Editorial Synopsis of the 30th Annual Public Land Law Conference

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Editorial Synopsis of the 30th Annual Public Land Law Conference

The Law of Ecosystem Restoration:
National Policy Implications of the Clark Fork River Basin
Natural Resource Damage Program

Jason Stone

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I. CONFERENCE TOPIC BACKGROUND

Last year marked the 30th Annual Public Land Law Conference. The topic of the three day conference was The Law of Ecosystem Restoration:

1. This article is a summary of the themes, topics and discussions that took place at the 30th Annual Public Land Law Conference held September 25 – 27, 2006 at the University of Montana School of Law.
2. Editor in Chief of the Public Land and Resources Law Review, J.D. expected May 2007 University of Montana School of Law, Missoula, Montana.
3. The Public Land Law Conference was first held in 1978. It is hosted by the University of Montana School of Law and presented by The Public Land and Resources Law Review. In 2006, The Public Policy Research Institute joined the Public Land & Resources Law Review in presenting the 30th Annual Public Land Law Conference - The Law of Ecosystem Restoration: National Policy Implications of the Clark Fork River Basin Natural Resource Damage Program. The conference was organized by Garrett Budds, Conference Editor of the Public Land & Resources Law Review with invaluable assistance and support from Sarah Bates Van de Wetering of the Public Policy Research Institute. This conference is the oldest Public Land Law conference in the United States. Each year the conference centers on a particular legal issue in Public Land Law, Natural Resource Law or Indian Law that is of current interest to practicing attorneys, professionals and students. Current conference details may be found at www.publiclandlawconference.org.
The world your grandchildren, your great grandchildren inherit is the world you create for them. That’s what this conference is about. To think, in a sense, beyond the law: to your contributions, your expectations, your hopes, your aspirations, and in some instances, your fears and your dreams. . . . The best conferences are always the conferences that are about you . . . about what you take away . . . the seeds that you plant in your own community organizations, the action you take by changing your daily behaviors, the stories, parables, cautionary tales you tell you children so that they’ll understand the mistakes and missteps of their fathers and mothers and grandfathers and grandmothers.4

A. Genesis - Love Canal

The first cautionary tale surrounding Natural Resource Damages began in 1977, when residents of the Love Canal neighborhood in Niagara Falls began suffering from seizures, blood disease and liver damage. Initially, there was no explanation.

Love Canal was a failed attempt to create a waterway between the upper and lower Niagara Rivers. William T. Love, for whom the canal was named, believed that by using the canal, power could be generated cheaply for the Niagara Falls community.5 Market forces crushed Love’s dream. Nikola Tesla discovered how to transmit electricity long distances by using alternating current making the canal impractical. In 1910, the canal was abandoned. By the 1920s, the canal had been turned into a dumpsite for municipal waste and toxic chemical waste by Hooker Chemical Company and the U.S. Government.6

The Hooker Chemical Company covered the canal and sold the property to the city for one dollar in 1953.7 The area was then redeveloped; a school and over 200 homes were built near or adjacent to the buried dumpsite.8

When it was discovered by the residents that they were living on top of toxic chemical waste, Love Canal residents mobilized.9 Kathy Hadley, her

8. Id.
sister Lois Gibbs and their families were living in Love Canal. With their neighbors, they worked to force the polluters and the federal government to recognize the health emergency that existed in the community and to accept responsibility for the crisis. That says Hadley, "was my internship on how to become an activist." 

On August 3, 1978, Governor Hugh Carey asked President Carter to declare the Love Canal area of Niagara Falls a Federal Disaster Area. The request included money to relocate 35 families and begin the cleanup of the area contaminated by industrial chemical waste. The question of who was going to pay for the Love Canal cleanup was quickly raised. In 1980, Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA”) and created the Superfund to cleanup toxic waste sites throughout the United States. The Environmental Protection Agency (“EPA”) was charged with its management.

### B. Chronicle – The Upper Clark Fork River Basin

While the Love Canal is the prime case study of Superfund environmental cleanup of private land in the East, the Upper Clark Fork Basin is the leading example of Superfund environmental restoration in the West and includes both private, tribal and public lands and interests.

In the 1860’s prospectors rushed into Montana territory when gold was discovered. Montana became home to boomtowns that exploded with the

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10. Id.


The EPA states that one of its top priorities is to get those responsible for the contamination, the Primary Responsible Parties (“PRP”), to cleanup the contaminated site. If, however, the PRP cannot be found, is not viable, or refuses to cooperate, Superfund money may be used by the EPA, the state, or the tribe. In those instances where PRP refuse to cooperate, the EPA may seek to recover the cost of cleanup from them. See U.S. Environmental Protection Agency, *Frequent Questions - Who pays to cleanup a Superfund site?* (http://epa.custhelp.com/cgi-bin/epa.cfg/php/enduser/std_alp.php last accessed Mar. 4, 2007).

15. On September 30, 2004, the EPA finalized its decision to remove Love Canal from the Superfund National Priorities List. It announced that all cleanup work at the site had been completed, and that follow up monitoring confirmed that the cleanup goals have been reached. See EPA, supra n. 7.
mining industry. For over a century Butte, Montana was known as the "richest hill on earth." Butte's economic prosperity was tied to the industrial revolution. At the dawning of the industrial age copper became a very valuable commodity. It was used to make the electrical wire required to supply electricity. As more of the world began to use electricity as a source for power, Butte boomed as the leading producer of copper in the United States. Millions of pounds of copper were mined in the Butte area.

Mining operations resulted in contamination of groundwater resources located on Butte Hill and in the Silver Bow Creek areas. The aquatic and riparian resources of the Silver Bow Creek area were severely impaired by the presence of tailings and other mine related wastes. Roughly 6.6 million cubic yards of sediment were deposited in Milltown Reservoir behind the power-generating Milltown Dam. The sediment resulted from milling operations in the Butte and Anaconda areas. The sediment contained hazardous substances that were transported to the underlying alluvial aquifer by water flows through the reservoir sediment.

In 1983, following the passage of CERCLA, the State of Montana filed a lawsuit against the Atlantic Richfield Company ("ARCO"). The lawsuit claimed damages from ARCO resulting from mining and smelting operations in Butte and Anaconda. The lawsuit alleged that such operations had "greatly harmed natural resources in the basin and deprived Montanans of their use."

Meanwhile, Kathy Hadley moved to Montana in 1979 with her husband and family. She had begun working for the Montana Department of Natural Resources and Conservation. Later, in 1983, they moved to Deer Lodge Montana, which was located on the Clark Fork River between two then-designated Superfund sites: Butte and Milltown. And although the river ecosystem had been severely impaired by mining pollution, the 120

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18. Id.
20. Id. at 16-17.
21. Id. at 26.
22. Id. at 25-26.
23. The Natural Resource Damage Program ("NRDP") is responsible for pursuing the lawsuit on behalf of the state. See Montana Department of Justice, infra n. 22.
25. Gadbow, supra n. 9.
26. Id.; see also Sonja Lee, Saving the Clark Fork, Great Falls Tribune (Dec. 25, 2005).
mile stretch of the river between Butte and Milltown was not included when the Superfund site was first designated.27

As happened in Love Canal, citizens, neighbors and supporters organized to pressure industry and government officials to perform environmental cleanup. Kathy Hadley and other volunteers founded the Clark Fork Coalition28 to lobby for the river to be included in the cleanup effort.29 It was not until 1992, that the EPA designated the Clark Fork River an operable unit of the Milltown Reservoir Superfund Site.30

The issues raised in the ongoing Clark Fork River Basin restoration reflect national concerns about Natural Resource Damage ("NRD") assessment and implementation. The Public Land Law Conference provided insights to policy makers, practitioners, and stakeholders into current NRD law and policy developments. The conference directed discussions toward possible resolutions in the Clark Fork River Basin and their application elsewhere.

The conference addressed important legal, social and policy questions. "What is the best way to address the diverse needs and concerns of multiple stakeholders in an affected area?" "What is the appropriate balance between assessing damages for past harms and fully restoring the impacted resources?" "In the face of scientific uncertainty and ongoing conflicts among affected groups, how can implementation be assured for the long-term health of the impacted environment and human communities?" "What lessons from the Clark Fork River Basin might be translated into national policy initiatives or applied in NRD programs elsewhere?"31

To answer the above questions, the conference was organized to first address NRD assessment and restoration from a national perspective. Then attention was focused on the Clark Fork River Basin NRD Program. Finally, the conference reviewed what was learned in the process and examined possible national implications. These issues will be addressed in this article in that order.

27. Gadbow, supra n. 9.

28. The Clark Fork Coalition is a non-profit organization based in Missoula, Montana. It is dedicated to protecting and restoring the Clark Fork River Basin, which stretches from Butte, Montana to Sandpoint, Idaho. It is a member-supported group that includes citizens, scientists, recreationists, and business leaders. See Clark Fork Coalition, About Us, http://www.clarkfork.org/about/index.html (last accessed Mar. 4, 2007).

29. Id.


II. NATIONAL PERSPECTIVES ON NRD ASSESSMENT AND RESTORATION

A. Overview of NRD Law and Policy

"The Natural Resource Damages Program was born within a broader context of cleaning up hazardous substances, contaminants and pollutants under both the Oil Pollution Act and under the Comprehensive Environmental Response, Compensation, and Liability Act. . . . It was born from a recognition of our responsibilities for natural resources that are held in the public trust."32

NRD efforts are crucial because the result sought in environmental cleanup efforts is restoration. How this is effectuated is often complicated by jurisdictional considerations, actions of potentially responsible parties, ecosystem requirements to sustain already impaired complex biological life, and difficulties in determining contaminant pathways and injury causation where contamination has occurred over a long period of time and from multiple sources; and which may still be occurring in ongoing deposition from historical contamination.33

These challenges are compounded by organizational problems. The Department of the Interior ("DOI") has three land management agencies and the Bureau of Indian Affairs and has multidimensional resource management stewardship responsibilities. As a result of these splintered agencies and responsibilities, the department "spoke with many voices on natural resource damages and restoration issues . . . on individual cases, at the program level, and on policy issues."34

The NRD program is an evolving program. Its evolution is in large part to meet the challenges above. A major point of evolution is a shift to focus

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33. In her speech, Deputy Scarlett pointed to three examples: The Tristate Mining District or the Tar Creek, Oklahoma Site, the Clinch River Site in Southwestern Virginia and the Upper Clark Fork River Basin in Montana.
34. Scarlett, supra n. 32.
on the results of restoration rather than on the amount of dollars collected.\textsuperscript{35} And this shift is in response to the consequential delay of results on the ground from debates about the contingent and existence valuation methodologies and about parties’ willingness to pay for these valuations and surveys.\textsuperscript{36}

Deputy Secretary of the Interior, Lynn Scarlett, explained that while these valuation strategies have academic utility, they rest on the assumptions of information aggregation and averaging, and have significant limitations in moving from an academic setting to implementation. They often spark debate and data battles. According to Deputy Scarlett, “we can often . . . achieve better outcomes, outcomes for everyone, by focusing directly on restoration with an emphasis on cooperation among interested parties . . . Cooperation includes coordination among interior’s family of agencies . . .”\textsuperscript{37} Deputy Scarlett’s vision of cooperation also includes cooperation with other federal agencies, and coordination with state agencies to exchange ideas on policy practice and restoration outcomes.

“Why the focus on Restoration rather than on dollars collected?” Deputy Scarlett explained:

First and perhaps most obvious, restoration is what we all seek. We seek healthy ecosystems and flourishing wildlife. We seek restoration of opportunities to enjoy and use those natural resources.

But second, that focus on restoration springs from a recognition that restoration can build upon a foundation of tangible evaluation methods and processes that help to get us beyond debate and conflict. A restoration focus centers on the more tractable questions of cost for specific restoration actions and projects.\textsuperscript{38}

Placing the focus of the NRD program on restoration has introduced a certain amount of certainty based upon the design and engineering actions and their associated estimated costs rooted in experience and practice. But according to Deputy Scarlett, the questions remain: “How much restoration is enough?” “How clean is clean enough?” These policy and values questions now create ambiguities in determining “what is injury?”\textsuperscript{39}

While looking for definitions for “clean” and “injury,” Deputy Scarlett emphasized the imperative to balance the need for knowledge and information with the need to get the job done. The questions then become: “What benefit does one more study have in comparison to investment of time and

\textsuperscript{35} Over the past 25 years, the NRD has cumulatively collected nearly 700 millions dollars. \textit{Id.}
\textsuperscript{36} \textit{Id.}
\textsuperscript{37} \textit{Id.}
\textsuperscript{38} \textit{Id.}
\textsuperscript{39} \textit{Id.}

resources on the ground?” and “Do we have enough information to proceed with the on-the-ground action?”

The administration has attempted to answer these policy questions by adopting a policy on cooperative conservation40 and chartering the National Resource Damage Restoration Advisory Committee. The committee, made up of federal, state and tribal natural resource trustee agencies, businesses, members of the conservation and academic communities and national and local environmental groups was organized to advise NRD authorities of their responsibilities and provide recommendations regarding implementation of NRD statutes and regulations.41

“What we seek . . . through cooperative conservation and our restoration focus are healthy lands and waters along side thriving communities and dynamic economies.”42

B. **NRD Law and Policy – With a Special Emphasis on Indian Tribes**

NRD law is presumed to function over substantial periods of time.43 It is the challenge of practitioners working in this area to create law and policy that lives up to this expectation. Professor William H. Rodgers, Jr., warned:

If you don’t show environmental benefits from these projects, they’re not going to happen that frequently. There has to be some return on these endeavors or skepticism will take over. . . . You cannot ride the righteous expectation bandwagon very far. People want to see good things happen.44

Fundamental to all NRD theory is the baseline issue. Within that issue are the questions “How clean is clean?” and “To what do you aspire in your restoration endeavors?”45 Professor Rodgers noted that each party has baselines, based largely upon our own memories. In many particulars, the decision as to what constitutes the baseline is a policy choice in the face of enormous variations in the parties’ understanding of restoration.

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41. Updates regarding the actions of Natural Resource Damage Assessment and Restoration Advisory Committee can be found at [http://restoration.doi.gov/faca.html](http://restoration.doi.gov/faca.html).
42. Scarlett, *supra* n. 32.
44. *Id.*
45. *Id.* (referencing Jeremy B. C. Jackson, *et al.*, *Historical Overfishing and the Recent Collapse of Coastal Ecosystems*, 27 Science 629 (July 2001)).
And while NRD law reaches forward in establishing regulatory regimes for restoration of the natural resource damages, establishing baselines naturally reaches backward. According to Rodgers:

[It] really matters how you look back in time and how you measure your own aspirations, and what you’re trying to do. . . . I know this is one reason I am really fond of the Indian tribes . . . they do tend to have very bold baselines because they have extremely long memories and a solid, solid history.46

When establishing baselines, some problems are so difficult that it is tempting to give up, and put up warning signs. “Don’t eat the shellfish.” “Do not collect consume bottom fish, shellfish, or seaweed from Puget Sound waters in King County, particularly where warning signs are posted.”47 “The baseline that settles for a warning sign is not the baseline to which you aspire. You’re looking farther back when shellfish could be used.”48

While tribes have traditionally had a geographical extension of tribal interest strategies (usual and accustomed areas, ceded areas and sacred sites), the loss of subsistence and fisheries in the Northwest are conceivably takings, they are also giving rise to the food-quality extension of tribal interests strategies (i.e., natural resource damages, protection of subsistence and environmental justice).49

In NRD, tribes can now be a third trustee with federal and state governments. They participate in trustee councils and decide, with the other trustees, how to spend money to restore damaged natural resources.50

While the baseline is the definitional aspect of NRD law, the effectual aspect of NRD law rests on how the system works over time. Sustainable management of cooperative efforts is required to insure success of long-term restoration projects.51 One example of these efforts is the Columbia River Inter-Tribal Fish Commission at Celilo Falls. There, a system of oversight and enforcement was established that was aimed toward sustainability, in particular toward the sustainability of the fishery. Success over time requires monitoring over time. In Celilo, there were eyes everywhere. There was constant review, acknowledgement and feedback.

46. Rodgers, supra n. 43.
47. Id. (Quoting study of Washington Toxics Coalition).
48. Id.
49. Id.
50. Professor Rodgers noted that trustee councils are “entirely new inventions[,]” “What are they supposed to do; nobody really knows.” Trustee councils are directed to act “by reference to unanimity,” but how the priorities are selected and what procedures they use are as of yet undetermined. Id.
While cooperative efforts are helped by oversight and strict enforcement, there are significant questions that must be answered for long term restoration projects. Namely, who is going to be there over the restoration period; who will do the monitoring; is there effective enforcement; are there ways to defect from this deal, through bankruptcy, for example. When parties defect, the restoration regime is impaired.

Participation of tribes in NRD programs enhance environmental cleanup. Tribes bring a different view, perhaps a longer view on the question of restoration. This is not merely a geographical extension, but also a subsistence extension arising from the desire to not have their way of life "submerged in general acknowledgement of warning statements." However, tribes must "be ready to prove their unique risks and their special subsistence uses." Tribes will often have the burden to demonstrate that recovery of subsistence uses may encompass resources that other parties ignored, and that their standards of recovery justifiably exceeds the goals of the other parties, and "should not surrender the ambition that natural resources 'recovery' included recovery of people, subsistence and culture."

C. National Trends and Directions in NRD

The Natural Resource Damage Assessment and Restoration Advisory Committee was chartered by the DOI on May 5, 2005. Like other federal advisory committees, it is limited to a two-year term. Federal advisory committees are intended to provide a forum for evaluating difficult issues government agencies may face, and to do so in an open public process, among multiple stakeholders.

The advisory committee had particular directives. It was not intended to resolve any particular case, but rather was to focus on the DOI in the CERCLA process, both as a trustee and as the authors of regulations propagated under CERCLA and related to natural resource damages and hazardous substances. The overlying philosophy, included in the charter is that "[b]y promoting cooperation certainty in the natural resource damage process [DOI] can foster quicker and more cost effective restoration.

NRD laws manifest a restoration based approach. The measure of damages is the cost to restore or replace injured resources. The NRD provisions borrow from the common law of Torts. When a thing is harmed there is both an entitlement to the restoration or replacement of the thing that was harmed.
harmed, there is also an entitlement to damages for lost use and apprecia-
tion values.\(^{58}\)

Under CERCLA’s Natural Resource Damage provisions, losses that arise
pending restoration were valued economically, measured by the public’s
willingness to pay. Later, National Oceanic and Atmospheric Administra-
tion’s oil pollution regulations propagated under the Oil Pollution Act
(“OPA”) introduced the concept of valuing damages as the cost of imple-
menting environmentally beneficial projects that can compensate for that
loss rather than using economic methodology to monetize the value of the
loss.\(^{59}\) The distinction between CERCLA and OPA is that, under
CERCLA, the measure of damages is the compensable value while it is
compensatory restoration under OPA.\(^{60}\)

Cultural biases affect NRD law and under the original rule, the DOI
adopted the bias that society embraces the most economically reasonable
method. As a result the measure of damages was the cost to restore or re-
place with an equivalent, or the value of what was lost. The value was en-
visioned as a tally sheet of the economic value of lost organisms. However,
a number of states including Montana, challenged the DOI’s biased inter-
pretation of the regulation in court, and prevailed, and the legislative pref-
erence of restoration was judicially recognized.\(^{61}\)

Tribal participation in Superfund cleanup is important because there are
over 600 Superfund caliber sites that are within 50 miles of tribal re-
sources.\(^{62}\) Tribal resource uses are much broader than have been articulated
by federal and state trustees in regulations. Tribal uses of resources in-
clude: nutritional, medicinal, educational, employment, industrial, ceremo-
nial and spiritual uses.\(^{63}\) Tribal concerns on restoration center on the view
that survival of the tribal culture, activities and resources is very different
than having tribal culture and activities thrive. Tribal efforts have been
helped by the trends for tribal trustees to “[p]roduce comprehensive site
assessment documents” and “[u]tilize tribal risk scenarios[,]”\(^{64}\) Tribal NRD
considerations are specialized based upon the special aspect of reserved
lands and resources and tribal uses that extend off-reservations, such as the

\(^{58}\) Id.

\(^{59}\) Id.

\(^{60}\) Rob Ricker, Acting Chief of the Damage Assessment Center, National Oceanic and Atmo-
ospheric Administration’s Office of Response and Restoration, National Trends and Directions in NRD -
(DVD on file with The Public Land & Resources Law Review); Public Land & Resources Law Review,
30th Annual Public Land Law Conference Materials: National Trends and Directions in NRD: Panel
discussion with members of the DOI’s FACA Committee on NRD Assessment and Restoration, C (Sept.
2006).

\(^{61}\) Carlucci, supra n. 55.

\(^{62}\) Lisa Gover, National Trends and Directions in NRD - NRD Panel Discussion (30th Annual
Public Land Law Conference, Missoula, Mont., Sept. 26, 2006) (DVD on file with The Public Land &
Resources Law Review).

\(^{63}\) Id.

\(^{64}\) Id.
case in the Upper Clark Fork River Basin. Currently, NRD measures are failing to adequately reflect tribal resource uses and values.\textsuperscript{65} From the tribal trustee perspective, resource use is not recreational.

\begin{quote}
It is really difficult to measure or reflect . . . tribal resource values and uses because it's like describing a way of life; if you take one piece of a way of life out, what's that worth to that one person, or what's that worth to history, what's that worth to others that might need that information or that specific service that person or that resource provides.\textsuperscript{66}
\end{quote}

III. FOCUS ON THE CLARK FORK RIVER BASIN NRD PROGRAM

A. Litigation History

In 1983, the State of Montana filed suit against ARCO seeking damages for injuries to natural resources in the Upper Clark Fork River Basin in U.S. District Court.\textsuperscript{67} It made claims under both state and federal law. In 1990, Montana created the state Natural Resource Damage Program ("NRDP") and performed NRD assessments from 1991 to 1994.\textsuperscript{68} Because of "the nature of the injuries being investigated, the geographic expanse over which they occurred and the complexity of both the natural resource damage assessment regulations and the scientific inquiry required by the regulations" the assessments required several years to complete.\textsuperscript{69} The 1995 Report of Assessment became the basis for Montana's claims. Fourteen years after the suit was filed, the trial began.\textsuperscript{70}

Under CERCLA, either remediation or restoration may be sought. The issue of remediation is primarily the responsibility of the federal government and restoration falls to the state.\textsuperscript{71} Montana's lawsuit was brought on behalf of the people of the State of Montana, with the governor as trustee for the people. Montana sought damages for natural resources that are "owned, controlled, managed or held in trust by the State of Montana" and "were injured by release of hazardous substances from ARCO or [its] predecessor's mining and mineral processing operations."\textsuperscript{72}

\textsuperscript{65} Id.
\textsuperscript{66} Id.
\textsuperscript{68} McGrath, supra n. 17; Montana Department of Justice, \textit{Natural Resource Damage Program}, http://www.doj.mt.gov/lands/naturalresource.asp (last accessed Mar. 11, 2007).
\textsuperscript{69} State of Montana Natural Resource Damage Program, supra n. 67.
\textsuperscript{70} McGrath, supra n. 17.
\textsuperscript{71} Id.
\textsuperscript{72} Id.
Damages, in the legal sense, are of two kinds: (1) restoration damages and (2) compensable damages. Restoration includes the costs to restore the injured area. Here, restoration damages included costs to restore the Clark Fork River and Warm Springs Creek and surrounding areas.

Compensation damages contemplate the costs to compensate the public for the lost use of natural resources. The loss of use includes recreational uses such as hunting, fishing, hiking, floating, and wildlife watching. The scope of these uses can be demonstrated by the following facts. Montana is a state of roughly 900,000. There are 234,000 hunting licenses and 281,000 fishing licenses. Montana has the highest per capita participation in hunting activities than any other state. Damage to natural resources has a major impact on Montana's economy.

The case was divided into seven separate segments. On June 8, 1998, a partial settlement was reached through the court appointed Special Settlement Master on three of the segments. A second consent decree was reached between ARCO, the United States, the Confederated Salish & Kootenai Tribes and Montana. The remaining segments (liability, aquatics, terrestrial and groundwater) went to trial separately. Under the consent decree and partial settlement, ARCO paid Montana 215 million dollars in damages plus interest. Since 1999, roughly 60 million dollars in interest has been earned and added to the restoration fund, and Montana has settled a claim with NorthWestern Energy, the owner of the Milltown Dam for 3.9 million dollars.

Criteria and procedures for spending settlement funds were finalized by the State in 2000. This includes a grant process “under which government agencies, private entities and individuals are all eligible to apply for grants for restoration projects based on these procedures and criteria.”

Through January of 2006, about fifty restoration projects have been approved by Montana, totaling $48,987,585 dollars in restoration funding.

It is the position of the EPA and the State that the dam must be removed as part of the restoration efforts at the Milltown site. Removal of the Milltown Dam and restoration of the Clark Fork and Blackfoot Rivers near the

73. Montana's lawsuit claimed restoration damages in the amount of $342 million, compensable damages in the amount of $410 million.
74. McGrath, supra n. 17.
75. Id.
76. Id.
77. The second consent decree is referred to as the “Streamside Tailings Consent Decree.” State of Montana Natural Resource Damage Program, supra n. 67.
78. McGrath, supra n. 17.
79. Id.
81. Id. For a summary of the approved restoration projects is listed, see Public Land & Resources Law Review, 30th Annual Public Land Law Conference Materials: Summary of UCFRB Restoration Projects, D (Sept. 2006).
dam was based upon a separate consent decree. Negotiations with North-Western Energy and ARCO were complicated because NorthWestern Energy, like its predecessor Montana Power was in bankruptcy while settlement negotiations were ongoing. Finally, in August 2005, an agreement was reached on a formal consent decree by state, federal and tribal government entities and provided for removal of the Milltown Dam and removal of 2.2 million cubic yards of contaminated sediment.\textsuperscript{82} In addition, to the dam and sediment removal, the restoration plan also included channel and floodplain realignment of three river stretches on the Clark Fork River and one on the Blackfoot river, and “implementation of soft stabilization/revegetation techniques to stabilize the floodplain and channel.”\textsuperscript{83}

In April 2006, the Milltown Dam hydroelectric plant was shut down after being in service for just over 98 years.\textsuperscript{84} The draw down leading to the removal of the dam began two months later and at the time of this conference, earth-moving machines had begun the Herculean task of excavation and removal of contaminated sediment.\textsuperscript{85}

B. Key Issues in the Clark Fork River Basin

The Clark Fork River Basin Damage Restoration Project encompasses many particular concerns held by a multitude of diverse interested parties. The details of which are too complex and nuanced to treat effectively in this synopsis and conference overview. The Public Land & Resources Law Review assembled a group of these parties to discuss the issues in an open forum.\textsuperscript{86}

The participants included: Rob Collins, Supervising Assistant Attorney General, Montana Department of Justice, NRD Program; John Wardell, Director, Montana Office, Environmental Protection Agency; Joe Hovenkotter, Attorney, Confederated Salish & Kootenai Tribes; Robin Bullock, Northwest Regional Manager, Remediation Management/Atlantic Richfield Co.; Matt Clifford, Conservation Director/Staff Attorney, Clark Fork Coalition; Jon Sesso, State Representative/Butte-Silver Bow Planning Department; and Kathy Hadley, Landowner, Upper Clark Fork River Basin. The Panel was moderated by Sarah Bates Van de Wetering.

\textsuperscript{82} Id.
\textsuperscript{83} State of Montana Natural Resource Damage Program, supra n. 67.
\textsuperscript{86} A copy of the DVD covering the panel discussion: Key Issues in the Clark Fork River Basin is on file at the Public Land & Resources Law Review Office at the University of Montana School of Law.
The viewpoints and issues identified by these, and other interested parties have shaped the nature of the restoration work on the Upper Clark Fork River Basin. The design and cleanup imperative of the Clark Fork River Restoration project has been driven by the action and concern of communities, government agencies and tribal governments working with the responsible parties under statutory and regulatory mandates to repair and replace damaged natural resources.

IV. LESSONS LEARNED, NATIONAL IMPLICATIONS

A. Implementation Challenges: National Issues and the Coeur d'Alene Experience

In the late 1800’s silver was discovered in upper Coeur d’Alene basin. It is one of the richest silver mines in the world and also resulted in extensive lead and zinc mining. One of the largest lead smelters in the United States functioned near Kellogg, Idaho and a nearby zinc plant produced phosphorus based fertilizers. There was complete denuding of hillsides near Kellogg and Smelterville, Idaho. As a result of these activities, over 100,000 parts per million of lead in basin sediment were deposited and over 100 million tons of contaminated soil and sediments were produced. Even in the 1980’s the children in the “Bunker Hill Box” had the highest blood lead levels in the world.

The project began in 1991 with the Operating Unit 1 Record of Decision, covering the populated areas, followed by Operating Unit 2 Record of Decision in 1992, covering the non-populated areas. For the next ten years, the trustees worked to persuade the EPA that the problem was larger than the 21 square miles comprising the “Bunker Hill Box.” Finally in 2002, the Operating Unit 3 Record of Decision was signed. It included areas upstream of the box, the lower Coeur d’Alene floodplain, Lake Coeur D’Alene, and the Spokane River to Lake Roosevelt.

Implementation requires a convergence of policy, project management, legal and technical expertise. Restorative organic legislation (CERCLA, NRDA, or OPA) often overlap in terms of policy, but these laws and statutes govern the restoration of natural resources. The regulations exist, from an implementation point of view, as guidelines. At times these regulations are cost prohibitive and ill-fitting. On the ground, the policy must be rec-

88. Id.
89. Id.
ognized as a general map of possible choices. These must be carefully reviewed and selected on their suitability. 90

In terms of policy, the Coeur d'Alene Tribe placed a premium on true restoration, and was unwavering in its long term commitment. "When they think about cleanup, they don't think about putting a cap on something and leaving it there. They think about permanent solutions. They think about restoration. They think about baseline." 91

The Coeur d'Alene Tribe developed a project management model to facilitate communication and cooperation between technical and legal practitioners as policy decisions were implemented. 92 Using this model, the Coeur d'Alene project management team developed funding proposals with the federal government. It is critical that NRD programs work closely with other trustees, particularly the federal government when federal funds are at play. 93

The project management team included the Coeur d'Alene Tribe, the U.S. Fish and Wildlife Service ("USFWS"), the U.S. Forest Service ("USFS"), and the Bureau of Land Management. The State of Idaho was not part of this team because Idaho prematurely settled its part of the NRDA claim in the 1980's. 94 It was up to the Tribe to file the damage claim in 1991. At that time, the federal government did not file a claim but promised to financially support the Tribe's claim, and coordinate assessment activities. 95

The legal team was comprised of tribal attorneys, DOI solicitors, Department of Agriculture ("USDA") and Department of Justice attorneys. They set the ground rules under which the project operated, including processes to preserve data integrity and to ensure credibility of the program. 96

The legal team focused studies upon the elements of the NRD case: release of a hazardous substance from a facility into the environment which either causes the incurrence of response costs, or causes resource injury. 97 Within these elements, are two great questions in NRD litigation: (1) "What is the injury?" and (2) "Who is a trustee for the injured resource?" 98

The two questions are interconnected.

91. Id.
92. Id.
93. Id.
94. Id.
95. Id.
96. Id.
98. Id.
The Coeur d’Alene Tribe did not have the resources to conduct studies across the whole of the 1,500 square mile basin or a claim to trusteeship on upstream damages.\textsuperscript{99} It was incumbent upon them to find other trustees. The United States became a party to the litigation through the damage to migratory bird populations. Circuitously, injury to other parts of the basin can be tied to the claim if there is damage to a resource belonging to a trustee. Idaho owns the beds and banks of the Coeur d’Alene Basin, with the exception of those lands owned by the Tribe.\textsuperscript{100} However, Idaho had already settled their NRD claims. The only way to bring the sediments under the NRD claim was to tie it to an injury pathway. In the Coeur d’Alene Basin, because the birds were dying, the sediment could be tied to the injury. Further, water, a state resource, was tied to the claim through the Clean Water Act, and again as a pathway of injury.\textsuperscript{101} By creating a trustee collective, the claim was strengthened,\textsuperscript{102} but it must be recognized that different trustees have different missions.\textsuperscript{103}

The technical team was made up of in house and contracted technical experts covering economic, historic and scientific disciplines. The team formulated the study by considering policy recommendations and litigation expectations. The technical team also defined the baseline in physical terms, drawing upon every discipline. In the Coeur d’Alene study, comparative studies were heavily used for upstream and similar systems.\textsuperscript{104}

The technical team had the responsibility to scientifically show that sediment was a damage pathway. Tundra Swans were used as an umbrella species. The USFWS worked with other agencies, including the US Geological Survey, to show that swans were eating sediment in the basin, and that lead concentrations in the sediment were toxic to the swans.\textsuperscript{105} The studies conducted by the technical team found that 530 parts per million of lead causes serious health effects to Tundra Swans; 1,800 parts per million will kill them. Within the Coeur d’Alene Basin, 85 percent of the 1,900 acres in the lower floodplain is high enough to kill the swans, and 95 percent is high enough to injure them.\textsuperscript{106}

The difficulty for trustees is to compensate for injury to the resource. The first approach advanced by the trustees was to replace Tundra Swan habitat through the acquisition of conservation easements. The second approach was to reduce exposure to Tundra Swans.

Because of the extensive contamination, there were not many places that were good candidates for remediation (reduction of contamination to a

\textsuperscript{99} Id.
\textsuperscript{100} Id.
\textsuperscript{101} Id.
\textsuperscript{102} Id.
\textsuperscript{103} Spears, supra n. 87.
\textsuperscript{104} Cernera, supra n. 90.
\textsuperscript{105} Spears, supra n. 87.
\textsuperscript{106} Id.
baseline). Efforts on remediation focused on feeding areas within the wetlands. Eventually, the EPA purchased land for a conservation easement. This effort was remarkable because it was “ecological remediation” by creating a safe feeding area and wetland for the Tundra Swans.

The Coeur d’Alene Basin approach is innovative, in that it is accomplishing restoration after remediation is over. It was based upon broad partnerships with the USFWS, EPA, USDA, USFS, Corp of Engineers, Coeur d’Alene Tribe and the Idaho Department of Environmental Quality.

B. Lessons from the Clark Fork River Basin

The Conference concluded with a panel discussion that highlighted trends and methodologies that emerged throughout the conversation that took place within the context of the conference.

Throughout the conference there emerged a tension between restoration and remedy, with the legal regime favoring remedy. NRD is a balance of exigencies and due process and there exists a tension between curing now and restoring long term. As varied and diverse parties participate in the NRD process the cooperative creates a kind of checks and balances. Congress itself imposed a balance requirement in the National Environmental Policy Act (“NEPA”) that may be helpful in crossing the perceived divide between remedy and restoration. Under NEPA, agencies are empowered to take into account affirmative environmental values. NEPA supplements the role of federal agencies and allows them to affirmatively handle environmental issues.

The tension and interaction between interested parties in the NRD context highlights the importance of leadership and a sustaining conviction that resources damaged will be remedied and restored. This is particularly important as projects develop over-time. “What you have here is a grand scheme of reciprocity.” Organized reciprocity is needed to successfully manage common systems. For these projects to work, both cooperation and sanctions are required.

107. Id.
108. Id.
109. Id.
110. Carlucci, supra n. 55.
112. Id. (citing Calvert Cliffs’ Coordinating Committee, Inc. v. U.S. Atomic, 449 F.2d 1109 (D.C. Cir. 1971)).
113. Id.
114. Id.
115. Id. (referring to the research of Elinor Ostrum and the theory of “Reciprocal Altruism” advanced by Robert Trivers).
You have to have a system to keep people in the game. A great example of this effort is the Technical Assistance Grants program administered by the Montana Natural Resource Damage Program. While potentially responsible parties may bristle at giving taxpayer money to pay their adversaries, Professor Rodgers observed that it changes an environmental group’s role from that of sniper to that of participant. Once in the game, participants are caught in the web of reciprocity and are sanctioned when they step out of line.

Similarly, the strong liability provisions of CERCLA, and the ability to file lawsuits bring parties to the table. The existing enforcement regimes are majestic in the way they focus remedial and restoration efforts even in the face of defections. "There are tremendous temptations to walk away from the table." "Any cooperation . . . happens in the shadow of the law, and a strong enforcement regime." NRD projects work best when the state, EPA and other agencies are willing to assert their authority to bring parties to the table. Strong enforcement, as well as, a trustee willing to bring a case leads to negotiated settlements.

Among the trustees, the tribal perspective is invaluable. It is impossible to speak for the tribes, they must speak for themselves. Tribes have specialized natural resource interests that include nutritional, spiritual, and medicinal interests. What has emerged in NRD cases, however, is the recognition that tribal trustees represent the entire public.

Those with the longest connection with resources can articulate the issues better concerning the true nature of the public interest. Although tribes have lost many treaty rights, and consequently many of their trust interests, tribes continue to take a deep and intense interest in resources. Tribes often expend their own resources to represent the entire public interest, not just their tribal members.

Tribal perspectives heighten the need for advancement of restoration science. Remedial and restoration efforts take place in dynamic systems. However, the current practice employs a very restricted view of baseline: it is a mere snapshot of populations, community structures and habitats. Right now, it is critical to articulate that it is merely a snapshot. This helps to diffuse bickering about how that baseline was established by arguing scientific minutia.

116. Rodgers, supra n.111.
117. Id.
119. Id.
120. Carlucci, supra n. 55.
121. Id.
122. Rodgers, supra n.111.
123. Carlucci, supra n. 55.
124. Id.
Community efforts support the whole process and lend credibility to policy decisions reached by trustees. If the public is not involved, then it appears that trustee action is taken on the basis of narrow parochial interest. Public involvement "is like oxygen for the trustees," and breathes life into the process.\textsuperscript{125}

Using the NRD program as a vehicle for community development in the Upper Clark Fork Basin has proven successful. By participating in the decision making process, communities become invested. In the Clark Fork Basin, using the community redevelopment model, communities helped define the plan for the project. While there are constraints because of the nature of NRD funding sources, it is much easier to have the plan and then find the appropriate funding source.\textsuperscript{126}

Within the community development model, however, more guidance is needed on projects that enhance services without enhancement of natural resources. Restoration with the human element is important. While more regulations are not needed, guidance would be helpful to those establishing NRD priorities and implementing NRD programs. For example, what constitutes appropriate recreation in the NRD arena is one consideration where more guidance at the federal level would be helpful.\textsuperscript{127}

V. CONCLUSION

The 30th annual Public Land Law Conference was designed to stimulate critical thinking, foster conversation and debate by evaluating the current state of the law of ecosystem restoration. In this way, the Public Land and Resources Law Review has sought to fulfill its roles as a synthesizer and critic of the law, and to introduce ideas for reflection among those that work in the area of natural resources.\textsuperscript{128}

This area of law is rich with complexity because of the interplay between public lands and uses, tribal interests and resources, and agency action on federal and state levels. This article is an overview of the discussions and presentations that were presented and merely highlights some of the scholarship, experiences and advances in ecosystem restorative law. The Public Land and Resources Law Review encourages those interested in Public Land Law, Natural Resources Law, Environmental Law and Indian Law to participate in this and future conference discussions by publishing their work and research, expressing innovative ideas to stimulate further discussion and research in these areas.

\textsuperscript{125} Id.
\textsuperscript{126} Fox, \textit{supra} n. 118.
\textsuperscript{127} Id.