

In Hot Pursuit of NRD Claims

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Federal- and state-designated entities' ability to pursue claims for damages to the nation's natural resources have long existed under statutory and common law but, until recently, were placed on the back burner.

Pursuit of Natural Resource Damage (NRD) claims by federal and certain state governments have drastically increased. New Jersey and New Mexico have been among the most aggressive. Issues surrounding NRD claims such as allocation of liability, calculation of damages using formulas and technical factors, and causation are the focus of litigation. New Jersey's groundwater initiative and New Mexico's program are being watched closely to determine future success of NRD claims.

INTRODUCTION

The ability and authority of federal- and state-designated entities to pursue claims for damages to the nation's lakes, rivers, groundwater, wetlands, and other natural resources have long existed under statutory and common law. These types of claims are not new but, except for the big oil spills or catastrophic events, were placed on the back burner. Under numerous settlements and consent decrees with federal and state governments, little was required in terms of compensation for loss of use of natural resources. These claims fell into the category of "reopeners": those items for which a settling or ordered party did not receive a release from future liability.

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However, the landscape of federal and state Natural Resource Damage (NRD) claims has drastically changed in the last five to seven years. These issues have received much attention in both the political and budgetary arenas, and in the federal and state courts. On the federal side, the pursuit of NRD claims has been drastically increasing. With respect to the states, certain ones have been more aggressive than others in going after potentially responsible parties to recover for these claims. New Jersey and New Mexico have been among the most aggressive.

For instance, in New Jersey in early 2003, then-Governor James McGreevey made environmental protection a major part of his political agenda. One of the key points of his political platform was the basic concept that the “polluter must pay.” McGreevey’s administration saw pursuit and recovery of NRD claims as ways to compel these responsible parties to pay for and compensate the residents of the state for the alleged loss of use and restoration of its natural resources.¹ To spearhead this aggressive initiative, in 2003 the New Jersey Department of Environmental Protection (NJDEP) Commissioner issued a policy directive aimed at “addressing more than 4,000 potential claims for natural resource damages statewide.”² As discussed below, this mission is continuing and has been very successful under the current administration. NJDEP continues to flaunt its success in recovering damages for these NRD claims.

New Mexico has also been at the forefront in addressing its NRD claims. The focus in that state, as illustrated in the recent federal circuit court case discussed below, is on what exactly is recoverable and how NRD claims are determined. This decision affords potential responsible parties in New Mexico and other jurisdictions with some ammunition to attack the calculation of NRD claims to ensure parties that are already addressing contamination issues are not paying twice on the same claims.³

This article presents a basic overview of some of the general points surrounding NRD claims and the factors and obstacles that need to be considered when calculating these claims, highlighting the recent case law developments and the New Jersey and New Mexico initiatives and settlements, as well as defenses and mitigating factors to be asserted.

FEDERAL AUTHORITY TO PURSUE NRD CLAIMS

Under federal law, the United States government has long been authorized to recover NRD. NRD claims are broadly defined to encompass

¹ New Jersey Department of Environmental Protection, “DEP to Address More Than 4,000 Potential Claims for Natural Resource Damages Statewide,” press release, September 23, 2003, http://www.state.nj.us/dep/newsrel/2007/07_0037.htm (accessed August 2, 2007).

² *Ibid.*

³ *New Mexico v. General Electric Company*, 467 F.3d 1223, 1238-1239 (10th Cir. 2006).

damages to, among other things, “land, fish, wildlife, biota, air, water, groundwater, drinking water supplies, and other such resources. . . .”⁴ Relevant provisions of the Clean Water Act⁵ (CWA), the Oil Pollution Act⁶ (OPA), and the Comprehensive Environmental Response Compensation and Liability Act⁷ (CERCLA) expressly authorize the recovery of NRD separate and apart from standard removal and remediation cleanup costs by a “designated trustee” on behalf of the public who has suffered a harm as a result of the damage to a national resource. Specifically, CERCLA provides that:

In the case of an injury to, destruction of, or loss of natural resources. . . liability shall be to the United States Government and to any State for natural resources within the State or belonging to, managed by, controlled by, or appertaining to such State. . . .⁸

In addition to the well-recognized CWA, OPA, and CERCLA statutes, there are also other, less-utilized, statutory authorities that allow federal NRD recovery.⁹

Under federal law, NRD claims must be brought within specified time frames. For example, CERCLA sets forth specific timing requirements for filing NRD claims, which must be commenced within three years after either the date of the discovery of the loss or the date on which regulations pertaining to NRD assessment were promulgated, whichever is later.¹⁰ An action for recovery of NRD must be commenced within three years after the completion of a remedial action.¹¹

Generally, NRD suits are brought by trustees¹² since private parties lack standing to bring such claims. Federal law provides:

The President shall designate in the National Contingency Plan. . . the Federal officials who shall act on behalf of the public as trustees for natural resources. . . .¹³

The federal government has designated, among other agencies, the Secretary of Defense, Secretary of the Interior, Secretary of Agriculture, Secretary

⁴ See *Comprehensive Environmental Response Compensation and Liability Act* (CERCLA) 42 USC §§ 9601-9675 (16) (2007); *Oil Pollution Act* (OPA), 26 USC § 2701(20) (2007).

⁵ 33 USC §§ 1, 13-21(f)(4)-(5) (2007).

⁶ 33 USC § 2702(b)(2)(A) (2007).

⁷ 42 USC § 9607(f)(1) (2007).

⁸ 42 USC § 9607 (f)(1)(2007).

⁹ See, e.g., *National Maritime Sanctuaries Act*, 16 USC § 1432(6)(A) (2007); *Park System Resource Protection Act*, 16 USC § 19 (2007).

¹⁰ 42 USC § 9613(g)(1) (2007).

¹¹ *Ibid.*

¹² 40 CFR § 300.5 (2007) defines “Trustee” as “an official of a federal natural resources management agency designated in subpart G of the NCP [National Contingency Plan] or a designated state official or Indian tribe or, in the case of discharges covered by OPA, a foreign government official, who may pursue claims for damages under section 107(f) of CERCLA or section 1006 of the OPA.”

¹³ 42 USC § 9607(f)(2) (2007).

of Commerce, and the Secretary of Energy as federal trustees for natural resources.¹⁴ The National Oil and Hazardous Substances Pollution Contingency Plan (National Contingency Plan), is the federal government's plan of action, published by the Executive Branch, to respond to releases and discharges of oil and hazardous substances.¹⁵ The National Oceanic and Atmospheric Administration (NOAA), a scientific agency of the Department of Commerce, provides technical support and guidance for response activities addressing coastal resources affected by oil or hazardous waste.¹⁶ Additionally, as discussed below, NOAA and the Department of the Interior (DOI) have developed specific regulations for NRD valuation.

Despite the fact that the authority for NRD recovery has existed for decades, for the most part these claims were previously pursued only in cases of catastrophic releases, such as the 1989 *Exxon Valdez* oil spill. In that case, an oil supertanker struck a reef causing it to spill almost eleven million gallons of oil into Alaska's Prince William Sound, resulting in one of the worst ecological disasters in American history.¹⁷ Prior to the *Exxon Valdez* spill, NOAA, which did not have specific statutory authority to assess NRD for oil spills, had only conducted one NRD assessment, performed under the authority of CERCLA.¹⁸ However, in response to the *Valdez* oil spill Congress enacted OPA in 1990, which provided NOAA with the express statutory authority to conduct NRD assessments for oil spills on a regular basis.¹⁹ NOAA's NRD assessments in the *Valdez* case formed the basis for a \$900 million NRD settlement in 1991, the largest NRD settlement for the discharge of oil or hazardous waste to date.²⁰

Today, NRD claims are no longer limited to such catastrophic events. To the contrary, recent developments have thrust these types of claims to the forefront of the consciousness of federal and state governments and the regulated community, causing parties who thought their matters were settled to address these long dormant issues.²¹ The regulatory schemes of CWA, OPA, and CERCLA have expressly authorized not only causes of action to recover cleanup and restoration costs, but also so-called "loss of use" damages. This component of NRD recovery is intended to compensate the public for the

¹⁴ Exec. Order No. 12580, 52 F.R. 2923 (1987).

¹⁵ 33 USC § 1321 (d)(1) (2007).

¹⁶ NOAA's "National Ocean Service, Contaminants in the Environment." www.oceanservice.noaa.gov/topics/coasts/contaminants/welcome.html (accessed August 2, 2007).

¹⁷ "NOAA 200th Top Ten Historical Events: *Exxon Valdez* Oil Spill." <http://celebrating200years.noaa.gov/events/exxonvaldez/welcome.html> (accessed August 2, 2007).

¹⁸ *Ibid.*

¹⁹ *Ibid.*

²⁰ *Ibid.*

²¹ Shawn Kelly, David A. Niles, and Victoria H. Roberts, "New Jersey's Natural Resource Damages Initiative: Is the "Sleeping Giant" Waking Up," *FDCC Quarterly* 345 (Spring 2006).

interim loss of the injured resource pending recovery.²² Specifically, OPA lists NRD as:

Damages for injury to, destruction of, loss of, or loss of use of, natural resources, including the reasonable costs of assessing the damage, which shall be recoverable by a United States trustee, a State trustee, an Indian tribe trustee, or a foreign trustee.²³

However, as discussed below, the challenges of determining the value of these types of claims are controversial and will spur much litigation.

STATE STATUTORY AUTHORITY

While NRD liability exists under the various federal statutes discussed above, it has been in the state arena where the most aggressive pursuit of the NRD claims has occurred. With respect to states' authority to pursue NRD, CERCLA provides that, "[t]he governor of each state shall designate who may act on behalf of the public as trustees for natural resources. . . ."²⁴ Each state's designated trustee has the authority to obtain relief for NRD claims under federal and state law.²⁵ Unlike NRD claims involving other types of ecological injury, damages to groundwater are the sole responsibility of the states.²⁶ Driven in large part by concern for their depleted resources, states such as New Jersey and New Mexico have been in the forefront of aggressively pursuing such claims.²⁷

New Jersey

Under New Jersey's NRD program, compensation is sought under the State's versions of CWA and CERCLA, known as the New Jersey Water Pollution Control Act²⁸ and the New Jersey Spill Compensation and Control Act (Spill Act),²⁹ for all forms of NRD claims, including groundwater whose contaminants exceed New Jersey's groundwater quality standards.

The New Jersey Water Pollution Control Act authorizes the State to commence a civil action to recover "damages for any loss or destruction of

²² 33 USC § 2702(b)(2)(A) (2007) (OPA specifically indicating that recovery is available for "loss of use"); see also 43 CFR § 11 (2007); 15 CFR § 990 (2007) (authority for "loss of use" damages provided for under both CERCLA and CWA).

²³ 33 USC § 2702(b)(2)(A) (2007).

²⁴ 42 USC § 9607(f)(2)(B) (2007).

²⁵ *Ibid.*

²⁶ Gary N. Donner and Elizabeth Koniers Brown. "Facing Groundwater Natural Resource Damages Claims: Challenging Lost Use Not A Lost Cause," *The Metropolitan Corporate Council* (April 2007) 12.

²⁷ James M. Davidson, P.G. and Nicholas W. Gard, PhD. "Groundwater NRD Claims-The New Frontier of Natural Resource Damage Assessments," *Environmental Perspectives* Summer 2005.

²⁸ N.J. Stat. Ann. § 58:10A-1 to -43 (2007).

²⁹ N.J. Stat. Ann. § 58: 10 -23.11-23.24 (2007).

wildlife, fish or aquatic life or other natural resources, and for any other actual damages caused by an unauthorized discharge. . . .³⁰ Similarly, the New Jersey Spill Act, a precursor to the federal CERCLA statute, states in relevant part:

[A]ny person who has discharged a hazardous substance, or is in any way responsible for any hazardous substance, shall be strictly liable, jointly and severally, without regard to fault, for all cleanup and removal costs no matter by whom incurred. Such person shall also be strictly liable, jointly and severally, without regard to fault, for all clean up and removal costs incurred by the department or a local unit. . . .³¹

In addition to the above statutes, New Jersey has set forth certain minimal requirements for investigation and ecological evaluations of NRD as part of all site investigations under its regulations.³²

New Jersey's pursuit of these NRD claims and its issuance of its NRD policy directive, discussed below, came under sharp criticism and was attacked in the courts in two separate lawsuits brought by several potentially responsible parties and trade associations in *New Jersey Department of Environmental Protection v. Exxon Mobil, Sun Refining, Area Petroleum, et al.*³³ and *New Jersey Society for Environmental & Economic Development, et al. v. Campbell, et al.* (Trade Group Suit).³⁴ Those lawsuits alleged that the failure to adopt formal administrative regulations setting forth its groundwater damage formula violated the State's Administrative Procedure Act.³⁵ In addition, they also challenged New Jersey's hiring of private counsel on a contingency fee basis, alleging that such actions violated state law.³⁶ With respect to the Trade Group Suit, the trial court ruled on several issues, upholding the use of contingency fee arrangements for NRD suits and confirming that the Spill Act authorized the State to retain special counsel to fulfill its statutory mandate.³⁷ The remaining challenges were certified for review by the Appellate Division.³⁸ However, the parties eventually settled those issues. The settlement included, among other things, an agreement that New Jersey would promulgate formal NRD regulations, subject to notice and comment.³⁹

Like the federal program, New Jersey's NRD program seeks recovery of not just the costs of cleanup and restoration of natural resources, including soil, wetlands, surface water, and groundwater, but also "loss of use" damages when those resources cannot be used by the public.⁴⁰ As discussed below, to

³⁰ N.J. Stat. Ann. § 58:10A-10(c)(4) (2007).

³¹ N.J. Stat. Ann. § 58: 10-23.11g(c)(1) (2007).

³² N.J. Admin. Code § 7:26E-3.11 (2007).

³³ Docket No. MER-L-2933-02 (N.J. Super. Law Div., Mercer County) (Sabitino, J.).

³⁴ Docket No. MER-343-04 (N.J. Super. Law Div., Mercer County) (Sabitino, J.).

³⁵ *Ibid.*

³⁶ *Ibid.*

³⁷ Docket No. MER-343-04 (N.J. Super. Law Div., Mercer County) (Sabitino, J.).

³⁸ Kelly, *supra* Note 21, at 369.

³⁹ *Ibid.*

⁴⁰ See *N.J.D.E.P v. Exxon Corp.*, 393 N.J. Super. 388, 923 A.2d 345 (N.J. Super. App. Div. 2007).

calculate loss of use damages the State uses an often criticized formula.⁴¹ New Jersey's NRD loss of use formula only addresses groundwater damages and does not indicate how damages to other resources will be valued.⁴²

New Jersey's concern over its depletion of water sources has caused a flurry of activity in passage of legislation and regulations aimed at protecting these resources, all of which come with a cost for this protection and compensation to the public.⁴³ These environmental and fiscal concerns tied to statute of limitation issues forced New Jersey to move quickly at this time to pursue NRD claims.⁴⁴

Under the Spill Act, no cause of action shall be deemed to have accrued prior to January 1, 2002.⁴⁵ Thus, the limitations period for NRD claims begins to run either on the date when the remedial investigation of the contaminated site was completed or on January 1, 2002, whichever is later.⁴⁶ The Spill Act previously had a four-year statute of limitations, which meant that many NRD claims would have expired in January 2006, a fact that led the State to rush to pursue such claims.⁴⁷ However, in December 2005 legislation was passed and signed into law that extended the Spill Act's statute of limitations by eighteen months to allow the State more time to bring these NRD suits.⁴⁸ A policy directive issued by then-Governor James E. McGreevey in 2003 made it clear that the State of New Jersey would vigorously pursue NRD claims.⁴⁹

The NRD pursuit that grabbed everyone's attention was the State's issuance of the Passaic River Directive in September 2003. Under this directive, the State ordered sixty-six parties deemed "responsible" to address damages to the natural resources of the Passaic River alleged to have been caused by contamination from eighteen sites within the Passaic River Watershed.⁵⁰ These

⁴¹ Donner, *supra* Note 26, at 12.

⁴² *Ibid.*

⁴³ See generally N.J. Stat. Ann. § 40:55D – 1 et seq.(2007) (municipal land use laws); N.J. Stat. Ann. § 13:20-1 et seq. (2007)(Highlands Preservation Act); N.J. Admin. Code § 7:26E-1.13 (2007)(minimum water quality standards for remediation of contaminated properties).

⁴⁴ Ballard Spahr Andrews & Ingersoll, LLP Environmental Alert, "New Jersey Extends Statute of Limitations for State Civil Actions for Natural Resource Damage Claims," January 13, 2006. http://www.ballardspahr.com/files/tbl_s11Newsletters/PDFFile142/651/01-13-06EnvironmentalAlert.pdf (accessed August 2, 2007).

⁴⁵ N.J. Stat. Ann. § 58:10B-17.1 (2007).

⁴⁶ *Ibid.*

⁴⁷ Ballard Spahr Andrews & Ingersoll, LLP Environmental Alert, "New Jersey Extends Statute of Limitations for State Civil Actions for Natural Resource Damage Claims," January 13, 2006, http://www.ballardspahr.com/files/tbl_s11Newsletters/PDFFile142/651/01-13-06EnvironmentalAlert.pdf (accessed August 2, 2007).

⁴⁸ N.J. Stat. Ann. § 58:10B-17.1 (2007).

⁴⁹ New Jersey Department of Environmental Protection, "DEP to Address More Than 4,000 Potential Claims for Natural Resource Damages Statewide," press release, September 23, 2003. http://www.state.nj.us/dep/newsrel/2007/07_0037.htm (accessed August 2, 2007).

⁵⁰ *Ibid.*

parties were required to:

initiate an interim restoration of natural resources, focusing on the ecological and economic services that the river provided prior to being injured. These services include, but are not limited to, recreational and commercial fishing, wetlands, sediment functions and services, boat access points and increased costs to commerce and the maritime industry due to dredging of contaminated sediments.⁵¹

Armed with the resources of private law firms that have been authorized by the State to pursue these claims, New Jersey has already recovered more than \$51 million since the inception of its NRD program.⁵² New Jersey's current administration under Governor Jon S. Corzine has continued the quest. Adapting the "polluters must pay" mantra of previous administrations, the current NJDEP Commissioner, Lisa P. Jackson, recently stated that, "We will aggressively pursue these claims through the court system until the public has been justly compensated for its losses."⁵³ In a recent press release, the Corzine administration boasted that, "The State has filed approximately 120 lawsuits that could result in hundreds of millions of dollars in compensation from polluters who have harmed New Jersey's natural resources."⁵⁴ These complaints are virtually identical, setting forth the same claims against responsible parties for alleged federal and State NRD.

New Jersey's resolve to continue its aggressive pursuit of such claims will no doubt be strengthened by that State's Appellate Division's recent decision in *NJDEP v. Exxon Mobil Corporation*,⁵⁵ which overturned a trial court ruling that found that the State could not recover NRD for the "loss of use" of natural resource damages under the New Jersey Spill Act, but rather NRD recovery was limited to cleanup and removal costs.

Exxon Mobil Corporation (Exxon Mobil) operated petroleum refineries and petrochemical plants in Linden and Bayonne, New Jersey. As a result of ownership and operations of these sites, Exxon Mobil discharged hazardous substances into the natural resources of the State that resulted in extensive contamination.⁵⁶ Exxon Mobil agreed to address the contamination at the sites by undertaking investigation and remediation. In this suit NJDEP sought recovery for "residual injury that remains once the remedial cleanup process is completed, that is for the 'loss of use' of the affected natural resources caused by the polluters wrong."⁵⁷ In its complaint, NJDEP asserted "Spill Act

⁵¹ *Ibid.*

⁵² New Jersey Department of Environmental Protection (NJDEP), "State Files Lawsuits Seeking Compensation for Damages Polluters Caused to Natural Resources," press release, June 29, 2007. http://www.state.nj.us/dep/newsrel/2007/07_0037.htm (accessed August 2, 2007).

⁵³ *Ibid.*

⁵⁴ *Ibid.*

⁵⁵ See *N.J.D.E.P. v. Exxon Corp.*, 393 N.J. Super. 388; 923 A.2d 345 (N.J. Super. App. Div. 2007).

⁵⁶ *Ibid.*

⁵⁷ *Ibid.* at 393, 923 A.2d at 348.

and common law claims of public nuisance and trespass, for natural resource damages for the discharge of hazardous substances.”⁵⁸ Additionally, NJDEP “asserted claims for ‘damages, including loss use. . . incurred for any natural resource of this date injured by the discharges hazardous substances’ at the sites.”⁵⁹ Exxon argued that “loss of use” damages are not available under the New Jersey Spill Act.⁶⁰

As noted above, the New Jersey Spill Act does not specifically set forth that a plaintiff can be compensated for the loss of use of a natural resource, but instead only lists cleanup and removal costs as recoverable damages.⁶¹ However, the State’s Appellate Division concluded such recovery was implied given the legislature’s broad policy objectives in enacting the legislation. Specifically, the court stated:

[We] find that the DEP’s claim for “compensatory restoration”—loss of use damages—is consistent with the Spill Act express terms, is harmonious with legislative intent, and is in keeping with legislative directives articulated in the Act’s recent Amendments.⁶²

This most recent New Jersey NRD decision has caused much concern about the deluge of NRD claims that may be brought in the near future.⁶³

New Mexico

In addition to the authorization provided by federal statutes, New Mexico, through its Natural Resource Trustee, is authorized to pursue such claims under that State’s National Resources Trustee Act.⁶⁴ Under this Act the trustee can do the following:

- (1) act on behalf of the public to protect New Mexico’s natural resources by recovering damages for injury to, destruction of or loss of natural resources;
- (2) investigate injury to, destruction of or loss of natural resources;
- (3) determine the amount and cause of injury to, destruction of or loss of natural resources;
- (4) determine the liability of any person for injury to, destruction of or loss of natural resources;

⁵⁸ *Ibid.* at 397, 923 A.2d at 351.

⁵⁹ *Ibid.*

⁶⁰ *Ibid.*

⁶¹ N.J. Stat. Ann. § 58: 10-23.11g(c)(1) (2007).

⁶² *Exxon*, 393 N.J. Super. at 410; 923 A.2d 359.

⁶³ Henry Gottlieb, “Court Says N.J. Can Tap Polluters for ‘Loss of Use’ of Natural Resources,” *New Jersey Law Journal* June 11, 2007, 1, 10.

⁶⁴ N.M. Stat. Ann. § 75-7-2 (2007).

- (5) assess and collect damages for injury to, destruction of or loss of natural resources, including bringing legal actions and collecting the costs of assessing and collecting the damages; and
- (6) expend money for the purposes set forth in the Natural Resources Trustee Act.⁶⁵

Damage awards that the trustee can obtain include:

- A. the cost of restoration, replacement or acquisition of equivalent resources, plus compensation for the loss of use or enjoyment of the natural resources; and
- B. compensation for the State's expenses in investigating, assessing and collecting damages and enforcing the State's rights.⁶⁶

Over the past few years, New Mexico's Office of the Natural Resource Trustee has focused heavily on groundwater NRD and undertaken several initiatives aimed specifically at improving, repairing, and restoring that State's groundwater.⁶⁷ These initiatives include a \$30,000 plan to improve wastewater treatment facilities on the Cebolleta Land Grant and a \$1.1 million restoration effort for wildlife and groundwater, both of which have been funded through NRD settlements with responsible parties.⁶⁸

In contrast to the *NJDEP v. Exxon-Mobil* decision in New Jersey, a year prior, New Mexico, which preceded New Jersey in authorizing private attorneys to bring NRD activities on behalf of state trustees, hit a roadblock in attempting to recover "loss of use" damages under NRD.⁶⁹ In *New Mexico v. General Electric Company*, the federal district court for the District of New Mexico found, and the Tenth Circuit Court of Appeals affirmed that, although the "loss of use" component of NRD was available under the New Mexico National Resources Trustee Act,⁷⁰ which unlike New Jersey expressly lists "loss of use" as a component of NRD, the State was unable to prove "loss of use" damages under the circumstances presented in that particular case.⁷¹

That case involved chemical contamination of groundwater underlying an old industrial site in the South Valley region of Albuquerque, New Mexico, where several manufacturing companies have been located since 1948,

⁶⁵ N.M. Stat. Ann. § 75-7-3(a) (2007).

⁶⁶ N.M. Stat. Ann. § 75-7-4 (2007).

⁶⁷ "Governor Bill Richardson & Natural Resources Trustee Martin Heinrich Announce Improvements to Cebolleta Land Grants Wastewater Treatment Plants," press release, July 7, 2006. www.onrt.state.nm.us (accessed August 2, 2007).

⁶⁸ *Ibid.*

⁶⁹ *New Mexico v. General Electric Company*, 467 F.3d 1223, 1234 (10 Cir. 2006).

⁷⁰ N.M. Stat. Ann. § 75-7-4 (2007).

⁷¹ *General Electric Company*, 467 F.3d at 1238; *New Mexico v. General Electric Company*, 322 F. Supp. 2d 1237, 1259-1261 (D.N.M. 2004).

including the United States' Air Force and General Electric Company.⁷² Below the South Valley is the Middle Rio Grande Water Basin, which contains approximately 1.2 billion acre feet of groundwater.⁷³ Contamination of the site's groundwater was discovered in 1978, when volatile organic compounds and petroleum were detected in some of the municipal supply wells in the area.⁷⁴ Extensive investigation, remediation, treatment, and restoration efforts were undertaken by the responsible parties in conjunction with the Federal Environmental Protection Agency and, as of July 2005 approximately 4.5 billion gallons of water had been recovered and treated, allowing the groundwater to be returned to its beneficial use.⁷⁵ Meanwhile, in 1999 New Mexico's attorney general filed a lawsuit in federal district court against the responsible parties alleging, among other things, that the citizens of New Mexico were entitled to damages for the loss of use of the contaminated groundwater.⁷⁶

In a decision considered favorable to industry, the District of New Mexico found, and the Tenth Circuit Court of Appeals agreed, that there could not be any loss of use damages when the groundwater was not used prior to contamination.⁷⁷ Thus, New Mexico's Environmental Department's (NMED) claim for such damages failed as a matter of law. The federal court and the Tenth Circuit rejected NMED's approach that NRD be calculated by presuming that all affected groundwater would be used for drinking water.⁷⁸ This would have required a higher cleanup standard.⁷⁹ The federal court and the Tenth Circuit further reasoned that the higher remediation standard was not appropriate because there was no obligation on responsible parties under New Mexico law to return the water to a "pristine" condition.⁸⁰ Rather, the test is whether the groundwater meets the State's applicable water quality standards.⁸¹ Finally, the District of New Mexico and the Tenth Circuit indicated that it was improper to even attempt to calculate "loss of use" for a site without first determining the effect of the remediation, as it is possible that such activities would successfully remove all contamination.⁸²

As highlighted by the *General Electric* decision, and as discussed in more detail below, the main focus in assessing NRD claims is the difficulty in determining the value of the claim.

⁷² *General Electric Company*, 467 F.3d at 1226.

⁷³ *Ibid.* at 1227.

⁷⁴ *Ibid.*

⁷⁵ *Ibid.* at 1233.

⁷⁶ *Ibid.* at 1235 (The court took specific notice that this lawsuit was filed without any NRD assessment having been first performed).

⁷⁷ *General Electric Company*, 322 F.Supp. 2d at 1259-1261; *General Electric Company*, 467 F.3d at 1238.

⁷⁸ *Ibid.*

⁷⁹ *Ibid.*

⁸⁰ *Ibid.*

⁸¹ *Ibid.*

⁸² *Ibid.*

CALCULATION OF NRD CLAIMS

Federal and New Mexico

By statute, NRD under New Mexico law “shall consist of those amounts calculated in accordance with federal law.”⁸³ Under the federal scheme for determining the value of NRD, calculations must take into account several “factors including; but not limited to, replacement value, use value, and ability of the ecosystem or resource to recover.”⁸⁴ Trustees shall recover those sums necessary to “restore, replace, or acquire the equivalent of such natural resources.”⁸⁵ Recovery for “loss of use” for the period of contamination is also authorized.⁸⁶ However, as highlighted by the *General Electric* case, difficulty arises when attempting to quantify “loss of use” damages. Unlike restoration and/or replacement costs, which are more readily quantifiable, attempting to compensate the public for its deprived use and enjoyment of public resources can be much more difficult, and often involve very subjective criteria.⁸⁷

Both the DOI and NOAA have promulgated guidelines codified in regulations for assessing and valuing NRD claims. The DOI’s regulations apply to assessing NRD under the CWA and CERCLA,⁸⁸ while NOAA’s regulations apply to OPA assessments.⁸⁹ While it is not mandatory that NRD trustees follow these regulations, under CERCLA a determination or assessment of NRD conducted pursuant to these regulations “shall have the force and effect of a rebuttable presumption on behalf of the trustee in any administrative or judicial proceeding under this Act. . . .”⁹⁰

The NOAA regulations state that the trustee may quantify injuries to natural resources in terms of:

- (1) The degree, and spatial and temporal extent of the injury to a natural resource;
- (2) The degree, and spatial and temporal extent of injury to a natural resource, with subsequent translation of that adverse change to a reduction in services provided by the natural resource; or
- (3) The amount of services lost as a result of the incident.⁹¹

⁸³ N.M. Stat. Ann. § 75-7-4 (2007).

⁸⁴ 42 USC § 9651(c)(2) (2007).

⁸⁵ 42 USC § 9607(f)(1) (2007).

⁸⁶ See 43 CFR § 11(83) (2007).

⁸⁷ Allan Kanner and Mary E. Ziegler, “Understanding and Protecting Natural Resources,” 17 *Duke Environmental Law and Policy Forum* 119, 147 (2006).

⁸⁸ United States Environmental Protection Agency, “Natural Resource Damages: A Primer.” <http://www.epa.gov/superfund/programs/nrd/primer.htm> (accessed August 2, 2007).

⁸⁹ *Ibid.*

⁹⁰ 42 USC § 9607(f)(2)(C) (2007).

⁹¹ 15 CFR § 990.52 (2007).

The DOI's regulations provide the following:

... the authorized official shall quantify for each resource determined to be injured and for which damages will be sought, the effect of the discharge or release in terms of reduction from the baseline condition in the quantity and quality of the services... provided by the injured resource...⁹²

Thus, the trustee must perform an analysis that determines the extent of the injury and how much and what method should be required to restore and compensate for that injury.⁹³

As a tool to be used for understanding NRD assessments, both the NOAA and DOI regulations set forth a staged NRD assessment process. Under the DOI regulations, the process consists of several stages: "Pre-assessment Screen," involving a determination if any action is needed; "Assessment Plan," involving a determination as to how damages will be evaluated; "Assessment Implementation," requiring the collection of information to determine the nature and extent of the damages; and "Post-Assessment," phase requiring the trustee to prepare a report summarizing the findings of the prior activities.⁹⁴ A similar phased approach for conducting assessments is set forth under the NOAA regulations.⁹⁵

As of this date, no single formula is used to calculate such losses under federal law, although numerous economic methodologies have been studied, proposed, and criticized.⁹⁶ Accordingly, methods for calculating the "loss of use" component of NRD under federal law for groundwater damages remains ambiguous and unsettled,⁹⁷ especially in light of the fact that NRD claims are intended to compensate not only the lost economic uses of the resources, but also for recreational, cultural, and aesthetic losses suffered by the public.⁹⁸

New Jersey's Calculation of Groundwater NRD

To date, New Jersey has pursued more groundwater NRD claims than any other state.⁹⁹ New Jersey has developed a groundwater damage formula

⁹² 43 CFR § 11.70 (2007).

⁹³ United States Environmental Protection Agency, "Natural Resource Damages: A Primer," supra Note 88.

⁹⁴ See U.S. Environmental Protection Agency, "Natural Resource Damage Assessment." www.epa.gov/superfund/programs/nrd/nrda2.htm (accessed August 2, 2007).

⁹⁵ *Ibid.*

⁹⁶ Brian D. Israel, *Natural Resource Damages*, Environmental Law Practice Guide (2006, Matthew Bender), § 32B.07[3].

⁹⁷ James M. Davidson, P.G. and Nicholas W. Gard, PhD, "Groundwater NRD Claims-The New Frontier of Natural Resource Damage Assessments," *Environmental Perspectives* Summer 2005. <http://www.exponent.com/practices/environmental/newsletter/200508/> (accessed August 2, 2007).

⁹⁸ Israel, supra Note 96, 32B-61-67.

⁹⁹ Amy W. Ando, et al., "Natural Resource Damage Assessment: Methods and Cases," *WRMC Reports*, July 2004, 73.

of general application to quantify the “loss of use” of its groundwater¹⁰⁰ and other states have shown an interest in adopting such an approach.¹⁰¹ As previously discussed, the State groundwater formula, although prominently posted on the NJDEP’s Web Site, and although well-known by those involved with New Jersey NRD claims,¹⁰² has never been formally promulgated as a regulation. The official NJDEP Web site states that the formula is “for settlement purposes.”¹⁰³ NJDEP threatens that if a potentially responsible party declines to settle with the State, it will use a “robust formula” if the matter proceeds to trial.¹⁰⁴ However, the State has denied that it has actually developed a “robust formula.”¹⁰⁵

The State’s formula is quite simple in its application. The impacted area of groundwater is multiplied by a pre-established annual groundwater recharge rate.¹⁰⁶ The recharge rate for groundwater throughout New Jersey, despite the fact that it varies according to region, has been predetermined by a State study conducted in 1996.¹⁰⁷ This study produced a New Jersey Master Plan that divided the State into twenty-three planning areas that have either a surplus or a deficit of groundwater.¹⁰⁸ This calculation will yield a volume measure, which must then be converted by multiplying it by a constant (7.48 gallons per cubic foot) to determine the total gallons injured in one year.¹⁰⁹ Next, the volume of the affected groundwater is multiplied by the duration period of the injury.¹¹⁰ According to the NJDEP, the duration period is the “time perspective from when the remedial decision is made until the New Jersey Groundwater Quality Standards have been met, or thirty-year maximum, whichever comes first.”¹¹¹ That figure is then multiplied by the rates charged for municipal drinking water as listed by the New Jersey Board of Public Utilities to arrive at a dollar value for injuries to the groundwater.¹¹²

¹⁰⁰ New Jersey Department of Environmental Protection (NJDEP), “New Jersey Department of Environmental Protection Office of Natural Resource Restoration Sample Ground Water Injury Calculation.” http://www.state.nj.us/dep/nrr/nri/gw_injury_calc_200305.pdf (accessed August 2, 2007).

¹⁰¹ Davidson and Gard, “Groundwater NRD Claims-The New Frontier of Natural Resource Damage Assessments,” *supra* Note 97.

¹⁰² “New Jersey Department of Environmental Protection Office of Natural Resource Restoration Sample Ground Water Injury Calculation,” *supra* Note 100.

¹⁰³ “New Jersey Department of Environmental Protection Office of Natural Resource Restoration Sample Ground Water Injury Calculation,” *supra* Note 100.

¹⁰⁴ Henry Gottlieb, “Court Says N.J. Can Tap Polluters for ‘Loss of Use’ of Natural Resources,” *New Jersey Law Journal*, June 11, 2007, 1, 10.

¹⁰⁵ *Ibid.*

¹⁰⁶ “New Jersey Department of Environmental Protection Office of Natural Resource Restoration Sample Ground Water Injury Calculation,” *supra* Note 100.

¹⁰⁷ *Ibid.*

¹⁰⁸ *Ibid.*

¹⁰⁹ *Ibid.*

¹¹⁰ *Ibid.*

¹¹¹ *Ibid.*

¹¹² *Ibid.*

As discussed below, often this number is inflated and does not truly assess the actual damage for a specific site.

Most recently, the legality of NJDEP's application of its unpromulgated groundwater damage formula as a rule has been prohibited by at least one court ruling. On August 24, 2007, a State trial court in Mercer County ruled that, in order for the NJDEP to utilize its NRD groundwater damages formula, the formula must be vetted through the agency rule-making process, or the formula must be supported on a case-by-case basis via expert and/or scientific evidence.¹¹³ Specifically, the Court noted the following:

It is the Department's policy that this formula reflects the valuation of natural resource damages. So, if it is to be used and relied upon in litigation it either has to be a rule or it has to be sufficiently supported in the context of the case in which the Department tries to use it.

And, since neither of those things was done here, again, with reluctance, I'm going to dismiss the Department's claim for natural resource damages in this case, with prejudice.¹¹⁴

The Court did not render a written opinion. Nonetheless, since this formula has been used by the NJDEP to calculate damages in numerous cases thus far, this decision may have a far-reaching impact on NRD litigation and the State's ability to quickly settle NRD claims. Interestingly, the NJDEP has repeatedly publicly acknowledged the need for formal regulations with respect to its pursuit of natural resource damages.¹¹⁵ It is presently unknown whether the State's other trial courts will follow suit, and when and what steps NJDEP will take to promulgate the formula as a rule.

Criticisms of New Jersey's Groundwater NRD Calculation

On the technical side, as many critics continue to point out, the groundwater damage formula's simplicity is a tradeoff with accuracy.¹¹⁶ Indeed, many point to the fact that, because the formula is not site specific, it fails to take into account unique site attributes.¹¹⁷ Also, the formula's evaluation is based solely on the value of the water as potential drinking water. This leads to a

¹¹³ *NJDEP v. Exxon Mobil Corporation, et al.*, MER-L-2933-02 (Law Division, August 24, 2007) Transcript of Motion at 110.

¹¹⁴ *Ibid.*

¹¹⁵ Public Employees for Environmental Responsibility reports that "in 2002 'Vulnerability Assessments,' [the] DEP estimated that as many as 4,600 cases may require NRD litigation which would necessitate both rule making and extending the statute of limitations"; and that "in a 2004 settlement agreement of the case *New Jersey Society of Environmental & Economic Development v. Campbell* (N.J. Super.LawDiv., Mercer County) [the] DEP legally committed to propose formal natural resource damage regulations"; see Note 111.

¹¹⁶ Davidson and Gard, "Groundwater NRD Claims-The New Frontier of Natural Resource Damage Assessments," *supra* Note 97; Israel, *supra* Note 96, § 32B78-79; Kelly, *supra* Note 21, 362-364.

¹¹⁷ See *Ibid.*

false assumption that all groundwater is potable and would in fact be used as drinking water.¹¹⁸ Moreover, even if groundwater is not potable, that does not mean that the State should be entitled to full “loss of use” recovery, since there may be other uses of the groundwater.¹¹⁹

Furthermore, the NJDEP’s use of municipal rates for delivered drinking water improperly inflates the value of groundwater. The cost of delivered water necessarily includes transactional and delivery costs, which should not be considered in the damage calculation. There is also no adjustment for the increase or decrease of rates charged over time.¹²⁰ Moreover, such calculations fail to abide by basic economic principles in that they fail to properly take into account the time value of money.¹²¹

Finally, as pointed out by the District Court and Tenth Circuit in *New Mexico v. General Electric*, it is possible that some or all of the damages arrived at under this formula may be barred as double recovery in cases where remediation activities have successfully restored the damaged groundwater.¹²² According to the NJDEP’s own Website:

Restoration: is the remedial action that returns the natural resources to **pre-discharge** conditions. It includes the rehabilitation of injured resources, replacement, or acquisition of natural resources and their services, which were lost or impaired. Restoration also includes compensation for the natural resource services lost from the beginning of the injury through to the full recovery of the resource.¹²³ [emphasis added]

Like the federal statutes, the New Jersey Spill Act has an express prohibition on double recovery.¹²⁴

DEFENSES

In addition to the prohibition on double recovery¹²⁵ referenced above, there are several other statutory defenses that can be asserted by a potentially responsible party in an NRD action. CERCLA, for example, provides that a person otherwise liable for contamination will not be liable in the event the damages resulting from the release or threat of release were caused “solely

¹¹⁸ *Ibid.*

¹¹⁹ *Ibid.*

¹²⁰ See Israel, *supra* Note 96, § 32B78-79; see also Kelly, *supra* Note 21, 345.

¹²¹ *Ibid.*

¹²² *General Electric Company*, 322 F.Supp. 2d at 1259-1261; *General Electric Company*, 467 F.3d at 1238.

¹²³ New Jersey Department of Environmental Protection (NJDEP), “Natural Resource Restoration: Definitions.” <http://www.state.nj.us/dep/nrr/about/defs.htm> (accessed August 2, 2007).

¹²⁴ N.J. Admin. Code § 7:1J-2.4(b), which states: “[i]n determining the amount of the award, if any, the administrator shall reduce the award by the amount of compensation already received by the claimant for the damage which is the subject of the claim.”

¹²⁵ See 42 USC § 9607(f)(1) (2007).

by—(1) an act of God; (2) an act of war; (3) [or] an act or omission of a third party. . . .”¹²⁶ Similar provisions are found in the CWA and OPA.¹²⁷

As previously discussed, NRD claims must be timely brought in accordance with strict statute of limitation requirements.¹²⁸ Furthermore, such claims are wholly barred under CERCLA where the damages and the release of hazardous substances occurred “wholly before” December 11, 1980, the date of enactment of CERCLA.¹²⁹

There are also several jurisdictional defenses that may be asserted, including lack of standing and preemption.¹³⁰ Specifically, because the NRD statutes only confer standing on designated trustees, lawsuits by private parties and municipalities will be dismissed for lack of standing.¹³¹ Moreover, the federal courts do not have jurisdiction to hear NRD claims where response activities are not yet completed.¹³² Furthermore, although CERCLA contains a provision that states “[n]othing. . . shall be construed or interpreted as preempting any State from imposing any additional liability or requirements with respect to the release of hazardous substances with such State,” CERCLA does preempt state and local law where there is an actual conflict.¹³³

States may also choose to provide specific defenses in their own NRD statutes. For instance, New Jersey has enacted specific legislation, known as “Brownfields” laws, which provides a “zone of protection” from NRD claims for purchasers of known contaminated sites.¹³⁴

There are also many defenses that can be asserted that attack the quantification and valuation of damages based upon the calculations themselves, using accepted economic and scientific principles.¹³⁵ Finally, as illustrated by the criticisms to New Jersey’s groundwater formula and discussed in the *General Electric* case, parties may also assert fact-specific defenses by challenging plume size, baseline assumptions, and duration of harm periods that are used in NRD calculations.

NRD SETTLEMENTS

While the focus on NRD claims is often on monetary compensation, it is also important to remember that there are other alternatives to money

¹²⁶ 42 USC § 9607(b)(1)-(4) (2007).

¹²⁷ 33 USC § 1321 (i) (2007); 33 USC § 2703 (2007).

¹²⁸ See 42 USC § 9613 (g)(1) (2007).

¹²⁹ 42 USC § 9607(f)(1) (2007).

¹³⁰ See Israel, *supra* Note 96, at § 32B.02.

¹³¹ See *Coeur d’Alene Tribe v. Asarco, Inc.*, 280 F.Supp.2d 1094 (D. Idaho 2003).

¹³² 42 USC § 9613(h).

¹³³ See 42 USC § 9614 (2007).

¹³⁴ N.J. Stat. § 58:10-23.11g.f. (2007).

¹³⁵ See Israel, *supra* Note 96, at § 32B78-79; see also Kelly, *supra* Note 21, at 345.

settlements. The federal government has utilized monetary and nonmonetary devices, and sometimes both, to reach overall settlements in NRD cases. For example, in a settlement with the Fort James Operating Company, the company was required to preserve more than 1,000 acres of wildlife habitat in northeastern Wisconsin and to pay an additional \$8.5 million for other restoration projects.¹³⁶ In addition to its payments for restoration projects, Fort James paid \$1.6 million to help offset natural resource damages assessment costs and other costs incurred by the United States and Wisconsin. The settlement provides compensation for injuries to natural resources caused by widespread polychlorinated biphenyl contamination in the Fox River and the Green Bay.

The federal government took a similar approach in its settlement with Potomac Electric Power Company (PEPCO) to recover NRD and assessment costs arising from an oil spill from a ruptured pipeline.¹³⁷ PEPCO and its operator agreed to pay \$2,710,498 for projects identified in a joint federal-state "Restoration Plan and Environmental Assessment" and to reimburse \$318,000 in remaining unpaid costs incurred in assessing the injuries caused by the spill. The restoration projects include the creation of new wetlands and oyster reef sanctuary, enhancement of shoreline habitat for diamond-backed terrapins, protection of ruddy duck nesting habitat, creation of canoe/kayak campsites, including a disabled-accessible canoe launch site, construction of a fishing pier, along with other recreational improvements in the area.¹³⁸

Despite its flaws, the New Jersey groundwater damages formula has been successful in at least one respect: it affords responsible parties a framework for negotiating potential settlements of NRD claims.¹³⁹ In fact, in recent years, the NJDEP has settled a number of sizable NRD claims. For example, in January 2006 Merck & Co., Inc. and Motiva Enterprises/Shell Oil Company agreed to pay \$2.4 million and \$2.2 million, respectively, for NRD at Merck properties and several hundred Shell service stations.¹⁴⁰ In addition, in April 2005 International Matex Tank Terminals settled NRD claims brought against it by the NJDEP for \$3 million.¹⁴¹

¹³⁶ "United States Announces Major Natural Resource Damages Settlement for Fox River PCB Site," U.S. Department of Justice press release, June 20, 2002, http://www.usdoj.gov/opa/pr/2002/June/02_enrd_362.htm (accessed August 2, 2007).

¹³⁷ "Government Reaches \$3 Million Settlement with PEPCO Over Oil Pipeline Spill in Maryland," U.S. Department of Justice press release, December 12, 2002, http://www.usdoj.gov/opa/pr/2002/December/02_enrd_713.htm (accessed August 2, 2007).

¹³⁸ *Ibid.*

¹³⁹ New Jersey Department of Environmental Protection (NJDEP), "New Jersey Department of Environmental Protection Office of Natural Resource Restoration Sample Ground Water Injury Calculation," *supra* Note 100.

¹⁴⁰ Kelly, *supra* Note 21, at 359.

¹⁴¹ New Jersey Department of Environmental Protection (NJDEP), "IMTT Provides \$3 Million To Settle Natural Resource Damage For Ground and Surface Water Contamination," press release, April 29, 2005, http://www.state.nj.us/dep/newsrel/2005/05_0050.htm (accessed August 2, 2007).

With respect to noncash settlements in New Jersey, NJDEP Policy Directive 2003-07 suggests that it is NJDEP's preference to seek performance of restoration work in lieu of the payment of money damages:

In many cases, the provision of substitute resources or resource services may be a more cost-effective means to compensate the public for the natural resource injuries. The Department encourages habitat equivalency analysis, consideration both in-kind and out-of-kind substitute resources, and similar efforts to provide substantially equivalent resource services in designing compensatory restoration projects.¹⁴²

On April 21, 2005, the NJDEP announced that it had approved a settlement with Hatco Corporation and W. R. Grace & Co. to resolve the companies' NRD liability with respect to an industrial site in Woodbridge, New Jersey.¹⁴³ As part of this settlement, and in lieu of a monetary settlement for NRD, the parties agreed to conduct a land acquisition in excess of thirty-four acres.¹⁴⁴

Similarly, New Mexico takes the same policy approach. New Mexico's Office of Natural Resource Restoration's official Web site states:

[o]nce injury is determined, the next step is to identify fair compensation for the loss of the resources and the services they provide from the time the injury occurred until their full recovery. Compensation is either in the form of appropriate restoration projects or cash settlements. The purpose of both restoration projects and cash settlements is first to restore injured resources and, if that is not possible, to replace or acquire equivalent natural resources and the services that were lost or impaired.¹⁴⁵

New Mexico has used NRD settlements to finance numerous restoration projects around the state.¹⁴⁶ For example, a settlement with SOHIO Western Mining Company funded a project to repair and improve some of the state's wastewater treatment facilities.¹⁴⁷ The State also undertook measures to improve groundwater by eliminating "water-guzzling" trees to improve groundwater quality and eliminate fire danger, which were financed through a settlement with Sparton Industries.¹⁴⁸ A settlement agreement entered into with Burlington Northern and Santa Fe Railway in 2004 specified that the

¹⁴² New Jersey Department of Environmental Protection (NJDEP), Policy Directive 2003-07, Subject: Natural Resource Damages, September 24, 2003, <http://www.state.nj.us/dep/commissioner/policy/pdir2003-07.htm> (accessed August 2, 2007).

¹⁴³ New Jersey Department of Environmental Protection (NJDEP), "DEP Approves \$13.2 Million Hatco Site Cleanup and Land Acquisition Settlement For Wetland and Ground Water Contamination," press release, April 21, 2005, http://www.state.nj.us/dep/newsrel/2007/07_0037.htm (accessed August 2, 2007).

¹⁴⁴ *Ibid.*

¹⁴⁵ New Mexico Office of Natural Resource Trustee, official Web site at <http://www.onrt.state.nm.us/> (accessed August 2, 2007).

¹⁴⁶ New Mexico Office of Natural Resource Trustee, Media Releases, www.onrt.state.nm.us/Media.html (accessed August 2, 2007).

¹⁴⁷ *Ibid.*

¹⁴⁸ *Ibid.*

company would pay for a \$1.1 million restoration of groundwater and wildlife resources in the region.¹⁴⁹

As shown above, noncash settlements may take various forms, such as restoration projects, land donations, construction of wildlife habitats, and creation of wetlands. However, settlements based on resource restoration projects may be more difficult than it may at first seem. For example, while New Jersey does not require that all exchanges be like-kind, such donated land must have a nexus to the injured resources and possess equivalent or substantially similar environmental characteristics.¹⁵⁰ Nonetheless, noncash components of settlements remain a viable, and sometimes creative, option to consider in resolving NRD claims.

CONCLUSION

As federal and state entities, as well as targeted parties, become more involved in the myriad claims and the stakes escalate, the issues of allocation of liability, calculation of damages, and causation will be just some of the points that will evolve. Some critics think that once New Jersey's NRD regulations are promulgated, the program will change, and other states will wait to see what happens before investing resources into their programs.¹⁵¹ Others believe that although the New Jersey groundwater initiative is still in its infant stages, other states are closely watching New Jersey's model, and some have even adopted several aspects of New Jersey's plan to deal with groundwater NRD.¹⁵²

Despite its shortcomings, New Jersey's approach has provided potential targeted parties with a framework for valuing claimed NRD. Similarly, the precedent of the Tenth Circuit in *New Mexico v. General Electric Company*, as noted above, which limits the reach of such damages, has given environmental defense counsel much ammunition that can be used to contest such valuations. Several points are clear; the frequency of NRD claims will increase, the amount of the claims will multiply significantly, and controversy and litigation will ensue.

¹⁴⁹ *Ibid.*

¹⁵⁰ *Ibid.*

¹⁵¹ See Kelly, *supra* Note 21, at 349.

¹⁵² See Israel, *supra* Note 96, at § 32B.80.