Act (MPRSA), 16 U.S.C. §§ 1431 et seq., Park Systems Resource Act (PSRA). Over 40 states have state statutes independently authorizing natural resource damage claims.

² Federal Trustees include the U.S. Department of the Interior and the National Oceanic and Atmospheric Administration, while the U.S. Department of Energy, U.S. Department of Defense, U.S. Department of Agriculture, and the Environmental Protection Agency have also served as Trustees.

Since 1980, there have been individual case successes and some important advances in policy and practice. However, overall, we still miss the mark. Some cases have been sitting on the federal docket for multiple decades, and approaches designed to improve efficiency do not always lead to resolution. The Portland Harbor Superfund Site, for example, was listed on the National Priorities List in 2000, and a group of potentially responsible parties (PRPs) signed a cooperative assessment agreement in 2003. As of 2016, none of those parties has yet to settle its NRD liabilities. While not every case follows this example, the existence of cases like this indicates that work is needed to make the practice more reasonable, balanced and predictable.

IV. What Constitutes a Successful Practice?

The ultimate goal of the promulgated NRDA regulations and of this Paper is to promote a reasonable, balanced and predictable practice arena, which balances consistency, predictability and flexibility site-to-side nationwide. The rules of engagement and principles in this document are aimed at achieving such a practice arena.

In defining what constitutes a successful NRDA practice, it is important to consider the following criteria:

Goal-oriented: Assessment and restoration actions should be compensatory, not punitive, in nature and conducted with the goal of replacing, restoring, rehabilitating, or acquiring the equivalent of natural resources and resource services injured or lost due to the release of oil or hazardous substances.

Timely and Cost-Efficient: A successful NRDA practice should promote expeditious and cost-effective injury determination and restoration of natural resources and services. For instance, the selection of injury determination methodologies should use available data when feasible and narrowly tailor new studies to fill gaps in such data as opposed to funding science projects that, although interesting, do not wholly focus on gathering information needed to determine and quantify site-specific injuries. When selecting preferred restoration alternatives, the focus should be on the most cost-effective alternatives that appropriately restore the injured natural resources and services to their baseline condition. Moreover, focusing assessments on the earliest possible evaluation and implementation of restoration alternatives can expedite the resolution of NRD claims, decrease the need for compensatory restoration by decreasing the time from the date of injury until recovery is completed, and increase the ecological value generated by such activities.

Good Relationships and Open Communication: A collaborative, transparent, and efficient NRDA process that offers opportunities for meaningful involvement of PRPs is the hallmark of a successful NRDA practice. Both the CERCLA and OPA regulations emphasize the importance of such cooperation by requiring the invitation of PRPs to participate in the assessment. Whether by collaborating to pool assessment resources or optimizing coordination of restoration alternatives, cooperative NRDA can considerably improve the likelihood of achieving timely and cost-efficient restoration.

Based on Scientific and Economic Principles: Following the basic and generally-recognized scientific and economic principles on which the federal NRDA regulations are based—whether or not the parties are engaged in a process that specifically follows those regulations—is essential to conducting an expeditious, fair, accurate, and cost-effective assessment; establishing the legitimacy and merit of NRDA work plans and preferred restoration alternatives; and avoiding unnecessary litigation.

Regular Monitoring and Review of Practice: Regular monitoring of ongoing matters and leveraging of lessons-learned by both trustees and stakeholders is crucial to increasing the effectiveness of future NRDA and creating a reasonable, balanced and predictable practice arena.

V. How do we reach a successful practice? Part 1: The Rules of Engagement

In presenting a “blueprint” for a reasonable, balanced, and predictable practice arena, a series of “rules of engagement” can be identified and leveraged to promote successful interaction between parties to achieve shared goals.

Shared understanding: All parties enter into the process with a shared understanding of each other and the objectives of the process.

Awareness of common pitfalls: The parties need to be cognizant of the factors that bog down and unnecessarily elongate the process, in order to inform effective plans, actions and decision-making.

Involved principals: To the extent possible, principals should remain engaged in the NRDA and negotiation process with support from discipline experts and consultants as needed and not vice versa.

Relationships with other activities and actors: Consider relationships to and interactions with related processes, such as remediation or emergency response, and establish relationships and communication with the parties who are involved in those processes.

Holistic process: Look at the process holistically, including potential opportunities and considerations stemming from linkages to other actions or sites, such as consolidated settlements, restoration enhancement of remediation, landscape-level restoration planning and the like.

VI. How Do We Reach a Successful Practice? Part 2: Working Principles

Building on the “rules of engagement” presented above, these key working principles represent the high-level fundamentals that, in the majority of cases, can help guide parties through the NRD process. More specific practices that embody these principles are presented in an appendix to this Paper.

1. *The design of the assessment and restoration projects is tailored to achieve the goal of timely and cost-effective restoration of natural resource services to their baseline.*

All assessment and restoration actions should be aimed towards achieving the goal of providing timely and cost-effective restoration of natural resource services to their baseline. Focusing on this end result can reduce difficulties arising from disagreements at intermediate steps. While further action may be agreed upon, it is important to distinguish between a PRP’s legal obligations and actions it may take on a voluntary basis.

2. *The NRD process minimizes transaction costs.*

High transaction costs increase expenses for parties. Litigation, in particular, can cause high transaction costs. Reducing transaction costs can smooth the path to agreement on an overall settlement. Where high transaction costs stem from a longer and more drawn-out assessment and/or litigation process, that means dollars spent on litigation or delay are not spent on restoration, and that in any event the restoration of the natural resources and their services is also being delayed.

3. *The parties engage with transparency and continuing strong and effective communication.*

Transparency and strong communication can be a key element to strengthening relationships between key actors for all parties, which in turn can help move through the process in a timely and cost effective manner.

In particular, regular communication and established relationships can help parties move through difficult portions of the process.

4. The NRDA adheres to scientific and economic principles.

The assessment should be based on recognized scientific and economic principles, and should also respect the legal concepts that define the boundaries of natural resource damages. Reasonable technical assumptions that all of the parties deem scientifically supportable can be used, which can substantially reduce assessment time and cost.

5. Monitoring and review of results is a regular and agreed upon part of the process.

Parties engaged in the NRD process should regularly revisit the course of the process to ensure that the focus remains on the end goal of timely and cost-effective restoration of natural resource. Successes and failures should be monitored throughout the process in order to make improvements where necessary. The results of restoration should be closely monitored and compared to the projected results, and the post-settlement decision-making process by the Trustees concerning restoration should be open and transparent.

6. There is a commitment to lessons learned and leveraging of successes.

Parties engaged in NRD practice should review the results of ongoing and completed NRD cases in order to gauge where the practice is, and what still needs improvement. Metrics to monitor the “success” of the practice field should be further developed, to provide a reasonable and objective measure of progress.

VII. How Do We Move Forward?

Improvements in the state of NRD practice will have a significant impact going forward. Thousands of sites nationwide have the potential for natural resource claims under a variety of federal or state laws, including those on the EPA’s National Priorities List of Superfund sites. Industrial accidents and accidental spills and releases can occur despite extensive preventative measures. Natural resources and the services they provide to the public may be affected by such events, thereby invoking the potential for NRD liability.

Through recognizing what constitutes a successful practice, setting and agreeing to a limited set of rules of engagement, and understanding the set of working principles this White Paper, parties can set out a basic blueprint for a reasonable, balanced and predictable practice area, which will provide a reference for use in actual practice to achieve a timely and cost-efficient process.

Implementing the blueprint will require the use and refinement of existing tools, strategies and resources, as well as the development of new approaches. Appendix A to this Paper provides some examples of specific practices that can help parties effect the guiding principles at NRD cases and sites. The Ad-Hoc Industry Natural Resource Management Group has also published documents on Best Practices and Cooperative NRDA Guiding Principles, which may be of additional use. There is also a wealth of other scholarship existing on NRD issues, and regular practice exchange through meetings of the Group, Trustees, and other parties, which can help further develop effective practices.

New resources may be considered to make better use of the principles into practice. For example, the expansion of use of third-party neutrals in NRD actions may provide significant value in some cases. However, this is a work in progress, and parties may want to have more experience with an approach before becoming confident of its benefit to the process.

About the Group

The Ad-Hoc Industry Natural Resource Management Group, founded in 1988, is a large coalition of multinational companies in every industry sector. The Group is uniquely focused on the interface between natural resources (air, water, species, land) and industrial activities (including manufacturing; energy development, production and use; transportation by land and sea) in the US, Europe and elsewhere around the globe. In the US, the Group has been a formidable leader for industry for nearly 30 years, working on a wide set of issues related to natural resource damage liability and the related issues of remediation, emergency response, risk management and more. The Group engages in dialogue and practice exchange with government decision-makers and a wide set of other stakeholders, supports the ongoing development and refinement of best practices, and encourages innovation to achieve successful outcomes for all parties and achieve a reasonable, balanced and predictable legal, regulatory, scientific and methodological practice arena.

Further Information: For further information on the Group, the views expressed here, or how your company can participate as a Group member, contact our Executive Director, Barbara Goldsmith at 202-628-6818 or via email at bjg@nrdonline.org.

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Note: This White Paper has not been formally reviewed and approved by the full membership of the Ad-Hoc Industry Natural Resource Management Group and should not be construed as representing the views of any individual member company.

APPENDIX A

GUIDING PRINCIPLES IN SITE- OR CASE- SPECIFIC PRACTICE

This Appendix to the White Paper provides specific recommendations to assist those involved in the NRD process to actualize the guiding principles, with some examples of how these recommendations have been put into practice.

It is important to note that these specific recommendations represent an optimal vision of NRDA practice. This is not intended as an in-depth examination of practice at all sites, but notes some of the more common circumstances that can produce or resolve issues. At particular sites, Potentially Responsible Parties or PRPs and Trustees may feel that the strategies below would not work for them.

1. **The design of the assessment and restoration projects is tailored to the goal of timely and cost-effective restoration of natural resource services to baseline**
 - a. **Overall goal:** Confirm that the overall goal of NRDA and restoration is to restore natural resource services to their baseline level and back into public use as efficiently and cost-effectively as possible
 - b. **Site models:** In order to establish a structure to achieve the above, consider the use of Conceptual Site Models, Data Quality Objectives or other decision frameworks.
 - c. **Early restoration:** Focus the assessment process on the earliest reasonable evaluation of restoration options. “Earliest reasonable” will depend on the agreement of parties and will vary from site to site, and is particularly dependent on the degree of certainty about the injury, including its magnitude.
 - d. **Outside the box:** Where appropriate, think outside the current statutory and/or regulatory constructs to identify creative approaches to move through the NRDA and restoration process. Distinguish between statutory and regulatory requirements, and efforts that can be undertaken at the discretion of one or more involved parties.
 - e. **Consider all options:** Consider all methods and strategies to return resources back to local community use more expeditiously, including local partnerships, natural attenuation, early restoration, and many others.
 - f. **Focus on the end-game:** Maintain a focus on the end goal (restoration) and do not let small disagreements or the desire for more and more data stall the overall process when general agreement is reached.
 - g. **Revisiting the goals:** Regularly revisit the process agreement to check that the process is adhering to the agreement and to confirm that the process still makes sense given current knowledge.
2. **The NRD process includes minimized transaction costs.**
 - a. **Avoid litigation when appropriate:** Aim to resolve claims without litigation, which can greatly exacerbate transaction costs, recognizing that litigation may be required given the circumstances of the site or case.
 - b. **Existing data:** Where possible, use existing data, supplemented by reasonable assumptions, to reduce the work needed to reach the overall goals of the NRDA process. In some cases, the use of existing data, models and assumptions will be insufficient for one or more parties.
 - c. **Joint data collection:** If additional data are needed to fill gaps or test assumed facts, seek to jointly agree with Trustees and PRPs on studies to be done, where appropriate, to reduce duplication of effort.
 - d. **Restoration location:** Identify restoration options on either public lands or PRP-owned land to reduce both costs and potential for time delays created by involvement of a third party.
 - e. **Restoration performance:** Decide on which parties – Trustee(s) or PRP(s) -- will oversee performance of the restoration, based on who is best equipped to meet the restoration objectives.

- f. **Avoid conflict with other activities:** Avoid conflict with site remediation or response actions by coordinating data collection to avoid/minimize duplication of effort. Evaluate the combined cost of remedy options and potential related restoration options at the RI/FS stage, to identify the most cost effective and feasible combination for your site. The least expensive remedy may require extensive/technically challenging restoration, or vice versa. Look for ways to locate restoration to complement, and potentially benefit from, cleanup and response efforts.
3. **The parties engage with transparency and strong communication.**
 - a. **Key points for resolution:** Identify in advance key managers for each side in the process, who can be called upon to resolve disputes that threaten to bog down the process.
 - b. **Third –party neutral:** Decide whether a third-party neutral could be used when the parties cannot resolve an issue in a timely fashion, and establish the guidelines for referral.
 - c. **Communication:** Focus on regular and reliable communication, even if there may be no substantive news to be transmitted.
 - d. **Internal conflict resolution:** Each side should resolve any conflicting internal differences before the joint process begins.
 - e. **Reminder of goals:** Continue to remind all parties of the agreed-upon front-end objectives.
 4. **The NRDA adheres to scientific and economic principles**
 - a. **Principles underlying regulations:** Conduct NRDA's that follow the basic scientific and economic principles on which the federal NRDA regulations are based for the pertinent type of release—whether or not the parties are engaged in a process that specifically follows those regulations.
 - b. **Data quality:** Ensure all data, whether pre-existing or generated by the NRDA, are relevant, quality assured, and quality controlled.
 - c. **Data gaps:** Determine whether data gaps exist, and if such gaps exist, determine whether and how to deal with those gaps, e.g., by collecting additional data, and/or using reasonable assumptions.
 - d. **Assumptions:** Develop reasonable technical assumptions that all of the parties deem scientifically supportable.
 - e. **Account for Baseline:** Quantify lost natural resource services as reductions in services compared with the baseline (i.e., the level of services that would have existed but for the release in question), taking into account the resource recovery period and recovery rate and omitting speculative services.
 - f. **No “injury”:** Consider that a release with the potential for injury to a resource does not always result in a loss of natural resource services to the ecosystem or to people. A loss of services must be established and measured in order to scale restoration projects or determine damages.
 5. **Monitoring and review of results are a regular and agreed upon part of the process**
 - a. **Constant evaluation:** Evaluate the progress and success of the NRDA throughout the process, and monitor the successes (and failures) of projects throughout their life.
 - b. **Monitoring and metrics:** Design restoration projects with clear goals and monitoring processes oriented around those goals, with meaningful and consistent metrics to evaluate successes and failures.
 - c. **Transparency of post-settlement activity:** Communicate disbursements, restoration results, and challenges that occur post-settlement to the PRP and public.
 6. **There is a commitment to lessons learned and leveraging of successes.**
 - a. **Meeting overall objectives:** Review the success of each NRD process in meeting the goals of the practice, asking whether the process was goal-oriented, timely and cost-efficient, included good relationships and open communication, and was based on scientific and economic principles. Reviews should be done both collaboratively and by each party individually.
 - b. **Overall Practice Metrics:** Keep improving the specific metrics in order to evaluate the effectiveness of NRD programs, notably beyond that information which is submitted to congressional committees for the purposes of budget review.