October 1995

The Use of Alternative Dispute Resolution in Natural Resource Damage Assessments

Sarah L. Inderbitzin
Nicholas Targ
James L. Byrnes
Bruce A. Johnson

Follow this and additional works at: https://scholarship.law.wm.edu/wmelpr

Part of the Dispute Resolution and Arbitration Commons, and the Environmental Law Commons

Repository Citation

Copyright © 1995 by the authors. This article is brought to you by the William & Mary Law School Scholarship Repository.
https://scholarship.law.wm.edu/wmelpr
The practice of alternative dispute resolution ("ADR") and recovery for natural resource damage assessments ("NRDAs") are not new to the United States government. What is new is the increased awareness that ADR, which has been effective in resolving disputes concerning the cleanup of hazardous material ("HAZMAT"), may also be useful in resolving NRDA disputes.

Part I of this article introduces ADR techniques which may be utilized as part of a cooperative effort between parties to an NRDA. Part II outlines the Department of the Interior's ("DOI" or "Department") NRDA regulations and suggests "when" and "where" ADR techniques may be appropriate. Part III compares and contrasts the negotiations concerning the Exxon Valdez oil spill, which did not use ADR effectively, and those regarding the Megaborg oil spill which did use ADR effectively. Finally, Part IV concludes that, although agencies are not required to use ADR to resolve NRDA disputes, it is an effective tool which agencies should consider when conducting assessments.

I. ALTERNATIVE DISPUTE RESOLUTION

ADR—a term used frequently, recently, and often incorrectly. Is ADR a recent discovery that will save society from becoming a litigious swamp where one dare not take any action without an attorney present? Will the use of ADR cause lawyers to become an endangered species? The answers to these questions

* The views expressed in this paper are those of the authors only and are not necessarily those of the Department of the Interior or any other Department or Agency of the United States.

** Ms. Inderbitzin, Attorney Advisor with the U.S. Department of the Interior, holds a B.S. in Animal Science from the University of Maryland and a J.D. from Georgia State University College of Law. Ms. Inderbitzin is completing an LL.M. in Environmental Law at George Washington University, National Law Center.

Mr. Targ, Attorney Advisor with the U.S. Department of the Interior, holds degrees in Politics, Legal Studies, and Economics from the University of California at Santa Cruz and a J.D. from Boston College Law School. Mr. Targ is completing a Master's degree in Urban Planning at the Massachusetts Institute of Technology. Before joining the Department of the Interior, Mr. Targ served as Legal Adviser to the Republic of Haiti at the Earth Summit.

Mr. Byrnes, Chief Administrative Judge, U.S. Department of the Interior Board of Land Appeals, holds a B.A. from Duquesne University and a J.D. from Widener University School of Law.

Mr. Johnson, Special Counsel, Office of Hearings and Appeals, U.S. Department of the Interior, holds a B.A. from Elmhurst College and a J.D. from Howard University School of Law.
Admittedly, the phrase "alternative dispute resolution" is relatively new, at least in terms of common usage. In fact, *Black's Law Dictionary* did not define it until its sixth edition, published in 1990:

> Procedures for settling disputes by means other than litigation; e.g., by arbitration, mediation, mini-trials. Such procedures, which are usually less costly and more expeditious, are increasingly being used in commercial and labor disputes, divorce actions, in resolving motor vehicle and medical malpractice tort claims, and in other disputes that would likely otherwise involve court litigation.

The DOI has been a leader in resolving disputes through ADR before resorting to litigation. Since its inception in 1849, the DOI has used a form of arbitration in which either the Secretary of the Interior or an Administrative Law Judge ("ALJ") acts as an arbitrator. The DOI allows an internal appeal of subordinate officials' decisions on the use of public lands. An appellant must, therefore, exhaust his intra-agency appeal rights prior to challenging such a decision in the federal courts. While this process is not regarded as particularly novel today, it represented a unique way of resolving public lands disputes in the nineteenth century.

The DOI's administrative appeal system remains in effect, as mandated by a number of federal statutes including the Administrative Procedure Act, the Taylor Grazing Act of 1934, and the Federal Land Policy and Management Act of 1976. Although the DOI's appeal system is adversarial, unlike cooperative decisionmaking and mediation, it is still a form of ADR. However, ADR now focuses not only on avoiding costly formal litigation in federal courts, but on resolving disputes outside adversarial administrative forums. While these

2. The Department conducts its administrative review through its Office of Hearings and Appeals ("OHA"), Hearing Division, with ALJs. See 43 C.F.R. § 4.1(a) (1994). Appeals are conducted by Administrative Appeals Judges through OHA's constituent Boards of Appeals (i.e., Contract, Indian, and Land). See id. § 4.1(b).
3. OHA exercises the delegated authority of the Secretary to hear and finally decide appeals of subordinate agency officials' decisions. See id. § 4.403.
administrative forums still play a substantial role in deciding disputes and refining final agency decisions before review by the federal judiciary, some conflicts can and are being resolved before, or as an alternative to, an administrative appeal.

A. The Administrative Dispute Resolution Act

In 1990, Congress enacted the Administrative Dispute Resolution Act ("ADRA") which mandated that all federal agencies review and implement some form of ADR in their programs. In the ADRA, Congress's specific mandate to the agencies was that each agency appoint a high-level official as the Dispute Resolution Specialist to oversee the implementation of an ADR program. Each agency was also required to adopt a policy that addresses the application of ADR to case management and to "formal and informal adjudications; rulemakings; enforcement actions; issuing and revoking licenses or permits; contract administration; litigation brought by or against the agency; and other agency actions."

The ADRA suggested that agencies experiment with settlement negotiations, conciliation, facilitation, mediation, fact-finding, mini-trials, arbitration, or any combination of ADR techniques. Congress acknowledged, however, that "you can't please all the people, all the time," and did not mandate the use of ADR. Congress likewise recognized that there are times when ADR
is not appropriate for the resolution of disputes. It stated:

An agency shall consider not using a dispute resolution proceeding if—

(1) a definitive or authoritative resolution of the matter is required for precedential value, and such a proceeding is not likely to be accepted generally as an authoritative precedent;

(2) the matter involves or may bear upon significant questions of Government policy that require additional procedures before a final resolution may be made, and such a proceeding would not likely serve to develop a recommended policy for the agency;

(3) maintaining established policies is of special importance, so that variations among individual decisions are not increased and such a proceeding would not likely reach consistent results among individual decisions;

(4) the matter significantly affects persons or organizations who are not parties to the proceeding;

(5) a full public record of the proceeding is important, and a dispute resolution proceeding cannot provide such a record; and

(6) the agency must maintain continuing jurisdiction over the matter with authority to alter the disposition of the matter in the light of changed circumstances, and a dispute resolution proceeding would interfere with the agency’s fulfilling that requirement.

To implement the ADRA, the DOI published an Interim ADR Policy

15. See id. § 572(b).
16. Id.
The first action taken pursuant to the Interim Policy was the appointment of the OHA Director as the Department’s Dispute Resolution Specialist. In that capacity, the OHA Director facilitates intra-DOI coordination and communication; ensures consistent and quality training; and establishes minimum qualifications for mediators, arbitrators, and employees with ADR responsibilities. Despite OHA being the focal point for ADR activity, the DOI’s Interim Policy encourages decentralized decisionmaking on “how” and “when” to propose the use of ADR.

The Interim Policy also created the Interior Dispute Resolution Council (“IDRC”). This body is composed of the Assistant Secretaries, the Solicitor, the Director of the Office of Regulatory Affairs, or their designees, and is chaired by the Dispute Resolution Specialist. The IDRC is charged with monitoring DOI’s use of ADR and Negotiated Rulemaking.

To assure that the goals of the ADRA are implemented in each of the Department’s Bureaus, the Interim Policy mandates that each Bureau Head appoint a Bureau Dispute Resolution Specialist (“BDRS”). Each BDRS receives preliminary training in the use of ADR consensus-building techniques, conflict resolution, and program design. Within sixty days of completion of this training, each BDRS develops its Bureau’s ADR Plan (“ADRP”) and submits it to the Bureau’s respective Assistant Secretary. Specifically, the Interim Policy requires each ADRP to “include at least one category of disputes amenable to ADR methods.” The Interim Policy also encourages Bureaus to select a category of disputes central to the DOI’s mission for their ADR pilot initiatives and to include a program to implement ADR to address such disputes. Finally, the Interim Policy requires that each ADRP contain goals, objectives, timetables, implementation strategy, monitoring criteria, and evaluation methodology. To ensure consistency, Bureaus must submit their ADRPs to the IDRC for review.

18. Id. at 30,369.
19. Id.
20. Id.
21. Id.
22. Id.
23. Id.
24. Id. at 30,370.
25. Id.
26. Id.
27. Id. The particular “category of disputes” was to be selected after the Bureau examined its “inventory” of disputes both within and outside the Bureau. Id.
28. Id.
29. Id.
30. Id.
prior to approval by the Assistant Secretary.\textsuperscript{31} The IDRC also monitors the ADRPs' performance, and evaluates each ADRP at the end of the two-year Interim Policy phase and reports the results to the Secretary.\textsuperscript{32}

This review of the recent statutory history, in addition to the DOI's historic commitment to solving disputes outside of the federal courts, makes it clear that ADR is here to stay as an additional tool for resolving conflicts. As demonstrated below, agencies have been creative in adopting various forms of ADR in an attempt to work out complex, seemingly unresolvable conflicts.

\section*{B. Methods of Alternative Dispute Resolution}

ADR is "an inclusive term used to describe a wide variety of problem solving processes."\textsuperscript{33} Some of these methods are new to the dispute resolution process, while others are variations of techniques the DOI has used for over one hundred years.\textsuperscript{34} A review of the characteristics of each of these methods provides a means for evaluating their usefulness in NRDA conflict resolution.

\subsection*{1. Arbitration}

Arbitration is "[a] process, quasi-judicial in nature, whereby a dispute is submitted to an impartial and neutral third party who considers the facts and merits of a case and decides the matter."\textsuperscript{35} Arbitration can be either mandated by a court or contract or entered into voluntarily, and the arbitrator's decision is normally binding.\textsuperscript{36} This means the parties have agreed to accept the settlement as final.\textsuperscript{37} An arbitration decision may only be appealed on very limited grounds, such as fraud or evidence of concealed partiality.\textsuperscript{38} Thus, arbitration is more final than administrative or court decisions, which may be appealed on a wide variety of reasons related to interpretation of law, evidence, or facts. Given the final nature of an arbitration decision, the ADRA mandates that any arbitration decision may be vacated by an agency head within a thirty-day period after the decision

\begin{itemize}
\item \textsuperscript{31} Id. The IDRC recommends changes and improvements before the ADRP is submitted to the Assistant Secretary. \textit{Id.}
\item \textsuperscript{32} Id. at 30,370-71.
\item \textsuperscript{33} Id. at 30,371 app. I. \textit{See infra} notes 35-127 and accompanying text.
\item \textsuperscript{34} The Interim Policy defines some of these methods. Id. at 30,371-72. \textit{See also supra} notes 2-7 and accompanying text.
\item \textsuperscript{35} 59 Fed. Reg. 30,371.
\item \textsuperscript{37} Id.
\item \textsuperscript{38} U.S. Arbitration Act, 9 U.S.C. § 10 (1994). \textit{See also} Harter, \textit{supra} note 36, at 313 & n.56.
\end{itemize}
is served on the agency.\textsuperscript{39}

The advantages of arbitration are: (1) the parties may usually choose, or negotiate over the choice of, the arbitrator,\textsuperscript{40} (2) the parties can agree to the ground rules of the proceeding\textsuperscript{41} and the type of evidence that will be excluded from the proceeding,\textsuperscript{42} and (3) the process is normally confidential and only the parties may learn the final results.\textsuperscript{43} Arbitration is one of the most widely used forms of non-litigious dispute resolution in the United States\textsuperscript{44} and is suitable for any dispute in which the parties are willing to be bound by the decision and to forego appellate procedures.\textsuperscript{45} It is generally faster and less expensive than court litigation.\textsuperscript{46} Arbitration is useful in complex multi-party disputes, in part, because the process of preparing for arbitration forces parties to narrow the issues under dispute.\textsuperscript{47} However, arbitration is not appropriate when: (1) an authoritative interpretation of law or regulation is needed; (2) the maintenance of consistent established government policy is of special importance; (3) the dispute would significantly affect persons not parties to the proceeding; or (4) a public record of the proceeding is important.\textsuperscript{48}

\textsuperscript{39} 5 U.S.C. § 580(b).
\textsuperscript{40} See, e.g., id. § 577(a). See also Roger J. Patterson, Dispute Resolution in a World of Alternatives, 37 CATH. U. L. REV. 591, 592-93 (1988); Harter, supra note 36, at 312-13.
\textsuperscript{41} See, e.g., 5 U.S.C. § 579(c)(2), (e)(1); Patterson, supra note 40, at 593; Harter, supra note 36, at 312-13.
\textsuperscript{42} See, e.g., 5 U.S.C. § 579(c)(1); Patterson, supra note 40, at 593; Harter, supra note 36, at 312-13.
\textsuperscript{44} Patterson, supra note 40, at 592. See also Harter, supra note 36, at 310; Timothy S. Hardy & R. Mason Cargill, Resolving Government Contract Disputes: Why Not Arbitrate?, 34 FED. B.J. 1, 8 (1975).
\textsuperscript{45} Behre, supra note 43, at 70.
\textsuperscript{46} See Hardy & Cargill, supra note 44, at 9; Patterson, supra note 40, at 599-600; Behre, supra note 43, at 70-71.
\textsuperscript{48} See U.S. EPA, supra note 47, at 762-63; Harter, supra note 36, at 315-16; Edwards, supra note 8, at 674 & n.18.
2. Conciliation

Conciliation is a process that brings a neutral third party into the negotiation process to assist in establishing "trust and openness between the parties to a dispute." The conciliator acts as a go-between, communicating each side's position to the other and relaying settlement options. Thus, conciliation is appropriate where parties to a dispute are "unable, unwilling, or unprepared to come to the table to negotiate their differences." A conciliator may also advise the parties about the consequences of discovery and other litigation procedures.

3. Dispute Review Board

A Dispute Review Board ("Board") is a panel, usually composed of three independent members, designed to provide prompt recommendations to assist in the resolution of project disputes. This type of ADR mechanism works to assure that interruptions of the project are prevented and to resolve small disputes early on before they escalate and end up in litigation. The Board’s decisions are non-binding and may be accepted or rejected by the parties or used as a basis for further negotiation. Although the Board visits the project site, the number of visits depends on the size of the project and the agreement of the parties. The costs of the Board are generally apportioned between the parties. In a sense, this constitutes ongoing arbitration between the parties, but with the distinct advantages of being swift and having disputes resolved by parties familiar with the individual project and the concerns of all parties.

4. Early Neutral Evaluation

Early neutral evaluation ("ENE") is a procedure whereby a neutral third party meets with disputants and reviews summaries of their cases to evaluate their

---

51. Id.
52. Id. at 44.
54. See id.
55. Id. at 723, 725.
56. Id. at 724, 728.
57. Id. at 721.
58. Id. at 729.
59. See e.g., id. at 730.
relative strengths and weaknesses. The neutral party is "typically a locally respected attorney with expertise in the principal subject area of the dispute." The neutral party may ask questions during the evaluation session and ultimately offer his assessments of each party's position and the likely outcome of the case should it proceed to litigation. The benefit of ENE is that it assists the parties to find common ground and helps each side understand the other's perspective. The ideal outcome of this procedure is for the neutral party to mediate settlement discussions between the parties. The recommendations of the neutral party are non-binding but offer participants the opportunity to receive an early and realistic evaluation of their case before investing substantial amounts of time and money in litigation.

5. Facilitation

Facilitation is a process which:

[1] Involves the assistance of a third party who is impartial toward the issues under discussion and who works with all participants in a whole group session providing procedural directions on how the group can effectively move through the problem-solving steps of the meeting and arrive at a jointly agreed upon goal.

A facilitator does not focus on the substance of the issues under discussion. Instead, she acts as a "neutral process expert" to help the parties focus on the process of resolving complex issues in order to improve their chances of reaching an agreement.

6. Fact-Finding

Fact-finding uses "neutrals acceptable to all parties to determine disputed..."
The neutral (or neutrals, as the case may be) usually has expertise in the subject matter of the dispute. Parties typically offer an informal presentation of their case, but the neutral may conduct further research on the issues in dispute. The neutral provides an advisory opinion on the disputed issues which the parties can then use as a basis for further negotiation. Fact-finding may be particularly useful where disagreements about the need for, or meaning of, data are impeding resolution of a dispute because the process seeks to resolve disputed facts or highly technical issues which are better addressed by experts.

7. Mediation

Mediation is one of the most informal ADR procedures, involving the intervention of an impartial and neutral third party into a dispute. Unlike an arbitrator, the mediator has no decisionmaking authority but assists the parties procedurally to reach a voluntary settlement of the dispute. Thus, the mediator does not issue a binding decision. Mediation sessions are private and confidential. Parties are governed by the rules of procedure and conduct which they have agreed upon in advance. If any party is unhappy with the outcome, they may opt not to draft a final settlement agreement. Mediation is useful where a negotiated settlement is likely, where the parties are likely to have dealings in the future, and where the parties need a process to mitigate emotions impeding communication.

The success of mediation in multi-party disputes is an example of the

70. U.S. EPA, supra note 47, at 743.
71. 59 Fed. Reg. 30,371. See also National Inst. for Dispute Resolution, supra note 50, at 45.
74. 59 Fed. Reg. 30,371; National Inst. for Dispute Resolution, supra note 50, at 45. The neutral’s decision can be binding or non-binding according to the wishes of the parties. U.S. EPA, supra note 47, at 743.
76. John W. Cooley, Arbitration vs. Mediation—Explaining the Differences, 69 JUDICATURE 263, 266 (1986); Patterson, supra note 40, at 594.
77. Cooley, supra note 76, at 263.
78. Patterson, supra note 40, at 594.
80. Phillips & Piazza, supra note 79, at 1234-36.
82. National Inst. for Dispute Resolution, supra note 50, at 14; Cooley, supra note 76, at 264.
83. National Inst. for Dispute Resolution, supra note 50, at 14; Cooley, supra note 76, at 264.
84. Phillips & Piazza, supra note 79, at 1234; National Inst. for Dispute Resolution, supra note 50, at 14; Cooley, supra note 76, at 269. This involves “separat[ing] the people from the problem.” Cooley, supra note 76, at 267 n.36.
adaptability of the process. Mediation is often better equipped to resolve disputes than traditional litigation because the process allows for more candid discussion of parties' interests and substantially more flexibility and creativity. The primary reason why it is such a flexible process is that the parties develop decisionmaking procedures tailored to the needs of the specific dispute. The parties also choose the neutral. Because mediators have different styles, levels of experience, and backgrounds, the disputants can select a neutral based upon the intricacies of the issue, giving the process additional flexibility as compared with traditional adversarial processes.

8. Mini-Trial

A mini-trial is "a structured settlement process in which the disputants agree on a procedure for presenting their cases in highly abbreviated versions (usually no more than a few hours or a few days) to [each party's] senior decisionmaking officials." Thus, mini-trials allow senior officials to assess firsthand the relative strengths or weaknesses of their cases, and can serve as a basis for more successful negotiations. Often, a neutral will assist the senior officials or preside over the hearing. The neutral may also subsequently mediate the dispute or give his opinion on the likely outcome of litigation. Like mediation, the mini-trial is voluntary and non-binding, and, like arbitration, the parties vigorously present their positions. Given the need to invest substantial resources in attorneys, senior officials, witnesses, and a neutral party, the mini-trial is only appropriate for major disputes that could only otherwise be resolved

85. For three case studies of multi-party mediation, see Lawrence Susskind & Connie Ozawa, Mediated Negotiation in the Public Sector, 27 AM. BEHAVIORAL SCIENTIST 255-79 (1983). See also Phillips & Piazza, supra note 79, at 1238-41.
86. Phillips & Piazza, supra note 79, at 1234-36; Patterson, supra note 40, at 594.
87. Phillips & Piazza, supra note 79, at 1234-36; Patterson, supra note 40, at 594.
88. Phillips & Piazza, supra note 79, at 1234-36; Patterson, supra note 40, at 594.
89. Patterson, supra note 40, at 595. The desirable background and experience of a mediator depends on the nature of the dispute and the parties' perception of the skills necessary to resolve the dispute. Id.
90. 59 Fed. Reg. 30,371. See also Patterson, supra note 40, at 595. Participating officials must have the authority to enter into a binding settlement agreement. Id.; LESTER EDELMAN ET AL., U.S. ARMY CORPS OF ENGINEERS, PAMPHLET-89-ADR-P-1, THE MINI-TRIAL 1 (1989) [hereinafter THE MINI-TRIAL].
91. 59 Fed. Reg. 30,371; THE MINI-TRIAL, supra note 90, at 3; Patterson, supra note 40, at 595.
92. 59 Fed. Reg. 30,371; THE MINI-TRIAL, supra note 90, at 2; Patterson, supra note 40, at 595-96.
94. Patterson, supra note 40, at 595; THE MINI-TRIAL, supra note 90, at 2.
by long, complex, and costly litigation. However, even if the size and complexity of the dispute justifies a mini-trial, it should be used only in disputes regarding the facts of the case, not about "what the law means."

9. **Partnering**

Partnering is a process unlike other forms of ADR because it is specifically designed to prevent disputes from developing in the first instance. Partnering involves a series of meetings of the relevant parties in a "partnering workshop," usually in a retreat-type setting, where the parties get to know each other. With the help of a neutral, the parties proceed through team-building exercises and discussions regarding the project, costs, potential problems, etc. The result of the meetings is a "Partnering Charter" which outlines the future relationship between the parties, responses to disputes, and the project goals. The Partnering Charter should also include ADR methods should later disputes arise. The Partnering Charter is supplemental to other contracts and agreements that may have been signed by the parties. However, the Partnering Charter does not create any legally enforceable rights. Partnering allows parties involved in major projects to establish a cooperative, team relationship based on open communication, shared risks and rewards, and collaborative decisionmaking. Partnering, like the Dispute Review Board, is used by the construction industry as a way to avoid problems that might otherwise disrupt a large construction venture and create additional project costs for all parties.

10. **Private Judging**

Private judging is similar to arbitration because parties refer their dispute to a neutral third party who renders a binding decision. However, in private

---

95. Patterson, *supra* note 40, at 596; *The Mini-Trial*, *supra* note 90, at 7-8. The U.S. Army Corps of Engineers ("Corps") has successfully used mini-trials to resolve construction contract disputes involving millions of dollars. *The Mini-Trial*, *supra* note 90, at 7-8.

96. *The Mini-Trial*, *supra* note 90, at 10. See also Patterson, *supra* note 40, at 596.


98. Id. at 2-3, 18-19.

99. Id.

100. Id. at 3, 19-20. Common project goals are quality, safety, timeliness, and cost-effectiveness. Id.

101. Id. at 8.

102. Id. at 1.

103. Id.

104. Id. at 1-2. The Corps has used the partnering concept with both its construction contractors and its suppliers. Id. at 7-15.

105. Patterson, *supra* note 40, at 597.
judging, the parties decide “how” and “when” to utilize private judging after a
dispute has arisen, whereas parties normally elect to use arbitration at the time of
contract before the dispute arises. Private judging may speed the completion
civil trials by permitting litigants to hire their own private judge to hear and
decline all or a portion of their case. In California, private judging is used by
parties who do not wish to wait years for their cases to be heard by overburdened
civil trial courts. Generally, litigants may choose an attorney or retired judge to
preside over a “trial” and render a decision just as a court would. This
decision may be appealable through the normal state court appellate system.

11. Settlement Negotiation

Settlement negotiation is a process in which the parties hold discussions
in an attempt to settle on a compromise agreement of the dispute, some portion
of it, or a procedural point. Agencies use settlement negotiation as a
“procedure[] and process[] for settling matters that would otherwise be resolved
by more formal means.” Settlement negotiation can be voluntary on the part
of the parties, before or after an action is filed, but is sometimes required by court
rules as a prerequisite to an adjudicative procedure. Because agencies’
settlement agreements may be subject to multiple layers of review and approval,
as many agency decisionmakers as possible should be included in the
negotiations.

12. Settlement Conference

A settlement conference is an attempt by the court in which a lawsuit is
filed to settle the suit before a trial or hearing. Judges often schedule
settlement conferences at the pre-trial conference stage under Rule 16 of the

106. Id.
107. Id. at 597, 601.
108. Id. at 597.
109. In complex cases, parties may wish to select a private judge with expertise in the disputed
area. Id. at 600.
110. Id. California courts offer referral to a private judge who will hear the case, and his decision
becomes that of the court. Id. at 597.
111. Id. However, the decision is not subject to trial de novo. Id.
112. See generally 59 Fed. Reg. 30,372; Charles Pou, Jr., Federal Agency Use of “ADR”: The
Experience to Date, in ADR SOURCEBOOK, supra note 36, at 101, 118.
113. Pou, supra note 112, at 118.
116. Carrie Menkel-Meadow, For and Against Settlement: Uses and Abuses of the Mandatory
Federal Rules of Civil Procedure. Rule 16(a)(5) specifically gives the judge discretionary authority to direct the parties to appear before the court at a pre-trial conference to "facilitate settlement of the case." The settlement conference is sometimes presided over by the judge to whom the case is assigned for hearing but may also be referred to another judge, magistrate, or other court officer. While style and procedure will vary widely with the forum and presiding official, the judge will hear each side's respective positions and, depending on the judge, may offer his opinion of the parties' positions. The judge may then attempt to convince each side to settle the dispute and thus help to "broker" a settlement.

13. **Summary Jury Trial**

A summary jury trial is a process, either court-mandated or voluntary, in which parties present abbreviated versions of their cases to a "jury," which renders a non-binding, advisory verdict. The jury may then discuss the case's strengths and weaknesses with the parties and their counsel. The parties may enter into a settlement agreement based on the advisory verdict, use the verdict as the basis for further negotiation, or proceed to litigation. The summary jury trial process generally lasts less than one day and is most appropriate in cases where the outcome of factual disputes does not hinge on witness credibility as witnesses usually are not presented. This technique was developed for use in federal district courts and authorized by Congress in the Civil Justice Reform Act of 1990.

As the preceding inventory indicates, numerous ADR techniques exist for resolving disputes of any size, shape, or form. Additionally, there are infinite variations and combinations of these techniques that can be tailored for a particular dispute or set of disputes. With these ADR methods in mind, the following section analyzes their application to Natural Resource Damage Assessments.

---

117. FED. R. CIV. P. 16(a)(5). See also Menkel-Meadow, supra note 116, at 491-92.
119. For a good discussion of the role of judges in settlement conferences, see id. at 494-98.
120. Id. at 510-11.
121. Id. at 506, 510-11.
122. Patterson, supra note 40, at 596; Dayton, supra note 8, at 905-07.
123. Dayton, supra note 8, at 907 & n.89.
124. Patterson, supra note 40, at 596.
125. Id.; Dayton, supra note 8, at 908.
126. Patterson, supra note 40, at 596 & n.27; Dayton, supra note 8, at 905-07.
A new era of increased environmental awareness and activism commenced when Congress promulgated the National Environmental Policy Act of 1969 ("NEPA"). Environmental disasters, such as the Love Canal toxic waste dump, eventually led to promulgation of specific environmental statutes. One of these statutes, CERCLA, was enacted "to address the threat to human health and the environment of abandoned hazardous waste sites." Although CERCLA has primarily been invoked to clean up abandoned waste sites, it also authorizes public trustees to recover for injury to, loss of, or destruction of natural resources. CERCLA also specifically requires that the President promulgate regulations for the assessment of damages for the injury to, loss of,
or destruction of natural resources. Former President Ronald Reagan delegated that responsibility to the DOI.

In 1986, the DOI issued rules for assessing natural resource damages. Trustees are not required to follow the DOI’s rules, but CERCLA provides that any assessment made under those rules benefits from a rebuttable presumption that the assessment is accurate. Accordingly, it is in the trustee’s best interest to conduct assessments pursuant to DOI rules.

The 1986 DOI NRDA rules were challenged in Ohio v. Department of the Interior. That decision invalidated portions of the DOI’s rules as: (1) contrary to congressional intent that the primary measure of natural resource damages should be restoration costs, and (2) contrary to congressional intent that trustees receive full compensation for damages to natural resources. The court remanded the rules to the DOI and directed the Department to revise the regulations consistent with its decision. On March 25, 1994, the DOI issued its final revised rules which addressed all but one aspect of the Ohio decision.

The reasons for settlement in the NRDA context are not complex. From the potentially responsible parties’ (“PRPs”) perspective, they have an incentive to negotiate because the trustees have substantial discretion in selecting the

134. 42 U.S.C. § 9651(c).
138. 880 F.2d 432 (D.C. Cir. 1989).
139. Id. at 456. DOI’s rule limited trustee damage recoveries to the “lesser of” restoration or replacement costs or the diminution of use value of the injured resource. 43 C.F.R. § 11.35.
140. Ohio, 880 F.2d at 462-63. The 1986 rule set up a hierarchy of valuation methodology which almost exclusively relied on the market value of the resource. 43 C.F.R. § 11.83(c)(1). Trustees could select an alternative value only if the market value methods were impossible. Id. § 11.83(d). Problems with this method are that, frequently, there is no “market” value for a resource, and, notwithstanding the existence of a market value, intangible values are not captured therein.

Another restriction in the rule which severely limited the ability of trustees to recover “non-use value” damages was also invalidated. Non-use values include: (1) “option value,” the value of knowing that one has the option to use a resource, (2) “existence value,” knowing the resource exists whether one intends to use it or not, and (3) “bequest value,” the value of the resource to future generations. See Fox, supra note 133, at 545-47. See also Rhoda L. White, Natural Resource Damages: Trusting the Trustees, 27 SAN DIEGO L. REV. 407, 418-19 (1990) (discussing valuation of natural resources).
141. Ohio, 880 F.2d at 481.
142. 59 Fed. Reg. 14,261 (1994). The revised final rule did not address the assessment of lost non-use values. See supra note 140. The revised rules have also been challenged in Chamber of Commerce v. United States Dep’t of the Interior, No. 94-1462 (D.D.C. filed June 21, 1994). The consolidated case involves actions by numerous industry representatives and one state. Id. Several states have intervened on behalf of the United States. Id. Two primary issues are: (1) whether the DOI gave the trustees too much discretion and flexibility to select the appropriate alternative for purposes of calculating damages, and (2) whether the level of guidance provided by the rules in selecting a method is consistent with CERCLA. Id.
THE USE OF ALTERNATIVE DISPUTE RESOLUTION

appropriate remedy and calculating costs\textsuperscript{143} which form the basic measure of damages.\textsuperscript{144} The trustees may also collect damages to recover the use and non-use values lost to the public until the restoration is complete.\textsuperscript{145} Finally, the responsible parties are liable for the reasonable costs of the trustees' assessment.\textsuperscript{146} Combined, the responsible parties face potentially large liability. Moreover, while the trustees conduct their studies and until the resource is restored, the damages continue to increase.

The trustees' incentives to negotiate are different but equally unambiguous. The primary goal of the NRDA process is to restore the integrity of the resource.\textsuperscript{147} Statutes with NRDA provisions, however, do not make funds available for restoration.\textsuperscript{148} Thus, until the parties settle or a court enters an award for damages, injury to the resource and the broader ecosystem may continue, and the trustees' ability to address natural resource damages will be lessened as resources are devoted to lingering cases.\textsuperscript{149} The trustees' incentive is clear: restore, remediate, or replace the resource as quickly as possible while avoiding protracted litigation.

The DOI's NRDA rules create incentives which encourage negotiation and settlement. This, in addition to the trustees' and PRPs' shared goals of generating a fast and efficient remedy, makes the question not whether negotiating is a good idea, but rather "when" and "how" best to negotiate.

A. NRDA Regulations

The DOI's NRDA regulations set out a four-phase administrative process for conducting NRDAs. Although ADR has frequently been used during these processes, the DOI does not explicitly incorporate ADR procedures into its rules.\textsuperscript{150} However, the DOI has encouraged the use of ADR in its regulations\textsuperscript{151}

\textsuperscript{143} See supra notes 132-40 and accompanying text.

\textsuperscript{144} Although the preferred remedy is restoration, unless the costs are completely disproportionate to the value of the resource, the Department has substantial discretion over the choice of valuation methodology. Ohio, 880 F.2d at 444, 459. The valuation methodology, thus, can become the predicate for the damages. See Okun, supra note 131, at 970-71.

\textsuperscript{145} See supra note 140.

\textsuperscript{146} 43 C.F.R. § 11.91(a).

\textsuperscript{147} Ohio, 880 F.2d at 444.

\textsuperscript{148} For example, CERCLA's Superfund provision does not apply to natural resource restoration. See 42 U.S.C. § 9611.

\textsuperscript{149} See supra note 148 and accompanying text. Under budget-constrained circumstances, even with everything else remaining constant, it is axiomatic that an agency's carrying capacity diminishes as greater demands are placed on its resources.

\textsuperscript{150} Only NOAA has proposed regulations that explicitly encourage settlement among the parties involved in NRDAs. 60 Fed. Reg. 39,828. See also id. at 39,809, 39,820; Natural Resource Damage Assessments Under the Oil Pollution Act of 1990, 59 Fed. Reg. 1162 (1994). Trustees and
through "negotiated resolutions." Accordingly, as will be discussed below, the use of ADR is proper in each phase of an NRDA under DOI rules.

1. **Preassessment Phase**

The first phase under the DOI’s NRDA rules is called the Preassessment Phase. This phase covers activities that precede the actual assessment. As a preliminary matter, after a natural resource trustee is notified of the discharge or release, she should assist in identifying other trustees. Once trustees are identified, they must determine whether further assessment activities are warranted, including appraising whether injuries have occurred to natural resources. Trustees must base their determination on various criteria and conditions outlined in the DOI’s NRDA regulations. The trustees’ determination is documented in the Preassessment Screen Determination.

Because preliminary assessment activities are expensive and may be duplicative in the case of numerous trustees, trustees should coordinate their assessment efforts at this earliest phase. To this end, NOAA has published a Draft Memorandum of Understanding ("MOU") for trustees with its proposed NRDA rules. The Draft MOU outlines, among other things, the trustees’ duties and responsibilities, the method of decisionmaking and dispute resolution, and the handling and disposition of damages recovered. At this juncture, it has proven

---

responsible parties “may settle a claim for natural resource damages at any time” following a discharge. 60 Fed. Reg. 39,828.

152. Id. at 52,753.
153. Id. at 52,750; 43 C.F.R. §§ 11.20-.25.
155. 43 C.F.R. § 11.20(c).
156. Id. § 11.22.
157. Id. § 11.23. The DOI requires trustees to conduct a preassessment screen to determine that all of the following criteria are met before beginning formal assessment efforts: (1) a discharge has occurred; (2) natural resources have been or are likely to be injured; (3) the quantity and concentration of the discharge is sufficient to cause injury to the natural resources; (4) there is sufficient data, necessary to pursue an NRDA, readily available or obtainable at a reasonable cost; and (5) response actions undertaken in accordance with the National Contingency Plan, 40 C.F.R. Part 300, do not or will not remedy the injury to natural resources. 43 C.F.R. § 11.23(c)(1)-(5).
158. 43 C.F.R. § 11.23(c). The Preassessment Screen Determination includes information on the site and on the discharge or release, damages excluded from liability under CERCLA or the CWA, a preliminary determination of exposure pathways, exposed areas, estimates of concentrations of the oil or hazardous substance, and potentially affected resources. Id. §§ 11.24, 11.25.
161. Id. at 8985.
effective to include the PRPs in any cooperative agreement.\textsuperscript{162}

Early inclusion of PRPs, especially if initiated by a neutral,\textsuperscript{163} sends a clear message to the PRPs that the trustees seek PRP involvement and a non-adversarial process.\textsuperscript{164} Depending on the circumstances of the case, the neutral can help the parties memorialize the level of collaboration through a consent agreement.\textsuperscript{165} Because of the great potential for breakdown in communication\textsuperscript{166} and the need for logistical coordination,\textsuperscript{167} both the trustees and the PRPs can benefit from the assistance of the neutral. The potential beneficial results of such cooperative efforts are: (1) it saves money and prevents duplicative studies performed by trustees and PRPs;\textsuperscript{168} (2) settlement, unlike litigation, focuses the parties on the goal of restoration;\textsuperscript{169} and (3) it fosters trust and confidence between the parties when data and calculations of values are shared.\textsuperscript{170} Therefore,

\footnotesize
\begin{itemize}
  \item 162. Cecil & Foster, supra note 133, at 425. In the case of the Megaborg spill off the Texas coast, joint studies performed by the trustees and PRPs resulted in an agreement as to how to proceed with further studies within three days of the spill. \textit{Id. See also infra} notes 273-93 and accompanying text.
  \item 163. The neutral need not be a private nor professional dispute resolution specialist if a non-trustee agency individual with ADR experience is available to make initial contact with the PRPs.
  \item 164. For example, the EPA’s guidelines on the use of ADR recommend early intervention. U.S. EPA, \textit{supra} note 47, at 744.
  \item 165. \textit{See} Cecil & Foster, \textit{supra} note 133, at 432-33.
  \item 166. \textit{See generally} Thomas L. Eggert & Kathleen A. Chorostecki, \textit{Rusty Trustees and the Lost Pots of Gold: Natural Resource Damage Trustee Coordination Under the Oil Pollution Act, 45 BAYLOR L. REV. 291, 304-12 (1993).}
  \item 169. Cecil & Foster, \textit{supra} note 133, at 434.
  \item 170. \textit{Id. at} 425-30. Inclusion of the PRPs at the earliest levels of decisionmaking enhances trust which is critical to collaborative decisionmaking. \textit{See} Endispute, \textit{supra} note 167. PRPs’ differing interests lead them to characterize natural resource injury differently even though they may agree on the quantitative harm. Raymond J. Kopp & V. Kerry Smith, \textit{Benefit Estimation Goes to Court: The Case of Natural Resource Damage Assessments, 8 J. POL’Y ANALYSIS & MGMT. 593, 600 (1989). Without input from all of the parties, including the trustees, the preassessment is unlikely to address the parties’ broad range of interests. Thus, if a party to a dispute feels left out of the decisionmaking process, it has a reason to try to disrupt the decision and any subsequent collaborative efforts that build upon the earlier determination. LAWRENCE E. SUSSKIND ET AL., ENVIRONMENTAL IMPACT ASSESSMENT PROJECT, MASSACHUSETTS INST. OF TECHNOLOGY, RESOLVING ENVIRONMENTAL DISPUTES: APPROACHES TO INTERVENTION, NEGOTIATION, AND CONFLICT RESOLUTION 77 (1978). Moreover, the PRPs frequently have special knowledge of the site or resource which may be useful in making the initial NRDA determination. Early inclusion of PRPs may therefore increase the speed of the preassessment determination and reduce its cost.}
\end{itemize}
although the rules do not require PRP notification until the second phase,\textsuperscript{171} the trustees should notify the PRPs and include them in joint Preassessment Phase activities whenever practicable and possible.

A facilitator or mediator at the Preassessment Phase could serve at least three useful functions: (1) identifying and contacting responsible parties, including public entities;\textsuperscript{172} (2) explaining the trustees' intent to adopt a cooperative approach;\textsuperscript{173} and (3) assisting the parties in negotiating a limited consent agreement concerning the preparation of the preassessment screen and the allocation of costs.\textsuperscript{174} To the extent that an agency presently undertakes these actions, the lead trustee would perform these functions.\textsuperscript{175}

2. Assessment Plan Phase

The second phase of the assessment process is the Assessment Plan Phase.\textsuperscript{176} This phase explicitly requires coordination among trustees,\textsuperscript{177} selection of a "lead authorized official,"\textsuperscript{178} and identification and notification of PRPs.\textsuperscript{179} The lead authorized official, designated by mutual agreement of all trustees, acts as the "final arbitrator of disputes if consensus cannot be reached on . . . any . . . aspect of the Assessment Plan."\textsuperscript{180} Trustees must then develop a written Assessment Plan describing the procedures that will be used to determine the injuries and damages.\textsuperscript{181} The Assessment Plan must select either a type A assessment which "provide[s] standard methodologies for conducting simplified" NRDAs\textsuperscript{182} or a type B assessment which "provide[s] alternative methodologies for conducting [NRDAs] in individual cases."\textsuperscript{183} The lead authorized official has

\begin{thebibliography}{99}
\bibitem{171} 43 C.F.R. § 11.32(a)(2)(iii).
\bibitem{172} Bruce C. French, \textit{More Effective Citizen Participation in Environmental Decisionmaking}, 24 U. Tol. L. REV. 389, 403 (1993). A third party might be able to "ferret-out" PRPs and others who should be involved in negotiations, including those with no direct legal stake, such as locally impacted residents and industries.
\bibitem{174} See infra notes 178-80 and accompanying text.
\bibitem{175} See supra note 155 and accompanying text.
\bibitem{176} 43 C.F.R. §§ 11.30-.35.
\bibitem{177} \textit{Id.} § 11.32.
\bibitem{178} \textit{Id.} § 11.32(a)(1)(ii)(A).
\bibitem{179} \textit{Id.} § 11.32(a)(2).
\bibitem{180} \textit{Id.} § 11.32(a)(1)(ii)(A). If trustees cannot reach a consensus on the designation of the lead official, the DOI rules set out which trustee shall be designated based upon where the affected land or water is located. \textit{Id.} § 11.32(a)(1)(ii)(A)-(D). This section also provides that if assessments may reasonably be divided and do not overlap, they may be pursued separately by each trustee. \textit{Id.} § 11.32(a)(1)(iii).
\bibitem{181} \textit{Id.} § 11.31.
\bibitem{182} \textit{Id.} § 11.40. See infra notes 208-11 and accompanying text.
\bibitem{183} \textit{Id.} § 11.60. See infra notes 208-11 and accompanying text.
\end{thebibliography}
final approval over the methodologies included in the Assessment Plan.\(^{184}\)

Once an Assessment Plan is established, it must be made public for comment.\(^{185}\) It has been suggested that there is an advantage in involving interested citizens and environmental groups prior to the official public comment period.\(^{186}\) Often, these groups suggest "creative restoration options [which] are often the most cost effective alternatives."\(^{187}\) This also helps foster trust between the public and government that public concerns are being addressed early on\(^{188}\) and may prevent legal challenges to the sufficiency of the Assessment Plan.\(^{189}\) Finally, if both PRPs and the public are involved in the process, it ensures that the NRDA addresses both industry and environmental concerns.\(^{190}\)

Collaborative, assisted decisionmaking has potential applicability to the Assessment Plan Phase and has precedent in the context of the Endangered Species Act,\(^{191}\) the siting of hazardous waste storage facilities,\(^{192}\) and in a variety of land use planning initiatives.\(^{193}\) With wide discretion in developing damage estimates and remedies but limited resources available to conduct planning assessments, there is reason to believe that negotiations on at least methodology and funding issues could be productive.

Reaching consensus on at least the broad parameters of the Assessment Plan can prevent conflict before it starts. Third party neutrals, especially mediators, facilitators, and fact-finders, can help parties expose and understand

---

184. Id. § 11.60(b).
185. Id. § 11.32(c).
186. Cecil & Foster, supra note 133, at 433-34.
187. Id. at 434.
188. Dinah Bear, General Counsel for the Council on Environmental Quality, has long advocated public participation in the NEPA process to ensure that the concerns of the parties involved are heard, responded to, and addressed. DINAH BEAR, EPA REGION IV WORKSHOP, MUST NEPA CONTROVERSIES MEAN WIN, LOSE OR SUE? EXPLORING ALTERNATIVE MEANS OF ENVIRONMENTAL DISPUTE RESOLUTION (1986).
189. Id.
190. Cecil & Foster, supra note 133, at 434.
191. For a good overview of consensus-building in the endangered species context, see STEVEN L. YAFFEE & JULIA M. WONDOLLECK, NEGOTIATING SURVIVAL: AN ASSESSMENT OF THE POTENTIAL USE OF ALTERNATIVE DISPUTE RESOLUTION TECHNIQUES FOR RESOLVING CONFLICTS BETWEEN ENDANGERED SPECIES AND DEVELOPMENT (1994). This study evaluates dispute resolution efforts involved in the recovery implementation program for endangered fishes of the Upper Colorado River Basin, the Salmon Summit, the negotiated rulemaking of turtle excluder devices, and the San Bruno Mountain habitat conservation plan. Id.
194. See e.g., supra note 142.
differences in their basic assumptions\(^{195}\) and priorities\(^{196}\) as these differences become apparent.\(^{197}\) If left unchecked, such differences can arise at the very end of the process when positions are hardened and all alternatives tend to be drawn in win-lose dichotomies.\(^{198}\)

Moreover, once the parties' assumptions and priorities are exposed, neutrals can help parties communicate and prioritize the interests which make competing assumptions important.\(^{199}\) Parties to an NRDA dispute do not hold dichotomous interests.\(^{200}\) Indeed, all parties have some interest in having the injury remedied in a fast, efficient, and permanent manner.\(^{201}\) What separates the parties is primarily how they set their priorities, and in some cases, other special concerns.\(^{202}\)

By negotiating at the Assessment Plan Phase, parties do not "give up" anything.\(^{203}\) If negotiations fail, trustees may lose some time in preparing the

\(^{195}\) Neutral third parties are effective at assisting parties to expose different assumptions about the causes and impacts of particular actions. SUSSKIND ET AL., supra note 170, at 87-90. Such differences in the NRDA context can take a variety of forms: interest or discount rates, toxic threshold levels, the time over which harm occurs, etc. Kopp & Smith, supra note 170, at 605. Without jointly probing and understanding basic assumptions, it is almost axiomatic that parties will arrive at different conclusions.

\(^{196}\) Third parties are particularly effective at helping negotiation participants prioritize their own interests and understand those of others. See Susan Sturm, A Normative Theory of Public Law Remedies, 79 GEO. L.J. 1357, 1374 (1991) (describing use of court-appointed special master to assist parties to “score” issues using agreed upon methods). Unlike the interested parties, a neutral can speak confidentially with parties, help parties to realistically evaluate alternatives, and make suggestions without the parties having to worry about “showing weakness.” Michael G. Liffing, Which Is the Fairest Court of All? The Case for a Private Court System, 70 N.D. L. REV. 353, 361 nn.18-20 (1994) (adversarial negotiation does not lend itself to open and realistic appraisals of respective parties’ cases). Thus, the mediator or facilitator can help parties identify and prioritize interests, structure possible alternatives, and determine whether continued negotiations are worthwhile. See SUSSKIND ET AL., supra note 170, at 87-90; PRITZKER & DALTON, supra note 173, at 37.

\(^{197}\) See Sturm, supra note 196, at 1374. Professor Sturm describes how a court-appointed special master in a Michigan fishing rights case helped the parties to the dispute evaluate and “score” their concerns using an agreed-upon method. Id. Because the parties used a unified system, each interest could be ordered and compared with others. Id.

\(^{198}\) Kopp & Smith, supra note 170, at 593.

\(^{199}\) See supra notes 195-97 and accompanying text.

\(^{200}\) Not only do parties have a common interest in removing both legal and financial uncertainty, but it is likely that all parties want the environmental injury to be repaired. See Mark Sagoff, We Have Met the Enemy and He Is Us or Conflict and Contradiction in Environmental Law, 12 ENVTL. L. 283, 313 (1982).

\(^{201}\) See supra notes 143-49 and accompanying text.

\(^{202}\) Local residents may be especially concerned about how the actual physical remedy will be conducted.

\(^{203}\) Unlike binding arbitration, discussed supra notes 35-48 and accompanying text, the neutral would have no substantive decisionmaking authority. Because the parties have control over the negotiating process, they must feel confident that their next best alternative (i.e., litigation) is not
Plan, but they will also better understand where points of contention lie. With this information, the trustees can address these areas thoroughly, indicating to both the parties and any reviewing court that the Plan was well-considered. Although the parties are likely to disagree on some basic issues such as information-sharing and funding, it is unlikely that negotiations will be completely unproductive. Based on the neutral's ability to understand and communicate assumptions, interests, and priorities, the neutral could help parties to the NRDA dispute make maximum use of the negotiating opportunities in the Assessment Plan Phase.

3. Assessment Phase

The next phase under the DOI rules is the Assessment Phase. This phase consists of Injury Determination, Injury Quantification, and Damage Determination. These determinations differ depending on whether the trustees selected a type A or type B procedure in the Assessment Plan. Injury Determination is the stage at which the trustees determine whether natural resources have been injured and whether there is a path of exposure between the discharge or release site and the injured resource. Although the term “injury” is defined under the DOI regulations as a measurable adverse change in quality or viability of a natural resource as a result of exposure to oil or a hazardous substance, under a type B assessment, specific additional definitions of injury are provided for surface water, ground water, air, geological, and biological resources. Once trustees establish an injury and a pathway, they proceed to

---

as good as the negotiation process. See LAWRENCE S. BACOW & MICHAEL WHEELER, ENVIRONMENTAL DISPUTE RESOLUTION 26-28 (1984).

204. See supra notes 195-202 and accompanying text.

205. See supra notes 195-204 and accompanying text.

206. 43 C.F.R. §§ 11.40-.84.

207. Id. § 11.60(b).

208. See supra notes 182-83 and accompanying text. If a type A procedure is used, minimal field work is performed and a computer model is used to determine and quantify injuries and damages for small discharges in marine or coastal environments. 43 C.F.R. § 11.41(a). The computer model is called the Natural Resource Damage Assessment Model for Marine and Coastal Environments. Id. The DOI recently proposed revising these rules. 59 Fed. Reg. 63,300 (1994). The DOI is also developing a computer model to use in the Great Lakes. Id. at 40,319.

If a type B procedure is selected, site-specific studies must be performed and trustees must identify and consider a reasonable number of alternatives for restoring, rehabilitating, replacing, or acquiring equivalent resources. 43 C.F.R. §§ 11.60-.84. Trustees must document their decisions in a Report of Assessment. Id. §§ 11.60, 11.90.

209. 43 C.F.R. § 11.61(a).

210. Id. § 11.14(v).

211. Id. § 11.62.
Injury Quantification.\textsuperscript{212}

Injury Quantification requires trustees to quantify the extent of the injuries and determine which damages will be sought.\textsuperscript{213} This is accomplished by measuring the resource's reduction from "baseline" conditions.\textsuperscript{214} An example is the reduction in "services," which are the functions that natural resources provide for humans and other resources, such as flood control, food, or recreation.\textsuperscript{215}

Once injuries have been quantified, trustees must make the Damage Determination,\textsuperscript{216} a calculation of the money damages to be sought as compensation for the quantified resource injuries.\textsuperscript{217} The basic measure of damages is the cost to restore, rehabilitate, replace, and/or acquire the equivalent injured resources.\textsuperscript{218} Trustees may also seek "compensable value" damages,\textsuperscript{219} which are damages for the economic value of services lost to the public from the time of discharge until the completion of restoration.\textsuperscript{220}

As with other phases of the assessment, early cooperation can be beneficial to all parties. As outlined above, the purpose of the consensual process is to produce a good remedy and to save costs and time.\textsuperscript{221} Because time is saved, restoration may begin sooner, thereby reducing compensable value damages.\textsuperscript{222}

Collaborative decisionmaking can help resolve valuation issues.\textsuperscript{223} Parties' separate damage assessment estimates frequently differ by substantial amounts.\textsuperscript{224} In \textit{Eagle Mine}, a CERCLA-NRDA case, the State of Colorado and other trustees' valuation was two orders of magnitude greater than the PRPs' estimate.\textsuperscript{225} This discrepancy occurred even though both the trustees and PRPs used very similar valuation methodologies.\textsuperscript{226} The problem was not the scientific

\begin{footnotesize}
\begin{enumerate}
  \item Id. \S 11.61(e)(2).
  \item Id. \S 11.70(a).
  \item Id. \S 11.70(b). A resource's "baseline" condition is the condition that would have existed without the discharge or release. \textit{Id.} \S 11.72(b).
  \item Id. \S 11.71(e).
  \item Id. \S 11.80(a).
  \item Id.
  \item Id. \S 11.80(b).
  \item Id.
  \item Id.
  \item Id.
  \item See \textit{supra} notes 143-49 and accompanying text.
  \item Cecil \& Foster, \textit{supra} note 133, at 434.
  \item \textit{See generally} Kopp \& Smith, \textit{supra} note 170. Private parties and public entities already use ADR techniques in a variety of contexts, including: (1) contract cost overruns, \textit{see} ADR SOURCEBOOK, \textit{supra} note 36, at 491, 493; (2) wage and salary disputes, \textit{id.} at 501; (3) tort claims, \textit{id.} at 496; and (4) corporate worth determinations, \textit{see} James C. McKinney, Federal Communications Comm'n, \textit{Final Report of the Mediator/Facilitator in the RKO Settlement Process}, \textit{in} ADR SOURCEBOOK, \textit{supra} note 36, at 531, 534.
  \item \textit{See} Kopp \& Smith, \textit{supra} note 170, at 604-05.
  \item Id. at 605.
  \item Id.
\end{enumerate}
\end{footnotesize}
method or data used, but the basic assumptions that the parties’ respective counsels instructed the economists to use.\textsuperscript{227}

If differences in scientific assumptions are not resolved in the Assessment Phase, a lay trier of fact in a court proceeding must determine which set of assumptions or methodological approach is better.\textsuperscript{228} Because the credibility of the science, not the witness, would usually be at issue before the court in an NRDA proceeding, an adversarial process conducted by non-technically trained lawyers before a non-technically trained trier of fact would rarely be the most effective way to make cutting-edge scientific determinations.\textsuperscript{229}

One approach used to reconcile methodological and scientific assumptions is to question the parties’ expert witnesses at the same time.\textsuperscript{230} In such “tandem witness” examinations, witnesses are asked the same questions and must respond directly to the other’s argument.\textsuperscript{231} This approach serves to clarify the points of scientific departure, the basis for disagreement, and can be used to develop measures that test the validity of underlying assumptions.\textsuperscript{232} Techniques that involve tandem witness examination or scientific advisory panels can increase the accuracy of the damage assessment and reduce the transaction costs in reaching agreement.\textsuperscript{233} Unlike much adversarial settlement bargaining, these approaches do not attempt to effect a “zero-sum game” or “split-the-difference” compromise.\textsuperscript{234} Instead, they seek to develop, using the best science available and objective criteria, a common understanding of the facts, the extent of the injury’s impact, and the injury’s expected duration.\textsuperscript{235}

The Fish and Wildlife Service (“Service”) and the EPA have used scientific panels to help resolve contentious factual determinations in a manner analogous to that which could be used in the Assessment Phase.\textsuperscript{236} In a decision involving the Endangered Species Act, the Service requested the assistance of

\begin{itemize}
\item 227. \textit{Id.} See also supra notes 195-202 and accompanying text.
\item 228. This problem is only likely to increase with the recent holding in Daubert \textit{v.} Dow Chemicals, Inc., 113 S. Ct. 2786 (1993) (holding that “general acceptance” standard was not necessary prerequisite for admissibility of scientific evidence and that trial judge is bound to ensure that scientific experts’ testimony is reliable and relevant).
\item 230. \textit{Id.}
\item 231. \textit{Id.}
\item 232. \textit{Id.}
\item 233. \textit{Id.}
\item 235. \textit{See generally} \textit{id.} at 84-98.
\item 236. \textit{See} YAFFEE & WONDOLLECK, \textit{supra} note 191, at 5-7. Professors Yaffee and Wondolleck aptly and critically discuss the use of dispute resolution in the endangered species context. \textit{Id.} See also Peter Evans, \textit{A “Recovery” Partnership for the Upper Colorado River To Meet § 7 Needs}, 8 NAT. RESOURCES & ENV’T 1, 24 (1993).
\end{itemize}
nine leading fish experts to evaluate the best scientific evidence and to report their independent conclusions as to whether to list the Alabama Sturgeon as a protected species.\textsuperscript{237} While the Service, of course, retained all authority in the decision whether to list the fish,\textsuperscript{238} the Service sought expert peer review to help develop a credible, unbiased basis for making the complex determination.\textsuperscript{239}

Techniques such as tandem witness questioning and the use of scientific panels can be employed in facilitation, mediation, or mini-trials.\textsuperscript{240} These techniques have applicability to the NRDA process because it is a service-based process.\textsuperscript{241} Like the other techniques discussed above,\textsuperscript{242} their use does nothing to avoid or "privatize" the dispute.\textsuperscript{243} Rather, the consensus-building techniques focus dispute resolution efforts on understanding the science, the facts, and the parties' interests in an effort to avoid delay, transaction costs, and inefficient or under-funded remedies.

4. Post-Assessment Phase

The final phase of the assessment process is the Post-Assessment Phase.\textsuperscript{244} This phase outlines the process by which the trustees prepare a final report, present demands to PRPs, and, if necessary, file suit.\textsuperscript{245} Although DOI regulations do not explicitly address settlement of damage claims, "[t]rustees have authority to settle their damage claims at any time during the administrative process."\textsuperscript{246} Furthermore, CERCLA requires the EPA to notify trustees if settlement negotiations involving a release affecting resources are underway and to encourage the trustees' participation in the negotiation.\textsuperscript{247} A trustee, however, should not wait until the last minute to attempt to reach settlement for the reasons addressed above.\textsuperscript{248} A trustee is more likely to recoup sufficient damages from PRPs to complete a restoration plan which they have helped develop. The

\begin{footnotes}
\item[239] Memorandum, supra note 237, at 3.
\item[240] See supra note 234 and accompanying text.
\item[241] See supra notes 143-49 and accompanying text.
\item[242] See supra notes 35-127 and accompanying text.
\item[243] Quite the contrary of avoiding disputes, consensus-building focuses the parties' attention on the roots and facts of the dispute and separates out superficial posturing and personality conflicts. See, e.g., supra notes 195-205, 234-35 and accompanying text.
\item[244] 43 C.F.R. §§ 11.90-.93.
\item[245] Id.
\item[246] 59 Fed. Reg. 52,751. See also supra notes 150-52 and accompanying text.
\item[247] 42 U.S.C. § 9622(j)(1).
\item[248] See supra notes 159-75, 195-205, 221-31 and accompanying text.
\end{footnotes}
alternative is to adopt a litigation posture and "settle" for less than might have been gained via a joint effort.249

Whether a case settles or not, the damages must be allocated among the PRPs.250 Liability under CERCLA is joint and several.251 As a result, trustees have the option of looking to one or all PRPs for compensation of natural resource damages.252 However, because CERCLA allows PRPs to seek contribution from, and allocate responsibility among, other PRPs,253 all PRPs should be involved in the allocation of damages. Thus, it is more efficient for all parties to reach settlement together than to negotiate with, or litigate against, each PRP. This would be particularly productive in cases where PRPs have been involved in the process from its earliest stages because they will have had access to information which will help determine their proportionate liability. Furthermore, because trustees may also be PRPs under CERCLA,254 it is in their best interest to determine early in the assessment process what their potential liability may be so that public money is spent in the most efficient manner.

The EPA and the Corps have used different types of ADR techniques to resolve cost allocation disputes.255 The EPA has used mediation as its primary method of resolving cost allocation disputes through ADR, in part because of the agency's desire to retain control over the decisionmaking process.256 Furthermore, the EPA and PRPs have found that mediation's informal but structured approach to negotiation has significant advantages beyond non-assisted negotiations.257 These benefits include: (1) improved sharing of information;258 (2) development of objective criteria for determining the allocation of costs;259 (3) improved speed

249. While a good remedy may be developed without cooperative decisionmaking, the process used is likely to be more resource-intensive than it needed to be. See supra notes 147-49 and accompanying text; infra notes 275-85 and accompanying text.
256. Peterson, supra note 255, at 338-41.
257. Id. at 329. See supra notes 85-89 and accompanying text.
259. Id. at 10.
and quality of communications through the mediator’s use of “shuttle diplomacy,” and (4) greater ability to negotiate through an impasse as a result of the mediator’s encouragement, interventions, and calls for “cooling-off” periods.

The Corps has used a mini-trial process to resolve hazardous waste cost allocation disputes in which the Department of Defense was a PRP. The Corps has chosen the mini-trial process for three principle reasons. First, this ADR technique allows technical experts and decisionmakers to retain control over the process, rather than having lawyers with different priorities take over. Second, unlike judicial decisions, mini-trials allow for greater flexibility in possible settlements. If the facts at issue are limited in scope, the “judges” can meaningfully consider the relative strengths of the case. Finally, mini-trials allow parties to settle their case quickly and on a set time schedule.

The line between mediation and mini-trial can easily become blurred. Both use a third party neutral to organize and keep the negotiations moving. The mediation process, however, tends to be more flexible and cooperative. Unlike the mini-trial, in which the decisionmakers consider opposing positions and then negotiate an agreement, in a mediation, parties work together, preferably before positions become hardened, to develop a joint solution. Mediation’s time-saving aspect may make its use more appropriate when only a small number of parties are involved, the issues are technical, and the decisionmakers have expertise in the subject matter.

III. CASE STUDIES: ADVERSARIAL V. COLLABORATIVE DECISIONMAKING

Federal agency experience suggests that negotiations early in the assessment process can reduce the amount of money spent on data collection, increase the data’s acceptability, and reduce litigation. State and federal agency experience with HAZMATs under CERCLA suggests that the use of a third party

260. See Endispute, supra note 167, at 66.
261. SCHILLING LANDFILL CASE, supra note 258, at 11.
263. Id. at 3.
264. THE MINI-TRIAL, supra note 90, at 3.
265. Id. at 4.
266. Compare id. at 1-3, 10-17 with MEDIATION, supra note 255, at 1-6. The mini-trial can be used as a technique within a mediation to help the parties better judge the relative strengths of their respective cases. See also supra notes 76-96 and accompanying text.
267. See supra notes 76-89 and accompanying text.
268. See supra notes 76-96 and accompanying text.
270. See infra notes 272-94 and accompanying text.
neutral may provide additional benefits.\textsuperscript{271} The following case studies illustrate the value of early negotiation.

A. The Exxon Valdez and the Megaborg Spills

The tragedy of the \textit{Exxon Valdez} oil spill\textsuperscript{272} will be compounded if one does not draw lessons from what went wrong with the federal agencies’ restoration efforts.\textsuperscript{273} Although the DOI negotiated a large settlement which will effect a substantial restoration of the injured natural resources,\textsuperscript{274} the Department can still learn valuable lessons about ADR from the \textit{Exxon Valdez} case.

Within one week after the \textit{Exxon Valdez} released eleven million gallons of oil into Prince William Sound, Exxon pledged $15 million to the damage assessment process.\textsuperscript{275} Federal agencies, however, informed Exxon that it could not participate in the planning of the assessment nor have access to the data developed.\textsuperscript{276} When the company finished its own analysis, it had spent over $100 million.\textsuperscript{277}

State and federal trustees included Alaska, NOAA, the Department of Agriculture, and the DOI.\textsuperscript{278} Without sufficient funding and sufficient inter- or intra-governmental coordination, the public entities conducted assessments independently and with varying degrees of comprehensiveness.\textsuperscript{279} Because of litigation concerns, the assessments were conducted in a closed atmosphere without peer review.\textsuperscript{280} In total, the trustees spent about $130 million on their assessments before the parties reached settlement.\textsuperscript{281}

The settlement was expensive, time consuming, and not based on the best data that could have been collected.\textsuperscript{282} The assessment should have cost substantially less than the approximately $230 million ultimately spent by the

\textsuperscript{272} See supra note 133 and accompanying text; Summary of Injuries to Natural Resources as a Result of the \textit{Exxon Valdez} Oil Spill, 56 Fed. Reg. 14,687 (1991).
\textsuperscript{273} Cecil & Foster, supra note 133, at 424-25.
\textsuperscript{274} By accepting responsibility for the oil spill and agreeing to pay over $1 billion, Exxon and the United States entered into the largest settlement for environmental damages in U.S. history. \textit{Exxon To Pay $5 Billion in Spill}, UPI, Oct. 9, 1991, available in LEXIS, Nexis Library, UPI File.
\textsuperscript{275} Cecil & Foster, supra note 133, at 424.
\textsuperscript{276} Id.
\textsuperscript{277} Id.
\textsuperscript{278} Id.
\textsuperscript{279} Id.
\textsuperscript{280} Id.
\textsuperscript{281} Id. at 425.
\textsuperscript{282} Id.
But for the adversarial atmosphere and front-loading of data in preparation for litigation, many millions of dollars could have been used instead to achieve CERCLA's goal of repairing damaged natural resources.

One year after the Exxon Valdez spill, the tanker Megaborg spilled more than 3.9 million gallons of volatile crude oil fifty miles off the Texas coast. The oil ignited in a series of explosions, causing two deaths. The lead agency, NOAA, formulated an initial "no-injury hypothesis" because the fires burned off a portion of the oil, the tanker owner responded rapidly to clean up the spill, and the spill did not occur near coastal areas.

Less than ten days after the initial spill, the trustees (NOAA, the State of Texas, and the DOI) proposed that the responsible parties jointly conduct an initial study to determine the validity of the "no-injury hypothesis." The trustees then entered into negotiations with the responsible parties. Within three days of the initial study, and about two weeks after the spill, the responsible parties and the trustees reached an agreement providing for the joint funding of additional studies and for the sharing of all data. As a result of the preassessment cooperation, the trustees were able to quickly confirm the initial no-injury hypothesis.

B. Lessons To Be Learned from the Exxon Valdez and Megaborg Spills

An adversarial assessment process, such as that used in the case of the Exxon Valdez, follows a predictable cycle crudely stated as follows. The trustees and the PRPs perform independent assessments and valuations. The trustees then seek damages for the injury through a "demand" letter, threatening litigation. Rather than focusing on how to restore the resource, the parties, and, if the case reaches litigation, the court, scrutinize the nexus between the alleged injury and the release to determine liability and damages. Therefore, in anticipation of litigation, the studies become oriented more toward proving or disproving liability and undermining the others' science and findings, rather than toward documenting the injury to the resource.

The fact that most cases settle sometime before a court assigns liability

283. See supra notes 277-81 and accompanying text.
285. See 42 U.S.C. § 9607(f); supra notes 132-33 and accompanying text.
287. Id.
289. Id.
290. Id.
291. Id.
292. Id.
mitigates only slightly the adverse effects of noncooperative assessments. Independently conducting an assessment in anticipation of litigation tends to harden the parties' positions, makes any settlement harder to reach, may result in a less tailored solution to the resource's needs, and uses scarce agency resources inefficiently.

The Exxon Valdez and Megaborg examples contrast in more ways than just the ability of the parties to reach a cooperative agreement. The spills differed in both size and impact on natural resources. Because the Megaborg spill was smaller and further offshore, the costs were lower. In addition, NOAA had used the one-year interval between the Exxon Valdez and Megaborg spills to develop a response strategy that lent itself to cooperative assessment. This strategy included improved trustee coordination and agreements on information sharing and contingent valuation techniques. Thus, the stakes in Megaborg were comparatively low and the conditions for settlement were good, making the comparison between the two cases particularly stark.

IV. CONCLUSION

The contrast between the Exxon Valdez and Megaborg spills serves to underscore the value of an early non-adversarial approach to joint scientific inquiry into injury resulting from a release. It also raises the issue regarding what actions the trustees can take to improve the conditions for non-adversarial assessments. This article suggests that the use of a cooperative decisionmaking process and the assistance of a third party neutral can help. The article does not presume to advise agencies on how to conduct NRDAs. Rather, in furtherance of OHA's role as ADR coordinator, it makes the suggestion based on OHA's and other federal agencies' experiences with ADR.

293. See id.
294. Id. at 429-32.