

1995

Deception, Self-Deception, and Myth: Evaluating Long-Term Environmental Settlements

William H. Rodgers, Jr.

University of Washington School of Law

Follow this and additional works at: <https://digitalcommons.law.uw.edu/faculty-articles>



Part of the [Environmental Law Commons](#)

Recommended Citation

William H. Rodgers, Jr., *Deception, Self-Deception, and Myth: Evaluating Long-Term Environmental Settlements*, 29 U. RICH. L. REV. 567 (1995), <https://digitalcommons.law.uw.edu/faculty-articles/257>

This Article is brought to you for free and open access by the Faculty Publications at UW Law Digital Commons. It has been accepted for inclusion in Articles by an authorized administrator of UW Law Digital Commons. For more information, please contact cnyberg@uw.edu.

ARTICLES

DECEPTION, SELF-DECEPTION, AND MYTH: EVALUATING LONG-TERM ENVIRONMENTAL SETTLEMENTS

*William H. Rodgers, Jr.**

I. INTRODUCTION

This paper draws upon six famous settlements that are known in various degrees to students of environmental law. Three are a matter of deep history: the 1970 Environmental Defense Fund settlement that led the last manufacturer of DDT in the U.S. to cease discharges into the Los Angeles sewer system and thence into Santa Monica Bay,¹ the Kepone settlement of the mid-70s that followed in the wake of Judge Merhige's initial assessment of a record-breaking criminal fine of \$13.24 million,² and the Hudson River settlement of the early 1980s in

* Professor, University of Washington School of Law. This paper was prepared for the State of the Chesapeake Bay Symposium, sponsored by the *University of Richmond Law Review*, Richmond, Va., March 2-3, 1995. Appreciation is expressed to the faculties of the T.C. Williams Law School, University of Richmond, and the University of Oklahoma College of Law, where another version of this paper was presented on March 9, 1995 as part of the enrichment program.

1. *Environmental Defense Fund v. Montrose Chemical Corp.*, Civ. No. 70-2389 ALS (N.D. Cal. Oct. 22, 1970). Montrose Chemical Corporation had discharged DDT into the Los Angeles sewer system for more than twenty years. Jill Stewart, *Santa Monica Bay Blues*, L.A. TIMES, Aug. 17, 1986, (Magazine), at 26 (interview with marine biologist Rimmon C. Fay). Montrose signed the agreement to stop discharging DDT into the ocean two weeks after the suit by EDF was filed. *Id.* For a general discussion of DDT and regulation of persistent pesticides during the same time frame as the Santa Monica Bay settlement, see William H. Rodgers, Jr., *The Persistent Problem of the Persistent Pesticides: A Lesson in Environmental Law*, 70 COLUM. L. REV. 567 (1970).

2. See Christopher D. Stone, *A Slap on the Wrist for the Kepone Mob*, in CORPO-

which environmentalists gave up demands for cooling towers on several utilities in return for the abandonment of the Storm King hydroelectric project and the construction of a fish hatchery that was expected to benefit the anadromous striped bass.³ The other three of these "settlements" have a more contemporary ring: the Everglades settlement (celebrated perhaps prematurely in July of 1991) that committed \$465 million to reconvert some farmlands into marshes, achieve phosphorus reduction targets and protect the Everglades' "river of grass" from upstream agricultural activities;⁴ the San Francisco Bay/Sacramento-San Joaquin Delta settlement (announced after the elections of November 1994) that involves salinity levels, water management, and fish survival over a sizeable portion of mid-California;⁵ and the pinniped-steelhead conflicts (sometimes called the Hershel wars) that have gained notoriety in my part of the world (Puget Sound) and are frequently described (inaccurately of course) as the only instance known in the U.S. where a "natural" predator, the sea lion, threatens the survival of a listed endangered species. The Hershel wars haven't really been "settled" in any definitive sense (the same is undoubtedly true of the other five conflicts) but a framework for resolution, or at least closure of the present phase, does appear in a half dozen pages of the Marine Mammal Protection Act Amendments of 1994.⁶

RATE VIOLENCE 121, 125 (Stuart L. Hills ed., 1987). Kepone, a pesticide that was mainly sold for use in eastern Europe, had been discharged into the James River through the municipal sewer system maintained by the town of Hopewell, Virginia. *Id.* at 128-31. Allied Chemical had produced Kepone since 1950, but in 1973 it ceased production of the pesticide at its Hopewell facility. *Id.* at 121-22. A new corporation, Life Science Products, Inc., headed by two former Allied employees, began production of Kepone that same year in an abandoned gasoline filling station next door to Allied facility. *Id.* at 122. As a part of the settlement of the case against Allied Chemical, Allied agreed to donate eight million dollars for the creation of the Virginia Environmental Endowment. *Id.* at 126.

3. See ALLAN R. TALBOT, *SETTLING THINGS: SIX CASE STUDIES IN ENVIRONMENTAL MEDIATION* 7 (1983).

4. John R. Wodraska & Peter E. von Haam, *Lessons in Water Resource and Ecosystem Regulation From the Everglades in Florida and California's Bay/Delta Estuary* (Metropolitan Water Dist. of Southern California 1994).

5. See John H. Cushman, Jr., *U.S. and California Reach Pact to Regulate Flow of Fresh Water*, N.Y. TIMES, Dec. 16, 1994, at A24. See generally Harrison C. Dunning, *Confronting the Environmental Legacy of Irrigated Agriculture in the West: The Case of the Central Valley Project*, 23 ENVTL. L. 943 (1993); Wodraska & von Haam, *supra* note 4, at 14-19.

6. Marine Mammal Protection Act Amendments of 1994, Pub. L. No. 103-238,

II. DECEPTION, SELF-DECEPTION, AND MYTH

Viewing the subject of environmental settlements through the lens of evolutionary theory⁷ can tell us something about deception, self-deception, and mythology in human affairs. Deception can be defined as communication that misrepresents the intentions or capacities of the actor.⁸ It is seen everywhere in nature, across species and within species, and explanations for it have provocative implications for the practice of truth-telling among members of our own species. One explanation is

that the biological costs of deceit are customarily low. It is easy to tell a lie; it can be done with a word, an expression, a mere change in body language. A feint can become an act of second nature, a fib can rush forth without rehearsal. This lie-telling business requires no long journeys, heavy caloric intake, or years of careful study.⁹

In addition, the theoretical literature has begun to accept the view that communication among animals serves as a means to manipulate others, not simply to inform them.¹⁰ Under this view, of course, inaccurate information can be as functional as accurate information, so long as it secures compliance. Among humans, perhaps, "the lawyers might be best prepared to embrace the suggestion that communication can be about persuasion as much as it is about truth-telling. Indeed, a speech designed to move others can sound very much like a speech designed to manipulate others."¹¹

But how can we take the step from the practice of telling lies to others to telling lies to ourselves? Self-deception can be defined as misrepresentation of reality to the actor. However, the

108 Stat. 532 (codified as amended in scattered sections of 16 U.S.C.A.); see also S. REP. NO. 103-220, 103d Cong., 2d Sess. 17 (1994), reprinted in 1994 U.S.C.C.A.N. 518, 535.

7. See William H. Rodgers, Jr., *Where Environmental Law and Biology Meet: Of Pandas' Thumbs, Statutory Sleepers, and Effective Law*, 65 U. COLO. L. REV. 25 (1993) [hereinafter *Pandas' Thumbs*].

8. See William H. Rodgers, Jr., *Deception, Self-Deception, and Mythology: The Law of Salmon in the Pacific Northwest*, 26 PAC. L.J. 821 (1995) (companion paper) [hereinafter *Self-Deception*].

9. *Id.* at 826.

10. *Id.*

11. *Id.*

whole point of Darwinian theory is to explain tendencies, traits, or behaviors in functional terms that advance the overall goals of successful life and reproduction.¹² What is the advantage in misreading the world about you? The answer is provided by the evolutionary biologist Robert Trivers, who argues that self-deception is a powerful force in the service of deception.¹³ That is, the best liars are true believers. The most persuasive charlatans tell the truth as they misperceive it.

Myths present a somewhat different version of a functional self-deception. The great student of the subject, Joseph Campbell, describes myths as a set of beliefs that explain the universe, answer imponderables, validate human moral systems, and conduct individuals in harmony "through the passages of human life."¹⁴ Thus, myths are supposed "to waken and maintain in the individual a sense of wonder and participation in the mystery of this finally inscrutable universe."¹⁵ Accordingly, myths provide explanations that can be seen as serviceable, perhaps because they appear in contexts where plausible empirical accounts are hard to find.

III. CHARACTERISTICS OF LONG-TERM ENVIRONMENTAL SETTLEMENTS: RULING ECOSYSTEMS

As a preparatory step to evaluating the role of deception and self-deception in long-term environmental settlements, we will look first at some conspicuous features of the legal problems presented by our six prototypical cases. At the outset, the very idea of "settlement" or "management" of these complex ecological worlds suggests an off-the-chart arrogance or, at the least, a conspicuous faith in the capacities of human reason. We are talking, after all, about major segments of the North American continent, including the Hudson River, the James River that feeds the Chesapeake Bay, the Everglades, Santa Monica Bay, the San Francisco Bay/Sacramento-San Joaquin Delta, and the great Puget Sound.

12. *Pandas' Thumbs*, *supra* note 7, *passim*.

13. See *Self-Deception*, *supra* note 8, at 827.

14. 1 JOSEPH CAMPBELL, *HISTORICAL ATLAS OF WORLD MYTHOLOGY: THE WAY OF THE ANIMAL POWERS* 9 (1983).

15. *Id.* at 8.

What does it mean to "settle" disputes regarding the integrity and functioning of the physical environment in many regions of the North American continent? Obviously, "settlement" can mean many things,¹⁶ and settlements can be looked at from the perspective of procedures, players, outcomes, duration, or something else. This essay focuses on four special problems: (1) representation, (2) prediction, (3) validation and (4) direction.

The *representation* problem arises because of the limited room at the bargaining table for those who assume responsibility for the future functioning of these ecosystems. A few people end up speaking for many, and only a few of these presume to speak for the natural systems and nonhuman creatures who cannot speak for themselves. The *prediction* problem arises because of the multiple uncertainties (of data, function, and response) that lurk behind any of these proposals. These uncertainties will meddle with the machinery of the Hudson River, the James River, the Everglades, or any comparable ecological web. President Bush made reference to the "vision thing," which is much in demand for the all-knowing few who can pull up the chairs at the select table that will decide the future of an ecosystem like the Hudson River. The *validation* principle requires admission of the possibility of error, and the idea is to subject the official estimates (dare we say guesses or visions, or self-deceptions or myths?) to the empirical tests of reality. There is a growing amount of literature recommending this sort of hypothesis-testing, appearing frequently today under the heading of adaptive management.¹⁷ The last category, the *direction* prob-

16. Presumably "settlement" means dispute resolution, which can embrace a range of finality, definitiveness, and outcomes. See GAIL BINGHAM, *RESOLVING ENVIRONMENTAL DISPUTES: A DECADE OF EXPERIENCE* (Conservation Foundation ed., 1986); TALBOTT, *supra* note 3; see also ROBERT PERCIVAL, *The Ecology of Environmental Conflict: Risk, Uncertainty, and the Transformation of Environmental Policy Disputes*, in *STUDIES IN LAW, POLITICS & SOCIETY* 209, 222 (S.S. Silby & A. Sarat eds., 1992) (Part B) (emphasizing "that disputes and the techniques for processing them do not exist in fixed form, but rather are transformed as disputes are processed").

17. Daniel A. Farber, *Environmental Protection as a Learning Experience*, 27 *LOY. L.A. L. REV.* 791 (1994); Ronald H. Rosenberg, *Evolving Consensus: The Dynamic Future of Environmental Law and Policy*, 27 *LOY. L.A. L. REV.* 1049 (1994); Daniel P. Selmi, *Experimentation and the "New" Environmental Law*, 27 *LOY. L.A. L. REV.* 1061 (1994); A.D. Tarlock, *The Nonequilibrium Paradigm in Ecology and the Partial Unraveling of Environmental Law*, 27 *LOY. L.A. L. REV.* 1121, 1139-44 (1994); John M. Volkman & Willis E. McConnaha, *Through a Glass, Darkly: Columbia River Salmon, The Endangered Species Act, and Adaptive Management*, 23 *ENVTL. L.* 1249 (1993).

lem, is included as a reminder that any significant intervention (or nonintervention) in a system as complex as the Hudson River, Chesapeake Bay, or Santa Monica Bay lets loose a chain of events that will unfold in the future in a nonreplicable or chaotic fashion, filled with surprises. This is much more than a "vision thing;" it is a concession that no vision will suffice when we are essentially resetting the starting points in the flow of historical events.

IV. EVALUATING LONG-TERM ENVIRONMENTAL SETTLEMENTS THROUGH THE LENS OF EVOLUTIONARY THEORY: HOW WELL DOES THE LAW RESIST THE TEMPTATIONS OF DECEPTION AND SELF-DECEPTION?

It is now time to look at how the six famous settlements deal with the challenges of representation, prediction, validation, and direction. The answer is poorly, or not at all.

A. *Representation*

The interesting reality underscored in the literature on mediation is the widespread belief that inclusive representation and benign procedures frequently stand in the way of settlement. Thus, the literature often recommends the withholding of invitations to the stronger ideologues and the true believers who make their deals only with God.¹⁸ This pattern of exclusion is frequently reinforced by a system of secretive, closed, and inflexible procedures that are deemed necessary to prevent a deal from coming apart. The Hudson River Settlement is described as an entrepreneurial triumph for the mediator of choice, Russel Train, but, extravagant due process was not his way of facilitating agreement. Allan Talbot reports:

18. Compare Kai N. Lee, *Afterword* to A. TALBOTT, ENVIRONMENTAL MEDIATION: 3 CASE STUDIES—THE ISLAND, THE HIGHWAY, THE FERRY TERMINAL (INST. FOR ENVTL. MEDIATION ed., 1981) with JANE MCCARTHY & ALICE SHORETT, NEGOTIATING SETTLEMENTS: A GUIDE TO ENVIRONMENTAL MEDIATION 18-19 (American Arbitration Ass'n ed., 1984) (pointing out that exclusion carries the risk of a subsequent lawsuit). The Committees of the National Research Council traditionally have made their science policy recommendations by "consensus." The Council has found it more difficult to hold a Committee "consensus" as membership is expanded from the traditional hard-science clientele to something that approaches interest-group representation.

Train conducted [the] formal signing session [on December 18, 1980], attended by the press and representatives from the 11 participants, with a stern hand. There was nervous laughter when he insisted that no one but he would speak until every one signed the agreement. He says today that he wasn't being funny. There was a real possibility that a fiery speech or an angry word in advance of the signing might have blown apart the whole agreement.¹⁹

The awesome responsibility of speaking for nature also leaves room for the play of human hopes, guesses, and invariably, self-deceptions. What did the fish think when their attorneys on the Hudson River decided to abandon the cooling towers and accept the \$2 million in counsel fees?²⁰ In reality, of course, choices are never this clear: the cooling towers might never have been built and the agreement benefited fish in a variety of other ways, and dramatically so, by marking the end of the Storm King Mountain project. Still, the decision to "settle" requires the decisionmaker to discount real tangible gains by indeterminate prospects that optimistic predictions about the future life prospects of striped bass might not be so. We will never know, of course, but \$2 million in counsel fees may allay ecological apprehension in ways that \$500,000 could never do.

B. *Prediction*

In the art of predicting, self-deception is given free reign, especially as time-frames are stretched out, complicating factors are multiplied and condition-dependent qualifiers are enacted. Acts of legislation tend to be acts of faith, as fulfillment of

19. TALBOT, *supra* note 3, at 24; see also G.W. CORMICK, *Relating Environmental Conflict, Community Mobilization, and the "Public Good": Linkages and Contradictions*, in *STUDIES IN LAW, POLITICS & SOCIETY* 309 (S.S. Silby & A. Sarat eds., 1992) (Part B) (arguing that environmental disputes "are unlikely to be effective vehicles for community empowerment and may even work to further disempower local minority communities," while also distinguishing three modes of conflict termination—resolution, settlement, and discontinuance).

20. See TALBOT, *supra* note 4, at 7 (offering a description of the Hudson River Settlement); see also *Hudson River Group Contends Cooling Towers Would Save Fish*, U.S. WATER NEWS, Jan. 1994, at 4 (stating that the 1980 compromise, which validated once-through cooling, will destroy millions of fish above Haverstraw Bay on the lower Hudson).

goals is linked to a swarm of confounding influences. Similarly, the six great settlements of which we speak were, and are, assemblages of hopeful prognostications about the future. Thus, it was hoped that the brown pelicans would return to Santa Monica Bay as the DDT was eliminated from their diet, that the steelhead would appear in abundance at the Ballard Locks in Seattle if predators were removed from the scene, that the Everglades would return to full bloom if the phosphorus was interrupted, and that the striped bass would rebound in the Hudson if some changes in utility operations were promised.

The practice of negotiating environmental settlements puts no formal limits on prognostication, other than the limits on imagination wrought by the small numbers and controlled process of the bargaining game. But, again, no small miracles in judgment and mind-modeling are demanded on the environmental side since what is called for is an estimate of how a series of complicated adjustments in human and business affairs are likely to manifest themselves as positive changes in complex ecological systems.

In this regard, the detail of the Hudson River Settlement that catches attention is the "hatchery" that promises enhanced striped bass production even in the face of abandonment of the cooling towers in the Hudson. For more than a century, the "hatchery" has had enormous appeal to the legal, political, and managerial minds whose affairs have come into conflict with the integrity of the river. Part of this attachment to hatcheries, no doubt, is the conventional tactical perspective that holds that the "hatchery" can be important in distinguishing your fish from mine, and thus offers an advantage in the usual struggle over commerce in fish. On this small question, the Supreme Court has seen fit to tie up a coterie of Northwest lawyers for the better parts of their careers searching out answers to the fascinating question of whether hatchery fish are actually "fish" for purposes of the "right to take fish" secured by the Indian treaties of the 1850s.²¹ On top of this, the creation of the

21. *United States v. Washington*, 506 F. Supp. 187 (W.D. Wash. 1980), *aff'd in part, rev'd in part* 694 F.2d 1375 (9th Cir. 1982), *petition for reh'g en banc granted* 704 F.2d 1141 (9th Cir. 1983), *modified* 759 F.2d 1353 (9th Cir. 1985), *cert. denied* 474 U.S. 994 (1985).

hatchery brings with it the hatchery manager, who is brimming with confidence that "the future evolution of salmonid species now lies chiefly in the hands of the people who are beginning to breed them on a large scale."²² Some men, including Lauren Donaldson, have lived this entrepreneurial dream to manage, dominate, and control, and will leave to posterity a living, swimming, self-perpetuating creation called "The Donaldson Chinook."

But the generic appeal of the hatchery solution goes beyond its tactical and managerial advantages to serve the deep-seated human desire to justify behaviors as beneficial and advantageous. The game theorist calls this the "nonzero-sum" perspective, and the hatchery has served magnificently as a satisfying compensatory gesture that would justify the next encroachment on the natural habitats of the fish, whether it be by dam, overfishing, mining, forestry, farming, or urban development. What is the wrong in taking something from the fish when more is given back? In this capacity, the hatchery "solution" rose to a prominent social self-deception preferred by political choice and enshrined in law. In opting for the hatchery, the Hudson River negotiators repeated a mistake made by hundreds of dealmakers before and after December 18, 1980. While we cannot settle the question here, suffice it to say that the accumulating evidence shows that hatcheries do not supplement natural stocks; they destroy them.²³ Policies built on beliefs to the contrary are policies that rest on self-deception.

C. *Validation*

The validation principle requires the inclusion of monitoring and similar measures that contribute to the self-correction that adaptive management requires. How well do the six great settlements respond to this need to prove the negotiators wrong? Is the environmental settlement process an efficient vehicle for generating hypotheses about the natural world and putting them to the empirical test? Not likely, it would seem.

22. L.R. Donaldson & T. Joyner, *The Salmonid Fishes as a Natural Livestock*, SCI. AM., July 1983, at 50, 58.

23. See JOSEPH CONE, *A COMMON FATE: ENDANGERED SALMON AND THE PEOPLE OF THE PACIFIC NORTHWEST*, *passim* (1995).

Consider the realities of environmental negotiations. A central tenet of the process is that the dealmakers should know their own interests. Have you ever been in negotiations where the opponents asserted: "With all my heart I want X. But I also will hold out for a provision that can prove me foolish for wanting X." What will the response be to this commendable display of self-doubt? How much is a strong case of self-doubt worth? Is not the response likely to be: "Resolve your doubts, so you can negotiate with us." Or: "Put aside your doubts, and accept the \$2 million in counsel fees." I predict that experimental features will not be conspicuous in negotiated environmental settlements.

The experience with Hershel at the Ballard locks shows how hard it is to expect invalidating mechanisms to appear in negotiated environmental settlements. For a number of years, the problem of sea-lion predation on returning steelhead runs has received close attention in the local media.²⁴ The authorities, primarily biologists and managers with the National Marine Fisheries Service and the Washington Department of Wildlife, have intervened in several ways to discourage the sea-lions from doing what comes naturally in the constrained quarters of the adult steelhead access route to Lake Washington. First was the discouragement phase—loud music, large nets, exploding firecrackers, rubber arrows, and foul-tasting fish. But Hershel was not to be deterred from his pursuit of the fish. Next came the capture and transport phase, during which sea lions were moved to the Coast of Washington, south to the Columbia River, and even to the distant waters of Los Angeles. But Hershel overcame the banishment strategy. In recent times, Hershel has been subjected to capture and incarceration, and on one occasion, Hershel actually escaped from prison to cross a couple of highways before he was reapprehended by the authorities more than a mile away.

A problem of this magnitude called for an act of Congress, and the legislators responded in voluminous detail with the Marine Mammal Protection Act Amendments of 1994.²⁵ This

24. See, e.g., Jennifer Bjorhus, *Sea Lion is One Slick Character—Salmon Glutton is Back in Custody*, SEATTLE TIMES, Jan. 29, 1995, at B1.

25. See *supra* note 6.

Act now approves the *lethal* taking of *culpable* sea lions whose misdeeds are linked to the steelhead attempting to navigate the Ballard Locks.²⁶ And herein lies the problem of validation: What is the scientific proposition that drives this law, and will we be able to confirm or contradict this proposition as implementation unfolds? Presumably, there is not much doubt that dead sea lions do not eat fish. Since 1980, trigger-men of one sort or another, including angry fishermen, poachers, vandals, have shot 254 seals and sea-lions in the waters of Puget Sound.²⁷

But the Hershel law is driven by another belief—namely, that the elimination of predators at the Ballard Locks will enhance steelhead survival and returns. To validate this belief with an experiment, it would be necessary to duplicate the returns, control for other events, then observe how the fish do with or without Hershel. Establishing any correlation between sea-lion mortality and steelhead survival is a tricky scientific proposition because of a host of confounding factors.

Are we likely to learn anything from the political-legal experiment that recommends disposing of sea lions? Almost certainly not. The steelhead run will continue to decline, caught as it is in a variety of adverse environmental conditions. Proponents of the lethal control of sea-lions will say that it should have happened sooner. Opponents will say that killing sea-lions is a pointless and contemptible slaughter. When the smoke clears, nothing will have been learned. Self-deceptions and beliefs will go uncontradicted. Adaptive management will not have happened. Managers will drift on to the next set of policies (has muddling through gone out of style?) informed by the next collection of myths and self-deceptions.

26. *Id.*

27. JEFFREY A. RASH, MARINE ANIMAL RESOURCE CENTER, MARINE MAMMAL SIGHTINGS AND STRANDINGS IN PUGET SOUND FROM 1980-1994: WHO, WHAT, WHEN, WHERE, AND WHY, IN PUGET SOUND WATER QUALITY AUTHORITY 50-51 (Puget Sound Research Conference Program 1995).

D. *Direction*

Thus far, our short survey of the six famous settlements suggests that they will prove deficient when measured against the *representation* standard and grossly deficient in confronting the challenges of *prediction* and *validation*. How do they measure up to the test of *direction*, by which we mean the realignment of events and institutions that at least can contribute to the undoing of the environmental damage in the future?

To elaborate somewhat, any successful long-term environmental settlement must address the challenge of successful management of chaotic systems. Any serious intervention in nonlinear systems, such as the social and ecological environment of major water bodies, can change the trajectory of events, for better or worse. Because of their capacity to overturn or redirect events in major ways, these settlements should be measured, tentative, and respectful of Hippocrates' first rule—do no damage. There is a nontrivial prospect that the small-numbers players of the settlement game can find equilibrium points that will leave the environmental damage unattended. This happened in all three of the older settlements that announced an end-of-the-story despite the massive pollution remaining in the sediments of the James River, Santa Monica Bay, and the Hudson River. Negotiators in all of these cases displayed conspicuous shortsightedness and overconfidence in believing they could "settle" these affairs in any definitive way.

On the other hand, several of the settlements nurtured, created, or directed new institutional initiatives that hold out promises of future restoration that could not be undone in the past. The Santa Monica Bay DDT settlement was weak in this regard, but the area has benefited from new laws that have produced a \$42 million natural resource damage judgment that can be turned to the advantage of nature's resources in that part of the world.²⁸ The Kepone settlement gave birth to the Virginia Environmental Endowment and the Hudson River settlement to another healthy endowment (\$12 million) and investment in research that will benefit the river and those

28. David Ferrell, *Off Palos Verdes, a DDT Dumping Ground Lingers*, L.A. TIMES, Sept. 9, 1992, at A1.

reliant upon it. Even the Hershel conflict has a new institutional dimension, the Fisheries-Pinniped Interaction Task Force, that can make of the enterprise something more than a group for approving sea-lion executions.

V. CONCLUSION

Viewed through the lens of deception and self-deception, some widely heralded environmental settlements lose their luster. They suffer from *representation* deficiencies that mean some interests will be left out; *prediction* shortcomings that distort social and environmental realities; *validation* lapses that immunize happy assumptions from the tests of time; and *direction* difficulties that can send future events along unsavory trajectories that are difficult to undo. But the good news is that all of these phenomena are manageable, which means that long-term environmental settlements need not necessarily founder on the shoals of narrow constituencies, poor prognostication, monitoring deficiencies, and directional shortcomings.

