

THE ENVIRONMENTAL LAWS OF THE 1970s: THEY LOOKED GOOD ON PAPER

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I. LOOKING GOOD ON PAPER

A. The Top Ten

What are these laws that look good on paper? My Top Ten is on most lists,¹ with an exception here and there.² They are:

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1. RICHARD J. LAZARUS, *THE MAKING OF ENVIRONMENTAL LAW* 70 (2004); KARL BOYD BROOKS, *PUBLIC POWER, PRIVATE DAMS: THE HELLS CANYON HIGH DAM CONTROVERSY* (2006). For a

- 1969: National Environmental Policy Act (NEPA)
- 1970: Clean Air Act (CAA)
- 1972: Federal Water Pollution Control Act Amendments (CWA)
- Marine Mammal Protection Act (MMPA)
- Federal Advisory Committee Act (FACA)
- 1973: Endangered Species Act (ESA)
- 1976: Magnuson Act (Fisheries)
- National Forest Management Act (NFMA)
- Resource Conservation & Recovery Act (RCRA)
- 1980: Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund).

These acts of Congress are quite different in many ways. NEPA is a comprehensive environmental study law imposed upon agencies of the federal government. There are three “media” protection laws—the CAA, the CWA, and RCRA (a land protection law with wastes tracked “cradle to grave,” so they said). FACA is a public disclosure law, which extended the Freedom of Information Act. Two resource “planning and management” laws are part of the package: the Magnuson Act, now Magnuson-Stevens for fisheries and NFMA for forests. Finally, there is one liability law, CERCLA.

B. Why Did They Look Good on Paper?

What were the pin-up qualities that made these laws look good on paper? What were the features sponsors bragged about or critics deplored?

symposium on statutory interpretation and environmental law, see David L. Shapiro, *Foreword: Statutory Dilemmas in the Regulation of the Environment*, 5 N.Y.U. ENVTL. L.J. 292 (1996).

2. See R.V. PERCIVAL ET AL., ENVIRONMENTAL REGULATION: LAW, SCIENCE, AND POLICY 91–93 (6th ed. 2009) (providing a “Chronology of Significant Federal Environmental Legislation” consisting of eleven statutes, adding Ocean Dumping Act, Safe Drinking Water Act, Emergency Planning and Community Right-to-Know Act, and TSCA; omitting FACA, Magnuson Act and MMPA); William H. Rodgers, Jr., *The Seven Statutory Wonders of U.S. Environmental Law: Origins and Morphology*, 27 LOY. L.A. L. REV. 1009–11 (1994).

How were they understood and described at the time of legislative birth? What was thought to be new, different, and better? We know some of these things about all of these laws.³

I'll exercise editorial judgment and declare four common features of these revolutionary laws to be the most conspicuous displays of merit and excellence. These are (1) best science, (2) public participation, (3) effective and aggressive judicial review, and (4) citizen enforcement.

C. What Kinds of Endeavors Look Good on Paper But Fail in Design, Purpose, Function, or Outcome?

There is, of course, a huge literature on human endeavors that did not work.⁴ Bridges and trains fail, oil wells fail, and laws fail too. I've borrowed from one of these studies⁵ to develop a general typology on *Modes of Failure* that haunt human endeavors. There are, of course, conspicuous differences between building a durable bridge and writing a creditable law. Bridge-builders do not have colleagues who are hoping for a rapid collapse. They are not dealing with the corrosive forces of human intellect that work to defeat their prudent designs. But there are commonalities. Bridges and laws both have futures, and they both have design features that will be put to the test.

So what are the recurring risks for human enterprises that looked good on paper?

1. Double-Edged Sword (illustrated by the Davy Crockett Nuclear Bazooka)

This is a design defect that can be exploited by adversaries of the enterprise.

2. Unanticipated Consequences (illustrated by Kudzu)

This is a design defect that renders the enterprise maladaptive for ends not adverted to.

3. For a useful contemporary perspective on Congress and the environmental statutes, see HENRY WAXMAN WITH JOSHUA GREEN, *THE WAXMAN REPORT: HOW CONGRESS REALLY WORKS* chs. 5, 7 (2009).

4. *E.g.*, DIETRICH DORNER, *THE LOGIC OF FAILURE: RECOGNIZING AND AVOIDING ERROR IN COMPLEX SITUATIONS* (1996) (analyzing the process of failure, especially among individuals in positions of authority, through psychological experiments conducted via computer simulations with role-playing volunteers).

5. *IT LOOKED GOOD ON PAPER: BIZARRE INVENTIONS, DESIGN DISASTERS, AND ENGINEERING FOLLIES* (Bill Fawcett ed., 2009).

3. Complexity (illustrated by “Smell-o-Vision”)

This is a design defect that obstructs realization of ends that are well understood.

4. High Maintenance (illustrated by World War I German Tanks)

This is a design defect that hinders the enterprise from achieving adaptive response, acquiring new energies, and realizing successful outcomes.

II. DESIGN DEFECTS IN THE ENVIRONMENTAL LAWS

A. The Double-Edged Sword: The Davey Crockett Nuclear Bazooka

Here is our initial metaphor:

In a way, from its very conception, the *Davy Crockett Nuclear Bazooka* was a classic military joke. The weapon was designed to fire a nuclear warhead a distance of 400 to 600 meters. The joke came because the blast of the atomic warhead had a lethal radius of about 350 meters, or just over 1100 feet. It was quite possible to fire this weapon correctly and actually still be in the blast zone of the warhead. And yet, this weapon was actually put into production in 1962 and 400 were issued to troops. A desperation—read suicide—move, the weapon was only useful if you were going to be overrun, as was the fear in 1962, by hordes of Russian tanks crossing into Europe. Fortunately none were ever used.⁶

Everything has uses it seems—and the Davey Crockett Nuclear Bazooka is no exception.⁷ But the broader question is whether the environmental laws of the 1970s, designed to advance environmental causes, simultaneously undermined those causes by equipping their adversaries to do a better job. This outcome would be a true double-edged sword. Are there more than subtle prophecies of backlash and get-even

6. *Id.* at 321–22.

7. *Id.* at 322 (“The highly secret weapons system did have one real distinction: it was a movie star. While still being classified top secret, some Davy Crocketts were deployed to Okinawa and, somehow, one Crockett, firing a standard warhead, appeared in a Godzilla movie. This was perhaps the only time it was fired in battle — well, sort of a battle. . .”).

vengeances that rolled back the giant legal leap forward for the environment in the 1970s?

There is much about law that has good-for-the-goose, good-for-the-gander features. If the environmentalists invented the “hard look” doctrine, the technique is certainly serviceable to trade associations resisting environmental regulatory advances. If the environmentalists invented the use of FOIA and FACA for discovery purposes, the practice is relished, duplicated, and put to creative use by many industries. These industries may be far more effective advocates than the original inventors of the techniques.

Certainly, the idea of the environmental impact statement has been appropriated and applied to actions not remotely environmental.⁸ But NEPA itself has remained steadfastly an *environmental* law, and those who would steer it in other directions have come up mostly empty-handed.⁹ NEPA’s adversaries certainly do not view the statute as a double-edged sword that helps them as much as it hurts them. Of course, the same could be said for the Endangered Species Act, even after Justice Scalia interpreted “best science” to mean “best economics” and read the citizen suit measure as affording “zone of interest” standing to those aggrieved by regulations aimed at helping the fish.¹⁰

Laws, of course, are much more than a collection of directives; there is a culture that surrounds them. Professor Oliver Houck ably describes the culture of Public Interest Environmental Law that spawned these famous statutes of the 1970s and nourished the particulars that populated them (citizen suits, impact statements, petition processes, whistleblower protections, ready judicial review, etc.).¹¹ Houck spoke up for the *public interest* as a regime where *private* interests did not go.¹² *Public interest* lawyers would speak for the heretofore unrepresented—the places, the

8. See, e.g., W.H. RODGERS, JR., ENVIRONMENTAL LAW IN INDIAN COUNTRY § 1:11 at 298–99 (2005) [hereinafter LAW IN INDIAN COUNTRY] (describing Cheney Energy Task Force urging an Executive Order requiring an EIS on any regulatory action “that could significantly and adversely affect energy supplies”).

9. *Contra* Bennett v. Spear, 520 U.S. 154 (1997) (expanding “zone of interests” in ESA citizen suits to include business interests objecting to so-called over-enforcement of environmental law).

10. This interpretive feat is described in William H. Rodgers, Jr., *NEPA’s Insatiable Optimism*, [2009] 39 *Env’tl. L. Rep. (Env’tl. Law Inst.)* 10,618, 10,619 nn.16, 17 [hereinafter *NEPA’s Insatiable Optimism*].

11. See Oliver A. Houck, *With Charity for All*, 93 *YALE L.J.* 1415, 1449 (1983–84) (“To restate the rationale: Public interest law provides access for unrepresented issues to the judicial system. This statement has become the primary justification for public interest law practice, and in large part its definition.”).

12. See *id.* at 1544–45 (“If public interest has a meaning, it is as a value which transcends the places where private interests go. This is a meaning worth preserving.”).

creatures, and the processes that had no voice in the system. He describes a movement that was truly revolutionary because it multiplied, and realigned, constituencies and values too long missing from the U.S. public dialogue.

Houck also captures the closest thing to a Nuclear Bazooka moment experienced by the environmental laws of the 1970s. This was the occasion when Public Interest Environmental Law opened offices on the other side of the street to become Private Interest Environmental Law.¹³ The event was marked by the famous 1971 Memorandum of Louis F. Powell (of the Hunton Williams law firm, and soon to be a member of the U.S. Supreme Court), which was prepared for the U.S. Chamber of Commerce. It was entitled “Attack on American Free Enterprise System,” and it urged the establishment and promotion of “public interest environmental law firms”:

This is a vast area of opportunity for the Chamber, if it is willing to undertake the role of spokesman for American business and if, in turn, business is willing to provide the funds.

As with respect to scholars and speakers, the Chamber would need a highly competent staff of lawyers. In special situations it should be authorized to engage, to appear as amicus counsel in the Supreme Court, lawyers of national standing and reputation. The greatest care should be exercised in selecting cases in which to participate, or the suits to institute. But the opportunity merits the necessary effort.¹⁴

This is the “reality” described by Lewis Powell and constructed by the U.S. Chamber of Commerce. It is the reality of public interest environmental law today. You always must look beneath the wrapper to discern the interest. You can’t be quite sure who this voice for the *public interest* is and what motivations are hiding there.

Q. What is the goal of “And For the Sake of the Kids”?¹⁵

A. To elect Brent Benjamin to the West Virginia Supreme Court so that the Massey Coal Co. might win a

13. Houck, *supra* note 11, at 1454–1512 (exploring the work of the leading business public interest law firms including the Pacific Legal Foundation, National Legal Center for the Public Interest, Mountain States Legal Foundation, Mid-American Legal Foundation, and Southeastern Legal Foundation).

14. *Id.* at 1458.

15. *Caperton v. A.T. Massey Coal Co.*, 129 S.Ct. 2252, 2257 (2009).

reversal of a judgment for fraudulent misrepresentation, concealment, and tortious interference.

Q. What is a goal of the Washington Legal Foundation?¹⁶

A. To give legal support and voice to those who would “dry-lab” the testing of water pollutants and spread the falsified results.

The *public interest* environmental laws were not designed to multiply and elevate the voices of business interests who are able to take care of themselves. They nonetheless got their foot firmly in the door. But few believe that business exploitation or mimicry of the environmental laws seriously undermines their purpose and function.¹⁷ The creators of the environmental laws of the 1970s should be free of “Nuclear Bazooka” doubts.

B. Unanticipated Consequences

1. Kudzu and the Ignorance of Crowds

This variety of failure of imagination is everywhere in the history of humans on earth.¹⁸ It is a small surprise that the condition might infect the design and application of the basic environmental laws. Let me offer but two examples from a rich pool of prospects.

The rise of Kudzu in the United States is a splendid illustration of the motor power of collective ignorance:

The plant was an instant hit among the gardeners who toured the Japanese Pavilion. By 1920 you could buy kudzu plants through the mail or at nurseries all over the South.

...

16. *United States v. Hagerman*, 525 F. Supp. 2d 1058, 1061 (S.D. Ind. 2007).

17. See Charles Eppig, *Do Parasites Make You Dumber*, 329 SCI. 131 (2010) (proffering the theory that children who must create more energy to fight off infection have less energy available for brain development). Similarly, a court or agency besieged by falsehoods and misrepresentations and phony fronts has less energy to devote to productive law-making.

18. See CHARLES MACKAY, *EXTRAORDINARILY POPULAR DELUSIONS AND THE MADNESS OF CROWDS* (Crowne Pub. 1980) (1841) (illustrating the concept that the wisdom of the crowd has been praised, but not always).

During the Depression, one of the ways in which the members of the Civilian Conservation Corps (CCC) worked was to plant kudzu to prevent erosion. After all, the kudzu plants grew quickly and covered the areas with roots. The CCC even paid an incentive of eight dollars per acre planted with kudzu. By 1946 almost three million acres had been “conserved” with kudzu planted by the government and the vine could be found all over the South. *It was ideal for this use, unless you ever wanted to use that land, and later any adjacent land, and a bit later most of the nearby land for anything else. . . . Kudzu is one of the fastest-growing vines commonly found anywhere. It can spread at the amazing rate of a foot a day, and sixty feet a year is not unusual. And where it spreads, every other plant is gone, cut off from the sun and dead.*

[This “dead zone” now covers seven million acres across the Southern United States. Using the Japanese vine for erosion control looked good on paper And they planted it on purpose.]¹⁹

2. Lead and the Expediency of Arrogance

This variety of short-sightedness manifested itself as the eleven aqueducts of Rome drifted from one practical material (lengths of hollow tree trunks) to a cheap, ubiquitous, and attractive substitute—lead:

Given that the toxic nature of lead was known, yet its usage was not banned or curtailed—an insanity in its own right—it is highly likely that it wasn’t the descendants of the hordes of hairy and half-naked barbarians who brought down the empire. It was the Romans’ own inability to turn away from expediency and the easy option that damaged them from within. Then all it needed was a shove in the right place, and Rome fell, pipes and all.²⁰

19. Bill Fawcett, *Overwhelming Success*, in *IT LOOKED GOOD ON PAPER: BIZARRE INVENTIONS, DESIGN DISASTERS, AND ENGINEERING FOLLIES* 17–18 (Bill Fawcett ed., 2009) (emphasis added).

20. Chris Powers, *The Pipes of Rome*, in *IT LOOKED GOOD ON PAPER: BIZARRE INVENTIONS, DESIGN DISASTERS, AND ENGINEERING FOLLIES* 9 (Bill Fawcett ed., 2009).

3. Unanticipated Consequence and U.S. Environmental Futures

How have the U.S. environmental laws fared against the ravages of unanticipated consequence? For the most part,²¹ they have escaped the historical verdict of unalterable stupidity that attends the choices to introduce Kudzu into the southern United States or to use lead in the aqueducts of Rome. But could these environmental laws of the 1970s be reenacted today? Serious doubt exists about that possibility. Certainly, at the moment of enactment the unassailable virtue of the environmental laws was the conviction that nobody wishes to live in a world of stinking waters, choking air, and disappearing life.²² That conviction was translated into a political “consensus” that embraced the goals of the environmental laws and limited the quarrels to the means.²³ Perhaps, then, if any future was “unanticipated,” it would be one that deviated from a determined public protection of its quality environments. But conflict between environmental protection and economic development was never *unanticipated*. Rather, the passage of time has exposed a unique vulnerability of the U.S. environmental laws—the capacity to attract committed, resourceful, and determined opposition—not only over means but over goals as well. Environmental laws have become a subject of “love to hate” second only to the tax laws. Once again, Oliver Houck saw this coming before it became a full-blown *unanticipated* consequence. He quotes Justin Dart, of the Dart drugstore chain, in a discussion of the Pacific Legal Foundation:

I loathe environmentalists I say we should preserve the redwoods, sure, maybe 100 acres of them to show the kids. Those environmentalists who talk about preserving wilderness in Alaska—how many goddamned bloody people will end up going there in the next hundred years to suck their thumbs and write poetry? . . . This country needs

21. For exceptions, see Thomas Stratman, *The Politics of Superfund*, in *POLITICAL ENVIRONMENTALISM: GOING BEHIND THE GREEN CURTAIN* 239, 259–60 (Terry L. Anderson ed., 2000) (finding that EPA generally spends Superfund monies in a cost-effective manner, but when politicians begin allocating funds money is not spent as effectively).

22. See ROBERT GOTTLIEB, *FORCING THE SPRING: THE TRANSFORMATION OF THE AMERICAN ENVIRONMENTAL MOVEMENT* 11 (1993) (discussing environmentalism as a social movement created in response to urban and industrial forces).

23. See 1 WILLIAM H. RODGERS, JR., *ENVIRONMENTAL LAW AIR AND WATER*, at vi–vii (1986) [hereinafter 1 *AIR AND WATER*] (discussing “consensus” features of early U.S. environmental law). On the collapse of political cooperation on environmental issues, see Keith Schneider & Cornelia Dean, *Stewart L. Udall, 90, Conservationist in Kennedy and Johnson Cabinets Dies*, *N.Y. TIMES*, Mar. 21, 2010, <http://www.nytimes.com/2010/03/21/nyregion/21udall.html?> (quoting Tom Udall on Stewart: worrying that “we were losing the bipartisanship in the environmental area.” He urges his grandchildren to try “to transform our society to a clean energy and clean job society”).

the oil. If my country doesn't come ahead of my view, then I don't think much of my country.²⁴

Needless to say, to the extent this view gains traction, and it has, the environmental laws have an unhappy future.

The environmental laws were better designed to address *unanticipated* environmental consequences than *unanticipated* economic consequences.

NEPA, certainly, is a work of genius and is comfortably applied to any number of environmentally dangerous (not to mention unimagined) innovations.²⁵ The Clean Water Act can reach nonindigenous species in ballast wastes,²⁶ the escaping “bads” of aquaculture,²⁷ and even runaway pesticides that the original designers left to future happenstance.²⁸ Even the Clean Air Act can be put to service on the newly arriving environmental freight train called climate change.²⁹

Additionally, the environmental laws of the 1970s are loaded with research, reporting, monitoring, and information-yielding devices that have put environmental law in the front ranks of the pursuit of knowledge that has marked human civilization since the dark ages.³⁰

There is a difference, too, between “normal” and “truly pathological” unanticipated consequence. Adaptation to change is certainly a healthy aspect of the environmental laws of the 1970s. Seriatim amendment became

24. Houck, *supra* note 11, at 1461.

25. Attempting to keep up with the kaleidoscopic NEPA case law is a personal pleasure for me. NEPA easily reaches just about everywhere—genetic technology, breeder reactors, naval sonar, terrorism, wind power. *See, e.g.*, *Natural Res. Def. Council, Inc. v. U.S. Dep't of Agric.*, 613 F.3d 76, 82 (2d Cir. 2010) (discussing NEPA and pest-harboring, packaging materials used in global trade); *see also Nat'l Parks & Conservation Ass'n v. Bureau of Land Mgmt.*, 586 F.3d 735, 738 (9th Cir. 2009) (discussing NEPA and the largest landfill in the United States).

26. *Compare* KIM TODD, *TINKERING WITH EDEN: A NATURAL HISTORY OF EXOTICS IN AMERICA* 72 (2001) (ballast water and the zebra mussel), *with* Liwen A. Mah, Note, *EPA Cannot Exempt Discharges of Ballast Water from the Clean Water Act's Permit Requirements*, 32 *ECOLOGY L.Q.* 757 (2005) (discussing the expansion of the CWA jurisdiction to ballast water discharges in U.S. waterways), *and* Liwen A. Mah, Note, *Sailing by Looking in the Rearview Mirror: EPA's Unreasonable Deferral of Ballast-Water Regulation to a Now Ineffective Coast Guard*, 31 *ECOLOGY L.Q.* 665 (2004) (discussing the EPA's initial refusal to regulate ballast water under the CWA).

27. *E.g.*, *U.S. Pub. Interest Research Grp. v. Atl. Salmon of Me.*, No. CIV.00-150-B-C, 2002 WL 240440 (D. Me. Feb. 19, 2002) (recommending decision of Magistrate Kravchuk); *cf.* *Wild Fish Conservancy v. U.S. EPA*, No. C08-0156-JCC, 2010 WL 1734850 (W.D. Wash. Apr. 28, 2010) (approving ESA challenge to EPA decision approving exemption of Puget Sound salmon farms from general sediment-management standards).

28. *See* *Peconic Baykeeper, Inc. v. Suffolk Cnty.*, 600 F.3d 188–89 (2d Cir. 2010) (holding that trucks and helicopters used by a county to spray pesticides were point sources within the meaning of the Clean Water Act).

29. *Massachusetts v. EPA*, 549 U.S. 497, 528 (2007).

30. *See, e.g.*, 1 *AIR AND WATER*, *supra* note 23, at 174–76; 2 *WILLIAM H. RODGERS, JR., ENVIRONMENTAL LAW AIR AND WATER* 22–23 (1986) [hereinafter 2 *AIR AND WATER*].

a regular response to a wide variety of “didn’t think of that” objections as new facts emerged and new opinions came forth.³¹ Certainly bold environmental ambitions were rolled back and “frustrated” by the emergence of a variety of “second laws”—five-year permits that become twenty-year licenses,³² “new source” rules defeated by old-source gaming,³³ “stringent” statutes undermined by truly devious “nonenforcement” policies,³⁴ not to mention empirical revelations of “unanticipated consequence” that should have been wholly anticipated if earlier design failures had been conceded. But these laws are certainly not stale, quaint, and out of date. The collapse of the New England fisheries might have been “unanticipated” by much of the world but it should have been completely understood by the legislative designers who ceded all powers to industry cartels.³⁵

*C. Complexity; Too Many Moving Parts:
Friction and Failure Built Into Implementation*

1. The Sword Pistol: Neither Fish Nor Fowl

It was Napoleon Bonaparte who made famous the quote: “Never interrupt your enemy when he is making a mistake.”³⁶ This is why the proponents of peace must have stood by silently while two of the great weapons of war were dismantled simultaneously in a grotesque and greedy experiment to combine the virtues of both. This effort to capture the killing virtues of each succeeded in nullifying the lethal capacities of both.³⁷ This sword pistol (circa 1800) was a grotesque combination of clumsy pistol and useless sword.³⁸ If you used the sword first, you would knock the powder

31. 1 AIR AND WATER, *supra* note 23, at preface.

32. *See generally* 2 AIR AND WATER, *supra* note 30, § 4.28 (detailing variances, exemptions, and escape-routes).

33. *E.g.*, *The Forum: Is It Time to Retire Grandfather?*, 17 ENVTL. FORUM 42 (2000).

34. Tarah Heizen, Essay, *Stopping the Campaign to Deregulate Factory Farm Air Pollution*, 17 N.Y.U. ENVTL. L.J. 1482, 1506–07 (2009).

35. On the collapse of the New England Fisheries, see generally MARK KURLANSKY, *COD: A BIOGRAPHY OF THE FISH THAT CHANGED THE WORLD* (1998) and CALLUM ROBERTS, *THE UNNATURAL HISTORY OF THE SEA* ch. 15 (2007). Josh Eagle points out that the Fisheries Conservation Act (formally the Magnuson-Stevens Fisheries Management Act) has never been anointed by inclusion in the West’s Annual Annotation of Federal Selected Environmental Law Statutes. Magnuson-Stevens, of course, is an environmental law, and an important one. It is just not a very good one.

36. Bill Fawcett, *The Sword Pistol*, in *IT LOOKED GOOD ON PAPER: BIZARRE INVENTIONS, DESIGN DISASTERS, AND ENGINEERING FOLLIES* 20 (Bill Fawcett ed., 2009).

37. *Id.* at 20–21.

38. *Id.*

out of your pistol.³⁹ If you used the pistol first, you didn't have time to flip the blade forward and lock it into place.⁴⁰ It was therefore useless as a sword.

This monstrosity has "Defense Department Acquisition" written all over it.⁴¹

2. Too Many Moving Parts: Smell-O-Vision

Another version of complexity is a misguided effort to wed odors with the visual images of film. The experiment was called "Smell-O-Vision."⁴² It happened this way:

[Odors, foul or sweet, have been slow to find a home in movie theatres.] But, finally, in 1960, one film made a serious attempt to involve audience noses in the movie experience. The film, called *Scent of Mystery*, included some thirty different smells released at each seat in synchronization with the projector. This patented device — surely the inventor was drooling at the prospects of his imminent profits — was called Smell-O-Vision.

Unfortunately, Smell-O-Vision, in practice, simply stank. The odors came out too late or too early, sometimes with overpowering strength, at other times so faint that viewers were forced to sniff loudly as they vainly sought the next clue. The early reviews were terrible, and the movie a complete flop. Mike Todd, Jr., wouldn't be able to produce another movie until he made *The Bell Jar* more than nineteen years later.

And theater-filling Smell-O-Vision would never stink again.⁴³

39. *Id.*

40. *Id.*

41. For other examples, see *id.* at 153, 281 ("Unlike most winged failures, the F-111 did serve long enough to redeem itself" and "No Plan Ever Survives Contact with the Enemy.").

42. Douglas Miles & Donald Miles, Sr., *Smell-O-Vision: Mixing Odors with Cinema*, in *IT LOOKED GOOD ON PAPER: BIZARRE INVENTIONS, DESIGN DISASTERS, AND ENGINEERING FOLLIES* 193 (Bill Fawcett ed., 2009).

43. *Id.* at 195.

3. Complexity and the Environmental Laws

Complexity is an oft-noted feature of the environmental laws.⁴⁴ It has many sources and it hides many motives. There is a genuine side of this complexity, as the finer avenues of process obstruct the rush to discard dangerous technologies and out-of-favor business practices. There is a clumsy side of it, as please-all combinations (sword-pistol weddings, as it were) yield utter stalemate. For years, the mechanics of hazardous air pollutants were gummed up in this fashion.⁴⁵ There are saboteur features of this phenomenon. Remember, many of the “designers” of the “sword pistol” called environmental law are striving to make the system *not* work. RCRA is famous for being a law of “mind-numbing complexity.”⁴⁶ RCRA rules are a product of huge, laborious, and detailed rulemakings. These are then culled over by huge, laborious, and detailed appellate reviews in the U.S. Court of Appeals for the District of Columbia that show signs of “selection” for immunities to the environmental laws. The study that should be conducted on RCRA is the extent to which “complexities” complained about are the product of drafting triumphs that could then be questioned collaterally.⁴⁷

Of course there is no rule that statutes serve as one-function specialists. A statute can prevent pollution, forbid its discharge, ban its accumulation, and regulate its underground management.⁴⁸ But the sword-pistol error is a generic design flaw, and it gravely hurts EPA’s hazardous waste program

44. See generally William H. Rodgers, Jr., *A Superfund Trivia Test: A Comment on the Complexity of the Environmental Laws*, 22 ENVTL. L. 417, 427 (1992) (illustrating the complexities of environmental laws regulating Superfund sites). For a serious and deft introduction to the science of complex systems, see MELANIE MITCHELL, *COMPLEXITY: A GUIDED TOUR* (2009).

45. See 1 AIR AND WATER, *supra* note 23, § 3.20 (providing an early description of the mechanics of hazardous air pollution).

46. T.J. SCHOENBAUM & R.H. ROSENBERG, *ENVIRONMENTAL POLICY LAW: PROBLEMS, CASES, AND READINGS* 703 (Foundation Press 3d ed. 1996); see C.R. JOHNSTON, W.F. FUNK & V.B. FLATT, *LEGAL PROTECTION OF THE ENVIRONMENT* 421 n.6 (2005) (noting that the details of RCRA’s “land ban” program, enacted by the HSWA of 1984, “are far too complicated to be treated in an overview course”).

47. A candidate for this sort of self-destruct mechanism is the inclusion of “discarded material” in the definition of “solid waste.” Solid Waste Disposal Act § 1004, 42 U.S.C. § 6903(27) (2006). This is read by Judge Kenneth Starr in *American Mining Cong. v. U.S. EPA*, 824 F.2d 1177 (D.C. Cir. 1987), to preclude EPA from regulating dangerous materials held for reuse where there is no intent to throw something away. Most observers might explain this case not as an example of “poor” or “complex” drafting but as opportunistic or destructive judging. The case law is summarized and presented in PERCIVAL ET AL., *supra* note 2, at ch. 4. Another candidate for a judicial “murder” is the extremely hard look taken at the asbestos ban rule by *Corrosion Proof Fittings v. EPA*, 947 F.2d 1201 (5th Cir. 1991). This appears to have let the air out of the TSCA balloon once and for all.

48. See Solid Waste Disposal Act § 9001, 42 U.S.C. § 6991 (2004) (addressing the regulation of underground storage tanks).

whether the mistake was the product of legislative error or judicial or administrative sabotage.

Complexity has a dark side. It affords niches for exploitation by gaming. It allows derailing of well-grounded policy. It spreads knowledge thin. It moves compliance from a simple matter of good will to a complicated matter of good lawyers. It tempts courts to quit the inquiry and defer to anyone who pretends to navigate the confusion.

One of the easiest routes to hideous complexity comes courtesy of constitutional necessity. Few doubt that the Supreme Court's rulings on standing have added inordinate transaction costs to the practice of environmental law.⁴⁹ Pointless discovery, even day-long depositions, are now the norm. All in the interests of constitutional necessity, we are told, although we understand that the guiding motivation is to roll back the ambitions of judicial review.⁵⁰

Generally, the common law is free from awkward combinations and the many moving parts that creep into statutory schemes. The environmental laws of the 1970s looked good on paper because they frequently settled on "common law" approaches in their basic design. The leader of the pack in this regard is the famous section 107 of CERCLA.⁵¹ Section 107 is little more than a striking declaration of strict liability. This idea was transported to the Oil Pollution Act of 1990,⁵² and it is firmly behind the many billions in liability that will attend the Deepwater Horizon Gulf Oil Well Blowout.⁵³

The common-law "bias" of the principal environmental statutes is conspicuous in other ways. It is evident in the several savings clauses,⁵⁴ the

49. *Summers v. Earth Island Inst.*, 129 S.Ct. 1142 (2009).

50. Antonin Scalia's "appoint me if you dare" article appears as *The Doctrine of Standing as an Essential Element of the Separation of Powers*, 17 SUFFOLK U. L. REV. 881 (1983). The tactic was successful. They dared to appoint this man to the U.S. Supreme Court and he did as he said he would in this law review article.

51. 42 U.S.C. § 9607 (2006); see Christopher J. Nowicki, *A Step Back from Chevron? An Analysis of Kelley v. EPA*, 9 ADMIN. L. REV. AM. U. 221, 234 (1995) (discussing the status of administrative deference following *Kelley v. EPA*, 15 F.3d 1100 (D.C. Cir. 1994)).

52. Oil Pollution Act of 1990 § 1002, 33 U.S.C. § 2702; see Oil Pollution Act of 1990 § 1003, 33 U.S.C. § 2703 (describing "Defenses to liability" as limited to an act of God, act of war, and "act or omission of a third party").

53. Clifford Krauss & Elizabeth Rosenthal, *The Price and Who Pays: Updates from the Gulf*, N.Y. TIMES, May 13, 2010, <http://www.nytimes.com/2010/05/13/us/13q-n-a.html>; see Seattle Times News Services, *New lawsuit*, SEATTLE TIMES, June 19, 2010, http://seattletimes.nwsources.com/html/nationworld/2012155857_oil19.html (describing a "maximum penalty" lawsuit by the Center for Biological Diversity; at \$4300 per barrel, BP's liability is calculated to be \$19 billion, which would go to the U.S. Treasury).

54. Clean Air Act § 310, 42 U.S.C. § 7610 (2006); Clean Water Act of 1972 § 510, 33 U.S.C. § 1370 (2006); Solid Waste Disposal Act of 1965 § 3009, 42 U.S.C. § 6929 (2006).

prohibition on “open dumping,”⁵⁵ the “imminent endangerment” innovations,⁵⁶ and the authorization in section 106(a) of CERCLA to issue administrative orders “as may be necessary to protect public health and welfare and the environment.”⁵⁷

Some “complexities” are necessary in the assemblage of any legislative engine. Major circuit-breakers appear in most statutes between matters of day-to-day administration and the more dramatic moments of enforcement. When this system fails, it is not necessarily because of an awkward combination of functions (the sword-pistol) or because of too many moving parts (Smell-O-Vision). It is because “normal” legislative design and practice allows commendable management to be driven onto the rocks by opportunistic enforcement.⁵⁸

D. High Maintenance

Human endeavors that require high maintenance are vulnerable in the long run. The longer the list of needs, the higher the demands for help. Laws differ in their capacities for self-sufficiency and extreme dependency. Popular support is but one barometer. This proposition will be twice illustrated. Consider:

1. The Great Wall of China

The Great Wall seemed to be a dubious enterprise. It was a pit for the swallowing of resources. Could you make it long enough? For that matter, could you make it high enough or strong enough? Consider:

55. Compare Solid Waste Disposal Act of 1965 § 4005(a), 42 U.S.C. § 6945(a) (2006) (“[O]pen dumping of solid waste or hazardous waste is prohibited.”), with Solid Waste Disposal Act of 1965 § 1004(14), 42 U.S.C. § 6903(14) (2006) (defining “open dump” to include any “facility where solid waste is disposed of” that is not a “sanitary landfill”).

56. Solid Waste Disposal Act § 7002, 42 U.S.C. § 6972 (1984) (inviting citizens to correct incidents of mishandling of “solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment”); Solid Waste Disposal Act § 7003(a), 42 U.S.C. § 6973(a) (2006) (noting administrator may bring suit to combat “solid or hazardous waste” disposal activities that “may present an imminent and substantial endangerment to health or the environment”).

57. 42 U.S.C. § 9606(a) (2006). Compare A. Dan Tarlock, *Is There a There There in Environmental Law?*, 19 J. LAND USE & ENVTL. L. 213, 217 (2004) (making the interesting point that the “survival” of environmental law “is more problematic than other areas of law because it is not an organic mutation of the common law, or more generally, the western legal tradition”).

58. For a modern record, see *Ass’n Irrigated Residents v. EPA*, 494 F.3d 1027 (D.C. Cir. 2007) (2-1 decision), upholding a sweetheart “settlement” agreement, thus inviting thousands of AFOs to escape enforcement in return for a few pretextual litanies.

[This wall was begun in 214 B.C. and completed in 1368 A.D. under the Ming Dynasty.] The first problem was that even the dirt-packed Great Wall and its forts were expensive to maintain. This meant often they were not kept in repair or well manned. The second problem was that in 1234 the Mongols invaded. The Great Wall was designed to keep out the steppe tribes, but not when they appeared as a well-organized army in great numbers. The Mongols barely paused at the Wall before invading China. Eventually all of China, including the Great Wall, was controlled by the Mongols.⁵⁹

2. World War I German Tanks: Great Vehicle, Road Missing

This is another tale of a nightmare in maintenance:

[The reality of rough ground and deep trenches] seems to have been lost on the designers of the German [A7V tank]. The 26- by 10- by 11-foot tank held six machine guns and a 57 mm gun that was quite sufficient for blasting apart those annoying machine gun nests. What this vehicle also had was a ground clearance of 1.5 inches. Yep, that is not a typo, the distance between the bottom of the tank and the ground was a tiny inch and a half. This meant that the entire bottom of the tank constantly ground itself against the dirt and debris below it except when running on the smoothest and firmest flat surfaces. (Maybe the German tank testing area was paved.) That scraping in turn meant the A7V was slowed to a crawl and was often stopped by even shallow depressions. There being a lack of fully paved battlefields in World War I, the Germans found that their new and expensive tank was effectively incapable of actually reaching the enemy and could not keep up with even walking infantry on an unpaved road. The program was dropped after only twenty of these awkward giants were made.⁶⁰

59. Bill Fawcett, *The Great Wall of China*, in *IT LOOKED GOOD ON PAPER: BIZARRE INVENTIONS, DESIGN DISASTERS, AND ENGINEERING FOLLIES* 10, 11 (Bill Fawcett ed., 2009).

60. Bill Fawcett, *Tanks a Lot*, in *IT LOOKED GOOD ON PAPER: BIZARRE INVENTIONS, DESIGN DISASTERS, AND ENGINEERING FOLLIES* 293, 294 (Bill Fawcett ed., 2009).

3. The Maintenance “Preadaptations” of Environmental Law

A “preadaptation” is a design feature that facilitates survival in future environments.⁶¹ The more flexible these preadaptation features, the less emergency future maintenance will be necessary. These features-of-the-future are the pillars of modern environmental law and they looked good on paper. They are four in number. They are the legislative commitments to (1) the best available science, (2) public participation, (3) effective judicial review, and (4) citizen suits.

These four foundations frame the origins and values of modern environmental law. The “science” commits us to fuller understandings of the natural world and deeper sympathies to the living creatures within it. The “public participation” captures the tremendous diversities of environmentalism that were practiced by aboriginal groups, sought after by activists of the labor movement, put to good use by “conservationists” who left us the public lands, and renewed by the many tentacles of contemporary “environmental justice.” The all-important business of “judicial review” was the salvation of the civil rights movement and it afforded a quiet confidence and settled conviction that justice could have its way in the long run. And the “citizen suits” are the means to the end of environmental justice. Activism must have a method and these “suits” were the way to reward the fury of purpose and preparation that people would bring to the protection of environmental values.

a. Best Available Science

Linking protection of the environment to the pursuit of excellence in science was an extraordinary measure of good fortune. The Environmental Defense Fund (EDF) was founded in 1967 on an “advancement of science” platform and it poured its biology-strong expertise into information-starved agricultural forums beginning with the Wisconsin DDT Hearings.⁶² This jump-start on “science matters” was naïve in one sense. EDF-ers really

61. See DICTIONARY OF THE HISTORY OF SCIENCE 6 (W.F. Bynum et al. eds., 1981) (defining “adaptation” to include being suited “to the process of adjustment to new conditions”). On the “starvation” of agencies by funding shortfalls and the rise of the “battered agency syndrome,” see RENA STEINZOR & SIDNEY SHAPIRO, *THE PEOPLE’S AGENTS AND THE BATTLE TO PROTECT THE AMERICAN PUBLIC: SPECIAL INTERESTS, GOVERNMENT, AND THREATS TO HEALTH, SAFETY, AND THE ENVIRONMENT* (2010).

62. William H. Rodgers, Jr., *The Persistent Problem of the Persistent Pesticides: A Lesson in Environmental Law*, 70 COLUM. L. REV. 567 (1970); see also Susan Haack, *Irreconcilable Differences? The Troubled Marriage of Science and Law*, 72 LAW & CONTEMP. PROBS. 1 (2009) (highlighting the inconsistencies between science and the law.); SAM HARRIS, *THE MORAL LANDSCAPE: HOW SCIENCE CAN DETERMINE HUMAN VALUES* (2010).

didn't look past the conviction that "speaking truth to politics" could only help improve the situation. The momentum of that initial "science first" campaign was the beginning of the end not only for DDT, but the entire class of chlorinated hydrocarbon pesticides.⁶³ This optimistic initiative has had worldwide positive consequences for human understanding of persistent organic pollutants.⁶⁴

Following the initial "science first" campaign, science quickly gained a foothold in the other environmental laws. The National Environmental Policy Act (NEPA) is a "science first" law and is written in full praise of the "ecological sciences."⁶⁵ It puts science—in particular, the life sciences—into the mandates of all federal agencies.⁶⁶ The "best available science" clauses appeared first in the Marine Mammal Protection Act of 1972 (MMPA) (twelve of these clauses are recorded there).⁶⁷ Another eight came into play with the 1973 Amendments to the Endangered Species Act (ESA).⁶⁸ Even the 1976 Magnuson Fisheries Conservation Act was bitten by the "best science" bug, though the dominant message of that cartel-building law is to invite fisheries interest groups to run their own affairs.⁶⁹

Linking protection of the environment to the "best available science" looked good on paper and has proven durable in practice. Being on the side of science is being on the side of the pursuit of truth, the praise of knowledge, the hope for improvement, and the advancement of learning. Science, it is now said, sparked the rise of political democracy and undergirds the free inquiry celebrated today in U.S. politics.⁷⁰

63. See MARK L. WINSTON, *NATURE WARS: PEOPLE VS. PESTS* (1997); WILLIAM CRONON & THOMAS R. DUNLAP, *DDT, SILENT SPRING, AND THE RISE OF ENVIRONMENTALISM* (2008); DONALD ROBERTS AND RICHARD TREN, *THE EXCELLENT POWDER: DDT'S POLITICAL AND SCIENTIFIC HISTORY* (2010).

64. THEO COLBORN, DIANE DUMANOSKI, & JOHN PETERSON MYERS, *OUR STOLEN FUTURE* (1996).

65. See LAW IN INDIAN COUNTRY, *supra* note 8, at 382–86 (quoting National Environmental Policy Act § 102(2)(A), 42 U.S.C. § 4332(2)(A) (2006), which urges the resort to a "systematic, interdisciplinary approach").

66. National Environmental Policy Act of 1969 § 105, 42 U.S.C. § 4335 (2006).

67. COMM. ON DEFINING BEST SCIENTIFIC INFO. AVAILABLE FOR FISHERIES MGMT., OCEAN STUDIES BOARD NAT'L RESEARCH COUNCIL, *IMPROVING THE USE OF THE "BEST SCIENTIFIC INFORMATION AVAILABLE" STANDARD IN FISHERIES MANAGEMENT* 30 (2004).

68. *Id.* at 17.

69. See Roger Fleming, Peter Shelley & Priscilla M. Brooks, *Twenty-Eight Years and Counting: Can the Magnuson-Stevens Act Deliver on Its Conservation Promise?*, 28 VT. L. REV. 579 (2004) (examining the state of New England federal fisheries thirty years after the passage of the original Magnuson-Stevens Act (MSA) and the implementation of recent amendments to the MSA); see also Allison Rieser, *Prescriptions for the Commons: Environmental Scholarship and the Fishing Quotas Debate*, 23 HARV. ENVTL. L. REV. 393 (1999) (discussing the effects of fishing quotas under the MSA).

70. TIMOTHY FERRIS, *THE SCIENCE OF LIBERTY: DEMOCRACY, REASON, AND THE LAWS OF NATURE* (2010).

Do opponents of the environmental laws have any side-of-the-angels answers to outcomes driven by the best available science? Not really. It is often said that “our science is better” or “science is trumped by policy” or “there is no science on this topic.” But even sweeping movements (the “junk science” campaign)⁷¹ and powerful defensive opportunities (*Daubert* motions to strike or limit expert testimony)⁷² suffer in the long run because their answer to “science says” is “science says otherwise.” Frankly, who is embarrassed when attorneys for the Alliance of Automobile Manufacturers and the General Motors Corp. make a *Daubert* motion in a climate change case to strike the testimony of Dr. James Hansen, preeminent climate scientist of the times and Director of the Goddard Institute for Space Studies? It certainly was not Dr. Hansen. It was the people who wanted to shut him up.⁷³

Lawyers are the first to say that “science” is but one input into a broader policy domain.⁷⁴ But the clearer and stronger the science, the harder it is for policy-makers to go against it. These things are done, of course, but

71. E.g., PETER W. HUBER, *GALILEO'S REVENGE: JUNK SCIENCE IN THE COURTROOM* (1993); TODD WILKINSON, *SCIENCE UNDER SIEGE: THE POLITICIANS' WAR ON NATURE AND TRUTH* (1998). For a strong argument that scientific “doubt” is an attractive justification for decision-avoidance, see Wendy E. Wagner, *The Science Charade in Toxic Risk Regulation*, 95 COLUM. L. REV. 1613, 1615–17 (1995) (illustrating the double-edged sword features of “best science” approaches).

72. Susan Haack, *Proving Causation: The Holism of Warrant and the Atomism of Daubert*, 4 J. HEALTH & BIOMEDICAL L. 253 (2008).

73. See *Green Mountain Chrysler Plymouth Dodge Jeep v. Crombie*, 508 F. Supp. 2d 295, 313–20 (D. Vt. 2007) as discussed in William H. Rodgers, Jr. & Anna T. Moritz, *The Worst Case and The Worst Example: An Agenda For Any Young Lawyer Who Wants to Save the World From Climate Chaos*, 17 SOUTHEASTERN ENVTL. L. J. 296, 297–304 (2009).

74. For thoughtful analyses of the confluence between science and law, see Beth C. Bryant, *Adapting to Uncertainty: Law, Science, and Management in the Steller Sea Lion Controversy*, 28 STAN. ENVTL. L. J. 171, 200 (2009) (“Exposing the fact that an agency has made policy choices based on an incomplete scientific record leaves the agency vulnerable to charges of unjustifiable over- or under-regulation.”), Cary Coglianese & Gary E. Marchant, *Shifting Sands: The Limits of Science in Setting Risk Standards*, 152 U. PA. L. REV. 1255, 1360 (2004) (“Embedded within any bare claim that a policy decision is ‘based on’ science, or that science ‘leads to’ a particular policy choice, will be some underlying normative position.”), and Thomas T. Ankersen & Richard Hamann, *Ecosystem Management and the Everglades: A Legal and Institutional Analysis*, 11 J. LAND USE & ENVTL. L. 473, 501 (1996) (“[I]t is difficult to find references to any ecosystem scale adaptive management experiments that have not become embroiled in political controversy.”).

On the problem of uncertainty and no readily available scientific answers, see Sanne Knudsen, *A Precautionary Tale: Assessing Ecological Damages After the Exxon Valdez Oil Spill*, 7 U. ST. THOMAS L.J. 95, 101–02 (2009) (quoting LAZARUS, *supra* note 1, at 21) (noting that science is not always able to provide certain answers and that “choosing to act on imperfect information is, therefore, a policy issue”).

the moments are better remembered for their shame than for their heroic visions of political independence.⁷⁵

In the long run, decisions resting on science are safer than those resting on anti-science. It may be front-page news that anti-Darwinists are joining forces with climate change deniers on the policy barricades.⁷⁶ But environmental advances face greater threats than rising coalitions of the ignorant.

b. Public Participation

This second pillar of the environmental laws of the 1970s is found in the texts and policies of the principal statutes.⁷⁷ Not unlike the confident assumption that the “science is on our side,” this theme of “public participation” conveys a 1960s preachment that the “people are with us” and if they are heard, environmental decisions will take care of themselves. “Public participation” looked good on paper and has proven to be resilient and durable in practice. To this day, being locked out of the decision-making process is an appealing claim in any environmental case. Opportunities to participate are at the heart and soul of procedural fairness and courts are quick to recognize this.⁷⁸

Statutory “public participation” has enormous supply-line reinforcement features behind it—FOIAs, FACAs, public disclosure (Prop. 65), whistle-blower laws and admirable NGO front-line combatants (e.g., GAP, OMB Watch, UCS) that have made “public participation” much more than a ritual.

75. *Natural Res. Def. Council v. Daley*, 209 F.3d 747, 750–51, 754 (D.C. Cir. 2000) (describing when industry committee allocates summer flounder fishery with a three percent chance of achieving overfishing target; NMFS approves a quota with an eighteen percent chance of meeting the overfishing target; the court says the standard should be at least fifty percent). Compare *Ohio Valley Env'tl. Coalition v. U.S. Army Corps of Eng'rs*, 479 F. Supp. 2d 607, 648–49 (S.D.W. Va. 2007) (noting expert testimony that over 30,000 stream and river restoration projects confirmed that stream creation “has not succeeded and is not scientifically credible”), with *Coeur Alaska, Inc. v. Se. Alaska Conservation Council*, 129 S.Ct. 2458 (2009) (accepting on faith a hearty pledge of “lake creation”).

76. Leslie Kaufman, *Darwin Foes Add Warming to Targets*, N.Y. TIMES, Mar. 3, 2010, <http://www.nytimes.com/2010/03/04/science/earth/04climate.html?scp=1&sq=anti-Darwinist,%20policy&st=cse>.

77. E.g., Federal Water Pollution Control Amendments of 1972 § 101(e), 33 U.S.C. § 1251(e) (2006) (describing public participation in development, revision, and enforcement of any Clean Water Act regulation). For a version of public participation that should make a “true difference,” see Marc B. Mihaly, *Citizen Participation in the Making of Environmental Decisions: Evolving Obstacles and Potential Solutions Through Partnership with Experts and Agents*, 27 PACE ENVTL. L. REV. 151, 155 (2009–10).

78. See WILLIAM H. RODGERS JR., ENVIRONMENTAL LAW: AIR & WATER 401–05 (1986) (detailing public participation provided in the NPDES program).

But history has conspired to make “public participation” something other than the unadulterated good advocates thought it to be in the 1970s. In ascending order of significance, I will mention the erosion of the radical environmental fringe, the loss of leadership charge against mainstream environmental groups, the rise of a chicanery front in the annals of public participation, and even the appearance of genuine doubts about the public and its sturdy wisdom.

i. Outing the Activists and the Monkey-Wrench Gang

Earth First! was founded in the early 1980s on the idea that a rise in the numbers and strength of radical environmentalists would leave the middle ground to the more moderate Sierra Club.⁷⁹ Dean Kuipers describes this movement:

During these years, before terrorism charges had any teeth, the radical [environmental] movement was a reporter’s dream: their commitment drove them to outrageous, often hilarious actions, and the public—who mostly assumed they were nonviolent hippies—treated them as more of a nuisance than a threat.⁸⁰

But then came September 11, 2001, and the coining of the term “eco-terrorist” by Ron Arnold, James Watts’ biographer and father of the Wise Use Movement.⁸¹ The 2001 PATRIOT Act defined “eco-terrorism” broadly⁸² and this definition “would become incredibly important in a surge of high-profile arrests and prosecutions that would sweep the movement.”⁸³ This was followed in 2006 by the Animal Enterprise Terrorism Act, which expanded the definition of “terrorism conspiracy.”⁸⁴

The developments are described by Kuipers:

79. THE EARTH FIRST! READER: TEN YEARS OF RADICAL ENVIRONMENTALISM (John Davis ed., 1991); MARTHA F. LEE, EARTH FIRST! ENVIRONMENTAL APOCALYPSE, at ix (1995) (discussing the uniqueness of the Earth First! Movement).

80. DEAN KUIPERS, OPERATION BITE BACK: ROD CORONADO’S WAR TO SAVE AMERICAN WILDERNESS 5 (2009). On threats and harassment over animal research, see Greg Miller, *A Civil Conversation About Animals in Research*, 327 SCI. 1315 (2010).

81. KUIPERS, *supra* note 80, at 50.

82. *Id.* at 274 (quoting the Patriot Act definition of eco-terrorism: “the use or threatened use of violence of a criminal nature against innocent victims or property by environmentally oriented, subnational groups for environmentally political reasons, or aimed at an audience beyond that target, often of a symbolic nature”).

83. *Id.*

84. *Id.*

Beginning in August 2003, it became clear that Rod [Coronado] and his radical colleagues had lost the tussle over what was and wasn't terrorism. That month, he gave a talk at a gay and lesbian center in San Diego for which he was later arrested. Rod had already served four years in prison for the Bite Back actions during the nineties, but when he reminisced on those days, U.S. attorneys decided his talk amounted to instructions for building incendiaries. No matter that no one actually made incendiaries, nor ever intended to—the speech alone was a crime. Worse, due to provisions in the 2001 USA PATRIOT Act, it was terrorism. For his walk down memory lane, federal prosecutors threatened to put Rod in prison for as many as eighteen years under new terrorism sentencing enhancements. Very few people even knew this was possible. Rod certainly didn't. He took a plea for a year and a day and was in jail while I wrote most of this. The word *terrorism* had finally caught up to him and the movement.⁸⁵

This year at the Public Interest Environmental Law Conference in Eugene, Oregon, I picked up a message from an unattended booth. It read: “Don't Talk to the FBI.” This is a sad new twist in the world of environmental law.

ii. Loss of Leadership Charge

Those who accumulate power and influence must answer for their actions. Environmental groups are no exception. The policies that have come under criticism include mismanagement of lands these groups are supposed to save,⁸⁶ choosing the thugs over the local communities in places they work around the world,⁸⁷ opportunistic political judgments with dreadful long-range environmental consequences,⁸⁸ questionable selection of partners,⁸⁹ enthusiastic embrace of contributions from the biggest and

85. *Id.* at 8.

86. See CHRISTINE MACDONALD, GREEN, INC.: AN ENVIRONMENTAL INSIDER REVEALS HOW A GOOD CAUSE HAS GONE BAD, at xiii–xiv (2008) (commenting on The Nature Conservancy).

87. See *id.* at xiv (commenting on Conservation International).

88. See *id.* at xv (commenting on the Natural Resources Defense Council and noting that “[a]lthough the organization frowns on corporate sponsorship, NRDC was an influential force behind the U.S. environmental movement’s acquiescence to the North American Free Trade Agreement and subsequent trade agreements”).

89. *Id.* at xiv (commenting on the World Wildlife Fund and noting “[i]ts partners include mining, logging, consumer goods, financial services, high-tech, and large retailers”).

baddest polluters,⁹⁰ and docile cooperation in every manner and form of greenwashing.⁹¹ Thus:

[Environmental Defense (ED) or the Environmental Defense Fund] likes to call itself nature's lawyer, but ED's longtime president Fred Krupp is seen more as corporate America's most effective mediator on environmental questions. ED won't take money from oil, gas, mining, agricultural, forestry, fishing, heavy construction, and an array of retail, transportation, and telecommunications sectors. But it has conducted "projects" aimed at greening such companies as Federal Express, S.C. Johnson, and DuPont that critics say have allowed these companies to greenwash their images.⁹²

There is certainly something depressing about an apparent loss of purpose and conviction of the tried and true environmental groups. Richard Lazarus calls it the "graying of the green."⁹³ None of these groups have redefined themselves more dramatically than the Environmental Defense Fund that abandoned its reputation as science-firsters to become keeper of the chalice of cap-and-trade.⁹⁴ This cap-and-trade business is now the lonely centerpiece of the climate change policy of the Obama administration.⁹⁵ It starts with the heavy burden of historical failure under Kyoto.⁹⁶

But the environmental laws that looked good on paper are not about to expire because of drift and change within the leading environmental groups. My work is at the retail level, and there is much evidence there that the supposed loss of zest among established environmental groups is greatly overrated.⁹⁷ New legions have appeared in impressive and forceful ways. To

90. *Id.* at 98 ("Why are the dirtiest industries on Earth among the biggest contributors to conservation groups?").

91. Compare MACDONALD, *supra* note 86, at 65, with MARK DOWIE, *LOSING GROUND: AMERICAN ENVIRONMENTALISM AT THE CLOSE OF THE TWENTIETH CENTURY* 175 (1996).

92. See MACDONALD, *supra* note 86, at xv-xvi (commenting on the Environmental Defense Fund).

93. LAZARUS, *supra* note 1, at 251.

94. Compare FRED KRUPP & MIRIAM HORN, *EARTH: THE SEQUEL—THE RACE TO REINVENT ENERGY AND STOP GLOBAL WARMING* (2008) (discussing the virtues of cap-and-trade), with Rodgers & Mortiz, *supra* note 73, at 321-24 (collecting some of the miseries of cap-and-trade).

95. See Tom Mounteer, *Did Copenhagen Give Climate Change Legislation Any "Bounce" in the Senate?*, 40 ENVTL. L. REPORTER 10,248 (discussing the Obama administration's push for cap-and-trade legislation post-Copenhagen).

96. See Michael Wara, *Measuring the Clean Development Mechanism's Performance and Potentials*, 55 UCLA L. REV. 1759 (2008) (discussing the shortcomings of the Kyoto Protocol).

97. *E.g.*, *Envtl. Def. v. EPA*, 489 F.3d 1320, 1330-31 (D.C. Cir. 2007) (demonstrating an unsuccessful challenge to PSD rule for NOx; Karen LeCraft Henderson is no friend of PSD but a good

mention the most obvious example, if environmental litigation is your game, the rise and work of the Center for Biological Diversity must be extolled.⁹⁸ In an extremely hostile political environment, the lawyers and scientists of this small band have made those environmental laws (chiefly the Endangered Species Act) continue to look good on paper.⁹⁹ They have shown that the creative and effective fervor that brought the environmental laws into being still burns brightly.

iii. The Chicanery Front: Who is this “Public”?

Any strategy of opening doors to “the public” runs the risk of the invitation being accepted by the unsavory, the unruly, the unwelcome, or the parasitic. But all forms of procedural due process or free speech are double-edged swords of this type. Oliver Houck’s refrain, when he complains about not knowing what you’re getting under the banner of “public interest environmental group,” is a common one.¹⁰⁰ For the moment, perhaps for all time, we must treat the *public* as a series of startling and unopened gifts—wrapped in packaging called “And For the Sake of the Kids,”¹⁰¹ “The Washington Legal Foundation,”¹⁰² or “The Cooler Heads Coalition.”¹⁰³ Environmental law has a long and skeptical familiarity on topics of superficial appearance, ranging over the spectrum of “green,” “sustainable,” “carbon-free,” and other self-congratulatory labels.¹⁰⁴

“Public participation” will not suffer from these ruses. All successful strategies are feasted upon by the mimics.¹⁰⁵ Fakes aspire to be viewed as the genuine item because the genuine item enjoys credibility and respect.

try is made by ED in conveying the message); *Natural Res. Def. Council v. U.S. EPA*, 676 F. Supp. 2d 307 (S.D.N.Y. 2009) (challenging EPA registration of insecticide spirotetramat including a commendable investigation into its effects on honeybees); 1 AIR AND WATER, *supra* note 23, at Table of Cases, 1, 44–45 (Supp. 2010) (forty-seven case citations with Sierra Club as lead plaintiff; no evidence here of “resting on laurels”).

98. DOUGLAS BEVINGTON, *THE REBIRTH OF ENVIRONMENTALISM: GRASSROOTS ACTIVISM FROM THE SPOTTED OWLS TO THE POLAR BEAR* (2009).

99. See LAW IN INDIAN COUNTRY, *supra* note 8, at Table of Cases, 1, 4–5 (Supp. 2010) (compiling twenty-six case citations with the Center for Biological Diversity as lead plaintiff).

100. See generally Houck, *supra* note 11 (discussing public interest law firms).

101. *Caperton v. A.T. Massey Coal Co.*, 129 S.Ct. 2252, 2257 (2009).

102. *United States v. Hagerman*, 525 F. Supp. 2d 1058, 1061 (S.D. Ind. 2007).

103. See *Native Vill. of Kivalina v. Exxon Mobil Corp.*, CV-08-00138 SBA, 2008 WL 2951517 (N.D. Cal. Feb. 26, 2008) (identifying the Cooler Heads Coalition as one of the anti-climate change front groups named in the conspiracy count of the complaint).

104. Compare HEATHER ROGERS, *GREEN GONE WRONG: HOW OUR ECONOMY IS UNDERMINING THE ENVIRONMENTAL REVOLUTION* (2010), with ADRIAN PARR, *HIJACKING SUSTAINABILITY* (2009).

105. JANICE M. BENYUS, *BIOMIMICRY: INNOVATION INSPIRED BY NATURE* (1997).

Far more dangerous to environmental groups is the prospect of loss of influence at the “grassroots.” The Wise Use Movement poses a genuine threat to environmentalism in this regard.¹⁰⁶ If you can win the “hearts and minds of the people” and “fill the room,” you matter in the world of “public participation.” Otherwise, you do not.

iv. The Disdain-for-the-Public Movement

Surely the most fundamental challenge to the “public participation” premise of the environmental laws is a questioning of the basic assumption that the “public” is an admirable influence that should be invited to undergird any worthwhile policy. Deep down, perhaps, is a rising concern among environmentalists that the “people aren’t with us anymore” in these hard economic times given the rising cynicism of the politics of the cyber-age.¹⁰⁷ The weaknesses of “public opinion” are suddenly on conspicuous display—too flighty, they say, too hard to measure, too vulnerable to manipulation, too easy to takeover by charlatans.¹⁰⁸

And now comes a flood of new books giving us another reason for wondering whether it was a dreadful mistake to link the future of the environmental laws to this unruly horse of “public participation.” That reason is that the public was—or is—terminally ignorant.¹⁰⁹

Is the world “going dumb” around us at some accelerated rate? I doubt it. I can even take a sympathetic view of this well known quotation (at least in environmental circles!) of this 1898 Declaration of the Cattlemen of West Texas:

106. See DOWIE, *supra* note 91, at App. C (discussing “The Wise Use Agenda”).

107. E.g., ROBERT J. BRULLE, *AGENCY, DEMOCRACY & NATURE: THE U.S. ENVIRONMENTAL MOVEMENT FROM A CRITICAL THEORY PERSPECTIVE* (2000); L.K. CALDWELL, L. R. HAYES & I.M. MACWHIRTER, *CITIZENS AND THE ENVIRONMENT: CASE STUDIES IN POPULAR ACTION* (1976); Gottlieb, *supra* note 22, at ch. 4, 5 (illustrating the “yesteryear” quality to many of the books on environmental activism).

108. ROGERS, *supra* note 104, at 207 (explaining that the “current moment of environmental awareness is unprecedented” and therefore “precious” and “must not be squandered”).

109. SUSAN JACOBY, *THE AGE OF AMERICAN UNREASON: DUMBING DOWN AND THE FUTURE OF DEMOCRACY* 17 (2008) (“[A] fertile culture for the spread of invincible ignorance . . .”); DAMIAN THOMPSON, *COUNTER KNOWLEDGE: HOW WE SURRENDERED TO CONSPIRACY THEORIES, QUACK MEDICINE, BOGUS SCIENCE, AND FAKE HISTORY* 2 (2008) (describing “a huge surge in the popularity” of the preposterous); CHRIS MOONEY & SHERIL KIRSHENBAUM, *UNSCIENTIFIC AMERICA: HOW SCIENTIFIC ILLITERACY THREATENS OUR FUTURE* 53 (2009) (“profoundly disheartening to see how far we have fallen”); MICHAEL SPECTER, *DENIALISM: HOW IRRATIONAL THINKING HINDERS SCIENTIFIC PROGRESS, HARMS THE PLANET, AND THREATENS OUR LIVES* (2009); Thomas Friedman, *First Law of Petropolitics*, FOREIGN POLICY (Apr. 25, 2006) http://www.foreignpolicy.com/articles/2006/04/25/the_first_law_of_petropolitics (describing a proposal that was the epitome of “dumb as we wanna be” politics).

Resolved, that none of us know, or care to know, anything about grasses, native or otherwise, outside the fact that for the present there are lots of them, the best on record, and we are after getting the most out of them while they last.¹¹⁰

This is, on the one hand, an appeal to the benefits of “not knowing” and an expression of the single-mindedness of ruthless exploitation. But these folks, like many other hard-workers, may be only “too busy to know.” They certainly shouldn’t be excluded from the next public hearing on grazing restrictions.

Through it all, “public participation” is a shining beacon of environmental law. It is, at once, an expression of confidence in the values collected under the environmental banner and the expression of a conviction that these values will never depart from the community psyche. Under the environmental laws, “public participation” is a game that all can play. But it is a game that the environment will win. It all looked good on paper.

E. Effective Judicial Review

At the extended birth of the environmental laws in the 1970s, there was an overriding conviction that the “science” would be right and the “public” would be supportive because the federal courts would make sure of it. The civil rights movement that preceded the environmental movement was all about a series of victories in courts, from top to bottom. Some moments in U.S. history used to be otherwise, young lawyers were told, but the federal courts were generally understood to be inseparable friends and allies of the environmental cause.

Was this assumption a latent design defect that looked deceptively good on paper?

Certainly, turning down the amplitude of judicial review has been a mission of modern anti-environmentalism. Senator Orrin Hatch (R. Utah) has been the fire and brimstone missionary. Changing the housekeeper always has been the quickest way to change the rules of the house. A number of political agendas have gone into hiding under the judicial Orwellian-speak of “strict constructionism,” “plain meaning,” “original intent,” “judicial restraint,” and “deference” to political and executive branches. But the agenda to withdraw the support of the courts from the environmental laws has not been in hiding at all. It has been obvious, explicit, and menacingly successful.

110. PAUL SHEPARD, NATURE AND MADNESS 1–2 (1982).

Why have the leaders of this counter-revolution (to replace effective judicial review with cursory judicial review) focused their antagonism and directed their creative spleen against the environmental laws? Because politically dangerous ideas of citizen suits, whistleblower protection, full disclosure, burdensome regulation, and product bans are hiding there. And economically dangerous land mines are everywhere in a suite of statutes that boast of zero pollutants,¹¹¹ land-bans,¹¹² best technology,¹¹³ and universal technology assessment.¹¹⁴ Besides, both Justice Powell¹¹⁵ and Justice Scalia¹¹⁶ had told the world that the struggle for the U.S. economy and its technological future (conveniently described as environmental law) eventually would be settled in the courts.

No single proposition has been more irksome to the assailants of environmental law than the idea that environmental values deserve a special protected status in court akin to the status of civil liberties.¹¹⁷ Of course, NEPA requires all agencies to consider environmental values throughout their decision-making despite contrary intonations in their legislative charters.¹¹⁸ And the little NEPAs do the same thing for the state and local agencies.¹¹⁹ But this consistently “troublesome” (to its opponents at least) rule of special status for environmental values found its legal voice before that in an opinion by Federal Power Commission (FPC) Commissioner Charles Ross.¹²⁰ Ross invented the phenomenon that became oddly named

111. Federal Water Pollution Control Amendments of 1972 § 301(a), 33 U.S.C. § 1311(a) (“The discharge of any pollutant by any person shall be unlawful.”).

112. See 4 W.H. RODGERS, JR., ENVIRONMENTAL LAW: HAZARDOUS WASTES & SUBSTANCES, § 7.21 (1992) (describing prohibitions on the land disposal of hazardous waste).

113. See 2 W.H. RODGERS, JR., ENVIRONMENTAL LAW: AIR AND WATER, § 4.28 at 411–21 (Supp. 1992) [hereinafter 2 AIR AND WATER (Supp. 1992)] (discussing various formulations of “best technology” under the Clean Water Act).

114. This would be NEPA. See LAW IN INDIAN COUNTRY, *supra* note 8, at 375–80.

115. See Houck, *supra* note 11, at 1458 (excerpting J. Powell’s memorandum on the concept of business-interest litigation).

116. Scalia, *supra* note 50. This struggle for the conscience, conviction, and loyalty of the federal judiciary remains intense and contemporary. See *NEPA’s Insatiable Optimism*, *supra* note 10 (celebrating the fortieth anniversary of NEPA with a look at its successes); see also William H. Rodgers, Jr., *Betty B. Fletcher: NEPA’s Angel and Chief Editor of the Hard Look*, 40 ENVTL. L. REPORTER 10,268 [hereinafter *Betty B. Fletcher: NEPA’s Angel and Chief Editor of the Hard Look*] (discussing the necessity of the judicial “hard look” doctrine).

117. William H. Rodgers, Jr., *A Hard Look at Vermont Yankee: Environmental Law Under Close Scrutiny*, 67 GEO. L.J. 699, 718–24 (1979).

118. National Environmental Policy Act of 1969 § 105, 42 U.S.C. § 4335 (1969).

119. Noah D. Hall, *Political Externalities, Federalism, and a Proposal for an Interstate Environmental Impact Assessment Policy*, 32 HARV. ENVTL. L. REV. 49, 79 (2008).

120. Consol. Edison Co. of New York, Inc., 33 F.P.C. 428, 458, 463 (1965) (Ross, C., concurring in part and dissenting in part) (requiring the agency on its own motion to make sure that a full record is presented and that all alternatives are considered).

the “balls and strikes” doctrine. In the historic Storm King Mountain case on the Hudson River, Commissioner Ross roundly criticized the majority for sitting by passively, “like an umpire calling balls and strikes,” thus allowing the power company applicant to control the process, dictate the input, and mandate the output—destruction of the mountain. Charles Ross said the fish and the river deserved the independent attention of the Commission even if the advocates thought otherwise.¹²¹

None would forget that this upstart FPC Commissioner, who announced that agency decision-makers should not preside passively over organized plans to ruin the environment, would later join the staff of Senator Lee Metcalf of Montana. The so-called “populist” Senator Metcalf (with the help of Charles Ross) would be the chief engineer of the Federal Advisory Committee Act (FACA) of 1972,¹²² which would profoundly hinder (it can never be stopped) the manipulation of advisory committees to the ends of corporate and special interest advantage. Metcalf and Ross obviously believed that advocates before agencies who were sitting there “blindly like an umpire” in the group of manipulative advisors might be aided by the disclosure provisions of FACA. The “Ross conspiracy” became wedded to law in the famous opinion of Judge Paul Hays in *Scenic Hudson (I)*.¹²³ In holding that the Commission failed to consider alternatives and measures to minimize effects from a pumped storage project planned for the Hudson River, Judge Hays wrote:

[T]he Commission has claimed to be the representative of the public interest. This role does not permit it to act as an umpire blandly calling balls and strikes for adversaries appearing before it; the right of the public must receive active and affirmative protection at the hands of the Commission.¹²⁴

The umpire metaphor was picked up and repeated by Judge Skelly Wright in his powerful *Calvert Cliffs* opinion,¹²⁵ which took the Atomic

121. *Id.*

122. Federal Advisory Committee Act of 1972, Pub. L. No. 92-463, 86 Stat. 770 (1972), 5 U.S.C.A. App. I, as amended Pub. L. No. 94-409, 90 Stat. 1247 (1976).

123. *See Scenic Hudson Pres. Conference v. Fed. Power Comm’n (Scenic Hudson (I))*, 354 F.2d 608, 620 (2d Cir. 1965) (setting aside order because the Federal Power Commission failed to compile a sufficient record to support its decision and failed to make thorough study of alternatives), *cert. denied*, 384 U.S. 941 (1966).

124. *Id.*

125. *Calvert Cliffs Coordinating Comm., Inc. v. U.S. Atomic Energy Comm’n*, 449 F.2d 1109, 1119 (D.C. Cir. 1971) (“[T]he primary responsibility for fulfilling [NEPA’s] mandate lies with the Commission. Its responsibility is not simply to sit back, like an umpire, and resolve adversary

Energy Commission to task for omitting from hearings environmental issues not raised by the parties.¹²⁶

This notion that a judicially discoverable “public interest” has life beyond the grasp of corporate litigants is disturbing to many who have made their plans. It makes environmental protection an ineradicable part of the agency mandate. It charges the courts with protecting the “special status” of environmental rights and preventing them from being swept away by the technicalities and vicissitudes of nonsense doctrines (e.g., laches or waiver) or out-of-tune burdens of proof. And it protects the courts (especially at the trial level) in endeavors to inquire, innovate, frame, and investigate. For the environmental cause the operative assumption is, the more courts know, the better; and the better they know it, the better the outcome will be for the environment. This is a version of “effective” judicial review or “activist” review.

Not all share this view. At his confirmation hearings, John Roberts offered an opinion on what used to be known as the “balls and strikes” doctrine:

[A] certain humility should characterize the judicial role. Judges and Justices are servants of the law, not the other way around. Judges are like umpires. Umpires don’t make the rules, they apply them. The role of an umpire and a judge is critical. They make sure everybody plays by the rules but it is a limited role. Nobody ever went to a ball game to see the umpire.¹²⁷

And through recent times, the Charles Ross-Paul Hays-Skelly Wright-Lee Metcalf version of “special status” for environmental values has not become the guiding light it was meant to be. Instead, it has become the object of contempt would-be destroyers of the environment hoped it would become. This job of “reconstruction” is undertaken enthusiastically by the Honorable Carlos T. Bea, who turns another page on the special status of “environmental concerns”:

contentions at the hearing stage. Rather, it must itself take the initiative of considering environmental values at every distinctive and comprehensive stage of the process beyond the staff’s evaluation and recommendation.”). *But see* Scalia, *supra* note 50, at 884, 886 (aiming harsh criticism at the efforts of Paul Hays and Skelly Wright—two of the great champions of environmental law).

126. *Calvert Cliffs*, 449 F.2d at 1117–18.

127. *Confirmation Hearing on the Nomination of John G. Roberts, Jr. to be Chief Justice of the United States: Before the S. Judiciary Comm.*, 109th Cong. 55 (2005) (statement of John G. Roberts, Jr., appointee, Chief Justice United States Supreme Court).

I place the word in quotes because it may have acquired a special meaning in the context of environmental litigation. Where other litigants have “objections,” environmental groups seem to have “concerns.” This may imply the “concerned” possess a greater commitment, sensitivity and objectivity. Nonetheless, for our purposes, to have effect in litigation, “concerns,” like objections, must be voiced and justified, or be lost by doctrines of waiver and exhaustion of administrative remedies.¹²⁸

In their zest to deprive the “environment” of any unique or special status, the U.S. Supreme Court has ignored, undermined, or gone around the environmental values expressed in the environmental laws of the 1970s. In the process, environmental values are now on a par with, say, pastry manufacturing, except that the biscuit-makers are far better protected by the property theories. Committed and able federal district courts are pulled from the fray with reasoning that ranges from exaggerated praise of judicial ignorance of scientific matters (rephrased, “we are so dumb we shouldn’t intervene”)¹²⁹ to falsified versions of the scientific record¹³⁰ to sophomoric plain-meaning word games.¹³¹ These raconteurs of the absurd are on a mission to destroy all environmental values, notably those articulated in the

128. *ʻIlioʻulaokalani Coal. v. Rumsfeld*, 464 F.3d 1083, 1102 n.1 (9th Cir. 2006) (Bea, J., dissenting opinion). See also *Nat’l Parks & Conservation Ass’n v. Bureau of Land Mgmt.*, 586 F.3d 735, 751 (9th Cir. 2009) (Trott, J., dissenting), where Judge Trott articulates a “burdensome” objection to what would be the “largest landfill in the United States” on 4,654 acres of BLM lands on a former Kaiser Mining site near Joshua Tree National Park:

What sane person would want to attempt to acquire property for a landfill? Our well-meaning environmental laws have unintentionally made such an endeavor a fool’s errand. This case is yet another example of how daunting—if not impossible—such an adventure can be. Ulysses thought he encountered fearsome obstacles as he headed home to Ithaca, but nothing that compares to the “due process” of unchecked environmental law. Not the Cyclops, not the Sirens, and not even Scylla and Charybdis can measure up to the obstacles Kaiser has faced in this endeavor. The record here exceeds 50,000 pages.

Is this problem created by “well-meaning environmental laws” or a “well-meaning” proposal to put a 4,654-acre dump in the desert? Or something else?

129. See *Betty B. Fletcher: NEPA’s Angel and Chief Editor of the Hard Look*, *supra* note 116, at 10,274 n.78 (discussing the colloquy on the meaning of “troposphere” during the oral argument in *Massachusetts v. EPA*, 549 U.S. 497 (2007)).

130. This is achieved by Chief Justice Roberts in *Winter v. Natural Res. Def. Council*, 129 S.Ct. 365, 370 (2008), as discussed in *Betty B. Fletcher: NEPA’s Angel and Chief Editor of the Hard Look*, *supra* note 116, at 10,278.

131. The opinions in *Rapanos v. United States*, 547 U.S. 715 (2006), are best summed up by Senior District Judge Robert Probst in *United States v. Robison*, 521 F. Supp. 2d 1247, 1249 n.5 (N.D. Ala. 2007) (“I will not compare the [*Rapanos*] ‘decision’ to making sausage because it would excessively demean sausage makers.”).

environmental laws of the 1970s. The Marine Mammal Protection Act (MMPA) proudly vows to protect marine mammals with the rarest of exceptions.¹³² But the high court quickly dispenses with these animals.¹³³ NEPA vows a look-before-you-leap policy,¹³⁴ while the high court repudiates all precaution when it proceeds under the mantle of national security¹³⁵ or de-regulation.¹³⁶ The ESA pledges the protection of endangered species,¹³⁷ but the high court says Congress really didn't mean this when it was turning over the NPDES program to the good offices of the State of Arizona.¹³⁸ Congress insisted 111 years ago that one should dump no "refuse" into navigable waters,¹³⁹ and it repeated the admonition in the Federal Water Pollution Control Act Amendments of 1972.¹⁴⁰ But the high court cleared the way for a mining company to bury a navigable lake because the tailings would look unsightly on nearby wetlands (rising higher than the Empire State Building).¹⁴¹ After careful consideration and deliberate debate, Congress put "environmental values" into the charters of each and every federal agency.¹⁴² But the Supreme Court forgot to read this,¹⁴³ ignoring several of its own precedents, while declaring that environmental laws had nothing to do with any decision to allow thousands of dilapidated and polluting Mexican trucks to enter the United States.¹⁴⁴ Comedians noted it was easier for Mexican trucks to enter the United States than Mexicans—perhaps because the former carried conspicuous and unarguable credentials of trade and economic activity, while the latter are perceived as an "environmental" menace.

132. See Marine Mammal Protection Act of 1972 § 101(a), 16 U.S.C. § 1371(a) ("There shall be a moratorium on the taking and importation of marine mammals and marine mammal productions, commencing on the effective date of this chapter.")

133. *Winter v. Natural Res. Def. Council*, 129 S.Ct. 365, 365 (2008).

134. National Environmental Policy Act of 1969 § 102(2)(C), 42 U.S.C. § 4332(2)(C) (2006).

135. *Winter*, 129 S.Ct. at 365.

136. *Monsanto Co. v. Geertson Seed Farms*, 130 S.Ct. 2743 (2010).

137. Endangered Species Act of 1973 § 7(a)(2), 16 U.S.C. § 1536(a)(2) (2006).

138. *Nat'l Ass'n of Home Builders v. Defenders of Wildlife*, 551 U.S. 644 (2007).

139. 33 U.S.C. § 407 (2006).

140. Federal Water Pollution Control Amendments of 1972 § 301(a), 33 U.S.C. § 1311(a) (2006).

141. *Coeur Alaska, Inc. v. Se. Alaska Conservation Council*, 129 S.Ct. 2458 (2009).

142. National Environmental Policy Act of 1969 § 105, 42 U.S.C. § 4335 (2006).

143. See generally William H. Rodgers, Jr., *Crazy Horse, The Tenth U.S. Supreme Court Justice and Dissents Not Written—The Environmental Term of 2003-2004*, 34 ENVTL L. REPORTER 11,033, 11,034-35 [hereinafter *Crazy Horse*] (discussing *U.S. Department of Transportation v. Public Citizen*, 541 U.S. 752 (2004)).

144. This precedent can be found in three Supreme Court cases: *Flint Ridge Dev. Co. v. Scenic Rivers Ass'n of Okla.*, 426 U.S. 776, 778 (1976), *Weinberger v. Catholic Action of Haw.*, 454 U.S. 139, 145-46 (1981), and *Andrus v. Sierra Club*, 442 U.S. 347, 362-63 (1979).

Of the four great virtues of the environmental laws that looked good on paper in the 1970s (best science, public participation, judicial review, and citizen suits), the high court certainly does not let the “best science”¹⁴⁵ and “public participation”¹⁴⁶ get in the way of its “strict constructionism” preferences. And it has undertaken a long—and determined—campaign to drive “citizen suits” into the legal wilderness.¹⁴⁷ But the more significant and more dramatic changes occurred because the Supreme Court was able to lay its hands repeatedly and directly upon all sentiments bound up with a 1970s understanding of “effective judicial review.” To many of the founders and supporters of the environmental laws, the device of judicial review looked good on paper when it meant active and intelligent review by a Skelly Wright, David Bazelon, Harold Leventhal, Patricia Wald, or Abner Mikva. But it doesn’t mean the same today because the script for judicial review is written by a different group of people who believe fervently in a “strict construction” of their own preferences.

The “strict constructionism” practiced by the U.S. Supreme Court on the environmental laws of the 1970s is five parts deception and another five parts self-deception. It is neither *strict* nor *constructionist*. Self-denial and “humility” is supposed to be part of this pompous package, so we must shed our tears along with Justice Scalia as he rules against pockets of old growth throughout the forests of the North Cascades¹⁴⁸ and as he sobs in frustration (his constitutional hands are tied after all)¹⁴⁹ at his professional inability to loosen the strictures on resisters to climate change.¹⁵⁰ We must believe that Justice Roberts is shaking with indignation because of the stress of his higher calling that insists he cannot relieve the agonies of the struggling whales¹⁵¹ or rush to save the failing domestic alfalfa industry.¹⁵²

We must sympathize with Justice Thomas because the law, strictly understood, has just obliged him (against his better judgment and quiet confidence) to destroy the economies of a number of struggling Indian tribes¹⁵³ and to permit a cascade of polluting trucks to make their way

145. See 2 AIR AND WATER (Supp. 1992), *supra* note 113.

146. See *Crazy Horse*, *supra* note 143.

147. See *infra* notes 161–169.

148. *Summers v. Earth Island Inst.*, 129 S.Ct. 1142, 1147 (2009).

149. The Scalia standing agenda (which is now prevailing law) is completely laid out in his 1983 law review article. Scalia, *supra* note 50.

150. *Massachusetts v. EPA*, 549 U.S. 497, 550–52 (2007).

151. *Winter v. Natural Res. Def. Council*, 129 S.Ct. 365, 370 (2008).

152. See *generally* *Monsanto Co. v. Geertson Seed Farms*, 130 S.Ct. 2743 (2010) (addressing the impact of genetically engineered seeds on the failing domestic alfalfa industry).

153. *Carcieri v. Salazar*, 129 S.Ct. 1058 (2009).

across the southern United States landscape.¹⁵⁴ We must commiserate with Justice Alito as he does his duty to send the birds to their doom in Arizona¹⁵⁵ and drain all legal value from the Apology Resolution that Congress wrote for the natives of Hawai'i.¹⁵⁶ And we must give condolences to Justice Kennedy, whose sleepless nights are shredded by thoughts of the bulldozed wetlands¹⁵⁷ and buried lakes¹⁵⁸ he was obliged to put away.

No good and common man could persuade himself that it was a commendable thing to kill whales and chop down trees in violation of law, to cheat Indians, and to deceive the natives of Hawai'i, to bury lakes, and to stand aside while the birds are allowed to die. This sort of thing can be done only by men of great rectitude, character, and restraint. And don't forget the ever-present "humility."

The environmental laws of the 1970s looked good on paper because they presupposed the enthusiastic cooperation of judges who would uphold declared environmental values within the ambiguous restrictions of legislative compromise. They assumed an unyielding embrace of the idea that the environment and its many services may not be made to succumb to casual inference or cryptic choice. They had a vision of active and aggressive judicial review. But this vision did not endure. It was replaced by something called *judicial restraint*, and this new vision would let environmental damage happen if it was justified, so as to look good on paper.

F. Citizen Suits

Environmental law has had its own constabulary since the earliest days of the environmental movement. Environmental lawyers were the first to seize upon the motto of "sue the bastards,"¹⁵⁹ and their experiences were richly informed about which bastards to sue and in what order.

154. U.S. Dep't of Transp. v. Pub. Citizen, 541 U.S. 752, 773 (2004).

155. Nat'l Ass'n of Home Builders v. Defenders of Wildlife, 551 U.S. 644, 649 (2007).

156. Hawaii v. Office of Hawaiian Affairs, 129 S.Ct. 1436, 1443 (2009).

157. See Rapanos v. United States, 547 U.S. 715, 759 (2004) (Kennedy, J., concurring) (asserting that the majority should have remanded the case and instructed the Court of Appeals to apply the 'significant nexus' test to determine whether a wetland was a navigable body of water within the meaning of the Clean Water Act).

158. Coeur Alaska, Inc. v. Se. Alaska Conservation Council, 129 S.Ct. 2458 (2009).

159. I have always associated Vic Yannacone, the first lawyer for Environmental Defense Fund, with this sentiment. *Environment: Sue the Bastards*, TIME, Oct. 18, 1971, <http://www.time.com/time/magazine/article/0,9171,910111,00.html>.

This tempestuous arrogance was rewarded and strengthened by the environmental laws of the 1970s. Enforcement was a necessary but elusive condition. Citizen enforcers were declared a good idea and many legislative moves were made to strengthen citizen hands in definition and application.¹⁶⁰

The Supreme Court has given citizen suits a calculated retooling that could only be done by a clique of idea-assassins. With a straight face, justices have taken great liberties with the doctrine of standing¹⁶¹ to hinder and annoy the enthusiasts who would make life difficult for polluters. Justice Scalia does not reluctantly discover constitutional barriers that stand in the way of these bright-eyed lawyers whose relentless energies have traced legal corrosion throughout the U.S. Forest Service. No, Justice Scalia, gleefully discovers a formidable stumbling block that could trip up these reformers. He sees it in the Constitution, though his hallucinations are not pre-advertised by any words in English found there.¹⁶² None of this matters to the opponents of citizen suits who will accept their ammunition from anybody in the business—with all due “humility,” of course.

To the impressive roster of “standing”—and sometimes “ripeness”¹⁶³—barriers the Supreme Court has used to clog the path to citizen suits, the Court has added unseemly and detailed attention to “notice” preconditions.¹⁶⁴ This is a “jurisdictional” necessity, the justices have said,¹⁶⁵ and “notice” usually means an avalanche of detail fit for a proper defense. If the citizen survives the discovery and moves on to the merits, it will meet any number of “we-don’t-do-that-any-more” defenses. This is the infamous *Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Found., Inc.*¹⁶⁶ ruling of the Supreme Court, which rests on wholly-invented word games based on present-tense/past-tense, made-up definitions. If the citizen survives *Gwaltney* and actually wins the case, any award of counsel fees

160. The first one—and thus the model for what follows—appeared in Clean Air Act of 1970 § 304, 42 U.S.C. § 7604. See Barton H. Thompson, Jr., *The Continuing Innovation of Citizen Enforcement*, 2000 U. ILL. L. REV. 185, 188 (2000) (discussing the addition of the first citizen suit provision in the Clean Air Act of 1970).

161. It was a small group of law students that obtained standing in *United States v. Students Challenging Regulatory Agency Procedures (SCRAP)*, 412 U.S. 669 (1973), as described in NEIL THOMAS PROTO, TO A HIGH COURT: THE TUMULT AND CHOICES THAT LED TO *UNITED STATES OF AMERICA V. SCRAP* (2006).

162. See *Summers v. Earth Island Inst.*, 129 S.Ct. 1142, 1151 (2009) (declaring that “the requirement of injury in fact is a hard floor of Article III jurisdiction that cannot be removed by statute”).

163. The leader in this category is *Ohio Forestry Ass’n v. Sierra Club*, 523 U.S. 726, 728 (1998).

164. For a representative sample, see Clean Air Act § 304(b), 42 U.S.C. § 7604(b) (2006) (describing notice requirement for bringing citizen suits pursuant to the Clean Air Act).

165. *Hallstrom v. Tillamook Cnty.*, 493 U.S. 20, 31 (1989).

166. *Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Found., Inc.*, 484 U.S. 49, 59 (1987).

will be trimmed and confined by stingy and technical versions of legal victory.¹⁶⁷

Thus, this proud relic of the “citizen suit,” handed down by the environmental laws that looked good on paper, is bothersome to plead, obstructed by standing, richly defended, stifled in the remedy, and decidedly unprofitable. And still they come.

III. CONCLUSION: THE ENVIRONMENTAL LAWS LOOKED GOOD ON PAPER BECAUSE THEY PROMISED A BETTER WORLD AND A HIGHER VIRTUE

Retrospective criticisms of the environmental laws confirm that they did not meet the higher ambitions of their creators.¹⁶⁸ The environmental agenda is glaringly unfinished, and it is topped by the climate change issue that is deservedly mentioned as the gravest challenge ever faced by human civilization.¹⁶⁹

Still, the environmental laws of the 1970s reached boldly, challenged deeply, and provoked the settled order profoundly. That they fell short is not necessarily attributable to drafting errors or failures of imagination. All statutes mark out a range of prospects and every goal achieved could have been otherwise.

It is said, for example, that the “most glaring and inexcusable deficiency of modern environmental law is the apparent lack of governmental obligation to protect natural resources.”¹⁷⁰ But this obligation

167. *Buckhannon Bd. & Care Home, Inc. v. W. Va. Dep’t of Health & Human Res.*, 532 U.S. 598, 600 (2001).

168. See LAZARUS, *supra* note 1, at xiv–xv (noting that though gaps remain in the “coverage, implementation, and enforcement” of existing laws, the achievement was remarkable); KARL BOYD BROOKS, *BEFORE EARTH DAY: THE ORIGINS OF AMERICAN ENVIRONMENTAL LAW, 1945–1970*, at 194 (2009) (noting environmental law’s “unstable legacy” and quoting Mark Twain: “Laws are sand, customs are rock”); Tarlock, *supra* note 57, at 214 (addressing the “Hidden Weaknesses of Environmental Law”); see also Arnold W. Reitze Jr., *Environmental Policy—It is Time for a New Beginning*, 14 COLUM. J. ENVTL. L. 111, 120–21 (1989) (reminding us that global environmental degradation is a function of growing population, unwise resource consumption, and pollution; some of these trends may be beyond the reach of well-written statutes and sympathetic courts).

169. Howard Latin, *Framing the Climate Change Debate*, in CLIMATE CHANGE: A READER at 739 (W.H. Rodgers et al. eds, Carolina Academic Press, Durham, NC.) (forthcoming 2011) (“People are now faced in varying degrees by the worst pollution problem of all time, the worst environmental problem of all time, and likely the worst human problem of all time.”).

170. Mary Christina Wood, *Atmospheric Trust Litigation*, in 2010 CLIMATE CHANGE READER at 1018, 1023.

was planted in the substantive text of NEPA¹⁷¹ until the Supreme Court decided it was not there.¹⁷² It is insisted, correctly, that the various permit systems “were never intended to subvert the goals of the statutes”¹⁷³ and these statutes, to be sure, put their own protective end-points clearly on the table.¹⁷⁴ But somehow, these articulated intentions slowly succumbed to the accumulated malaise of political necessity.¹⁷⁵

It is important, to be sure, to strive for a world where “Protecting Nature’s Assets is a Matter of Obligation, Not Discretion.”¹⁷⁶ For the most part, the environmental statutes sought to do this in the citizen suits that anticipated ready enforcement of each and every statutory “shall.” What slowed—and undid—this arrangement was the U.S. Supreme Court and others who had an unduly narrow understanding of what a “mandatory” administrative obligation might be.¹⁷⁷

Critics point out that the law must recognize that the “requirements for achieving climate equilibrium” are “set by Nature, not politicians.”¹⁷⁸ This is exactly the aim of the “best science” clauses in the environmental statutes of the 1970s. If there is a “slip” here it is not in the shape of the cup but twixt the cup and the lip. Courts are too often called upon to flag down executive misbehavior to circumvent proper science in the name of “sound policy choice.”¹⁷⁹

171. National Environmental Policy Act of 1969 § 101, 42 U.S.C. § 4331 (1970). And it appears in several natural resource damage provisions, including section 107(a)(4)(C) of CERCLA, 42 U.S.C. § 9607(a)(4)(C) (2006).

172. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 353 (1989).

173. Wood, *supra* note 170, at 1023.

174. *See* Federal Water Pollution Control Amendments of 1972 § 101(a)(1)–(2), 33 U.S.C. § 1251(a)(1)–(2) (daring to reach fishable/swimmable waters by July 1, 1983, and aiming for the elimination of the discharge of pollutants by 1985).

175. For examples of profound faltering in the reach to achieve statutory environmental goals, see *Northern Cheyenne Tribe v. Montana Dep’t of Envtl. Quality*, 234 P.3d 51 (Mont. 2010), repudiating an agency “do nothing” permit that allowed totally unregulated discharges of CBM wastewater into surface waters, and *Micosukee Tribe v. United States*, 706 F. Supp. 2d 1296 (S.D. Fla. 2010), exhibiting courageous judicial intervention and a “Contempt Hearing” for Florida’s nullification (participated in by the U.S. EPA) of water quality standards applicable to the Everglades.

176. Wood, *supra* note 170, at 1023.

177. For the leading (and most extreme) opinion, see *Norton v. Southern Utah Wilderness Alliance*, 542 U.S. 55 (2004), discussed in *Crazy Horse*, *supra* note 143.

178. Wood, *supra* note 170, at 1025.

179. For a sample, see *Rodgers & Mortiz*, *supra* note 73, at 309–13. *See also* *Wild Fish Conservancy v. U.S. EPA*, No. C08-0156-JCC, 2010 WL 1734850 (W.D. Wash. Apr. 28, 2010) (illustrating an ESA “best available science” failure where U.S. EPA and NMFS rushed to approve a Washington state exemption for salmon farms from general sediment-management water quality standards without reference to or mention of massive and detailed regional scientific studies on salmon and on the orca). For elaboration, see THOMAS O. MCGARITY & WENDY E. WAGNER, *BENDING SCIENCE: HOW SPECIAL INTERESTS CORRUPT PUBLIC HEALTH RESEARCH* (2008).

Critics emphasize the necessity of “Finding Moral and Economic Fortification for the Law” and “Restoring the Role of the Courts.”¹⁸⁰ These are strikingly important factors, and they are intensely at play in today’s environmental law. The environmental laws of the 1970s went so far as to presume that courts are ready to discover—and enforce—the environmental values expressed in those statutes. We know now that Justice Scalia is not Judge Wright,¹⁸¹ and it is the Scalia vision that has been on the march for a quarter century.

Most painful to those with a sympathetic view of the texts and traditions of environmental law are the occasions, now on the rise, where “environmental” decisions are handed down without appreciation, care, or concern about the environmental values at stake. Vandals are especially despised because they are heedless of the treasures trod upon. I would put in this category Judge O’Scannlain’s recent opinion in *Butte Environmental Council v. United States Army Corps of Engineers*, where it is pointed out that this splendid business park built on the vernal pools of Redding, California, would destroy only:

234.5 acres of “critical habitat” of the fairy shrimp (a mere .04% of the shrimp’s total critical habitat nationwide);

234.5 acres of “critical habitat” for the tadpole shrimp (a tiny .10% of this shrimp’s critical habitat nationwide); and

242.2 acres of “critical habitat” of the slender Orcutt grass (a mere .26% of the plant’s critical habitat nationwide).¹⁸²

Now, if people were involved and their “critical habitat” covered the 3,531,822 square miles of the U.S. land surface, these percentages (.04%, .10%, .26%) would represent 1,412 square miles, 3,531 square miles,

180. Wood, *supra* note 170, at 1034, 1032.

181. Scalia, *supra* note 50, at 884 (mocking the Skelly Wright opinion in *Calvert Cliffs Coordinating Comm’n v. Atomic Energy Comm’n*, 449 F.2d 1109 (D.C. Cir. 1971) that “began the judiciary’s long love affair with environmental litigation”). The author excludes himself from this liaison.

182. *Butte Env’tl. Council v. U.S. Army Corps of Eng’rs*, 607 F.3d 570, 578–79 (9th Cir. 2010). For another cold decision by a judicial “umpire” who lacks a sympathetic feeling for the game, see *United States v. Approximately 64,695 Pounds of Shark Fins*, 520 F.3d 976, 979 (9th Cir. 2008) (Reinhardt, C.J.) (noting that the 2000 Shark Finning Prohibition Act makes it unlawful to be in “custody, control, or possession” of a shark fin without the corresponding carcass aboard a “fishing vessel,” 16 U.S.C. § 1857(l)(P); this forfeiture action against an at-sea buyer who is taking the fins to Guatemala fails because the ruthless operator did not have “fair notice” that it would be considered a “fishing vessel” when it facilitated and advanced this practice).

and 9,182 square miles, respectively.¹⁸³ If .04% of the human habitat were lost, a city the size of Winston-Salem, North Carolina would be gone. If the figure were .10%, an urban area the size of Boston-Cambridge-Quincy, Massachusetts would disappear; if .26%, an urban area the size of Dallas-Fort Worth-Arlington, Texas (and most of El Paso) would be gone. Now the Endangered Species Act is an inspiring text and a profound teacher. But even a value-laden statute of that heft, distinction, and notoriety cannot move certain appellate judges to recognize activities that “result in the destruction or adverse modification” of critical habitat.¹⁸⁴ That is not an error in statutory drafting. Nor is it a commendable display of “humility.” It is a casual and hasty repudiation of the values of nonhuman life that were captured and expressed in the Endangered Species Act.

The great contributions of the U.S. environmental laws of the 1970s were not in the devices, schemes, arrangements, and incentives of the several texts. They are found instead in the stunning compilation—and expression—of values that redefined the relationship of human beings on earth to their world and all life within it. Millions of people have been moved by these articulated values, tens of millions of reflections set loose, and hundreds of millions of patterns of behavior changed and abandoned. While this crop of values was planted and spread, it has simultaneously been systematically sacked and repudiated by calculated resort to the U.S. political system that auspiciously includes the courts. In this moment of irony, loss of judicial support for these environmental values is the ultimate double-edged sword.

There is today a “values” debate over the U.S. environmental laws directed and led by a high court that does not share these values.

Here is a short collection of the inspiring values exhibited by the environmental laws of the 1970s:

1. The Public Trust Doctrine

This is captured by NEPA¹⁸⁵ and still retains great promise as a natural resource savior of last resort.

183. For the calculations, appreciation is expressed to Lori Fossum, Gallagher Law Library, University of Washington, School of Law, for her memorandum on “U.S. human habitat statistics.”

184. Endangered Species Act of 1973 § 7(a)(2), 16 U.S.C. § 1536(a)(2) (1972).

185. National Environmental Policy Act of 1969 § 101(b)(1), 42 U.S.C. § 4331(b)(1) (1970).

2. The Aldo Leopold Alternative

The ideas of this revolutionary thinker¹⁸⁶ are seized upon and elaborated in the texts of the Endangered Species Act and the Marine Mammal Protection Act. In some instances, statutes remove humans from the center of the environmental ethics community and put other creatures and places there.

3. The Native American Thought Alternative

U.S. Indian tribes were not a focus of the environmental laws of the 1970s. Tribes were ushered in later.¹⁸⁷ But while they were waiting for admission to the club, the tribes succeeded in writing one of the greatest environmental justice stories ever seen on earth—the fight of the U.S. Pacific Northwest Indian Tribes to enforce their treaty fishing rights. These cases rumbled through the federal courts in the 1970s and ended in triumph when the treaties landed before the U.S. Supreme Court in 1979—the seventh visit to the high court over a span of eighty years.¹⁸⁸ This was a vital legal moment in protection of the great anadromous fish runs.¹⁸⁹

4. A Universal Protection of All Physical and Living Resources of the Environment

This is substantive NEPA,¹⁹⁰ and it may yet have a legal future.

186. See generally ALDO LEOPOLD, *A SAND COUNTY ALMANAC AND SKETCHES HERE AND THERE* (4th prt. 1975) (describing Leopold's land ethic through a collection of essays).

187. Compare Richard Delgado, *Our Better Natures: A Revisionist View of Joseph Sax's Public Trust Theory of Environmental Protection, and Some Dark Thoughts on the Possibility of Law Reform*, 44 VAND. L. REV. 1209, 1218–23 (1991) (emphasizing Leopold's earth-centered environmental ethics, Native American thought, and eco-feminism as alternatives to public trust theory), with William H. Rodgers, Jr., *Treatment as Tribe, Treatment as State: The Penobscot Indians and the Clean Water Act*, 55 ALA. L. REV. 815, 817–18 (2004) (outlining the decision to treat tribes as states to make them subject to the Clean Water Act).

188. *Washington v. Wash. State Commercial Passenger Fishing Vessel Ass'n*, 433 U.S. 658, 684–85 (1979). The seven Supreme Court decisions are identified in LAW IN INDIAN COUNTRY, *supra* note 8, at 24 n.12, and elaborated on in J.C. DUPRIS, KATHLEEN S. HILL & WILLIAM H. RODGERS, JR., *THE SI'LAILO WAY: INDIANS, SALMON AND LAW ON THE COLUMBIA RIVER* (2006).

189. See LAW IN INDIAN COUNTRY, *supra* note 8, at 61–86 (describing the “environmental reserved rights” aspects of the treaties).

190. National Environmental Policy Act § 101, 42 U.S.C. § 4331; see Clean Air Act § 309(b), 42 U.S.C. § 7609(b) (according the Administrator of EPA the authority to adjudge various federal actions “unsatisfactory from the standpoint of public health or welfare”).

5. No Significant Deterioration

This idea was casually introduced by the Clean Air Act¹⁹¹ and then elaborately codified by Congress.¹⁹² It has been cheapened, but not destroyed, by a new wave of judicial thinkers who have applied their ignorance and “humility” to the matter.

6. Technology-Forcing

This idea originated in the great smog conspiracy case of the 1960s¹⁹³ that put limits on technology-fixing, forum-stone-walling, and conspiracies of silence preferred by the trade association of the auto manufacturers. Its centerpiece was a ninety percent emissions reduction for autos.¹⁹⁴ This history has been largely forgotten by the practitioners of “humility” on today’s Supreme Court.¹⁹⁵

7. Technology Assessment

This is another NEPA triumph.¹⁹⁶ However, it struggles to maintain its integrity in today’s judicial world.¹⁹⁷

8. Precautionary Principle

This principle is expressed in NEPA¹⁹⁸ and it lives on in other legal contexts.¹⁹⁹

191. Courts found it in the declaration of purpose “to protect and enhance the quality of the Nation’s air resources.” Clean Air Act § 101(b)(1), 42 U.S.C. § 7401(b)(1).

192. Clean Air Act §§ 171–193, 42 U.S.C. §§ 7501–15 (2006).

193. See 1 AIR AND WATER, *supra* note 23, at 393–96 (discussing “Technology-Forcing and Technology-Suppressing”).

194. See *id.* at 386–88 (discussing the 1970 and 1977 amendments to the Clean Air Act).

195. Entergy Corp. v. Riverkeeper, Inc., 129 S.Ct. 1498 (2010) (5-3 decision), criticized in 1 AIR AND WATER, *supra* note 23 (Supp. 2010).

196. National Environmental Policy Act § 102(2)(C), 42 U.S.C. § 4332(2)(C); see Bradley C. Karkkainen, *Toward a Smarter NEPA: Monitoring and Managing Government’s Environmental Performance*, 102 COLUM. L. REV. 903, 906 (2002) (offering a critical elaboration on 42 U.S.C. § 4332(2)(C)).

197. The high court’s recent decisions in *Winter v. Natural Resources Defense Council*, 129 S.Ct. 365, 370 (2008), and *Monsanto Co. v. Geertson Seed Farms*, 130 S.Ct. 2743, 2750 (2010), are NEPA-remedy rollbacks and containments. They reek of “leap before you look.”

198. LAW IN INDIAN COUNTRY, *supra* note 8, at 382–86.

199. Judge Skelly Wright would have been as pleased as punch with the recent ruling in *Coalition of Battery Recyclers v. EPA*, 604 F.3d 613, 621 (D.C. Cir. 2010) (upholding, on precautionary grounds, the latest revision tightening the NAAQS for lead).

9. Public Disclosure of Corporate Influence

This was the aim of FACA²⁰⁰ but the push-back has been swift and sure.²⁰¹

10. Active Enforcement by Citizens

Court-invented barriers have raised transaction costs and taken the profit out of this business. But “economic incentives” alone are not the whole story. Skeptics should review the efforts of Law Prof. Jerry Anderson in *Northeast Iowa Citizens for Clean Water v. Agriprocessors, Inc.*²⁰² Citizen enforcement may well be a legal clock that cannot be turned back.

11. Sustainability

This is a huge world that has swept beyond the environmental laws of the 1970s.²⁰³ But you can still see it, as you can see much of the future, in the buried text of NEPA.²⁰⁴

12. Integration

NEPA, again, achieved what few laws do and made the case against fragmentation, single-media approaches, and single-shot solutions.²⁰⁵ It is a magnificent how-to-do-it manual:

encouraging better recognition of the primary causes and
not just the symptoms of pollution; avoiding “solutions”

200. See William H. Rodgers, Jr., *The National Industrial Pollution Control Council: Advise or Collude?*, 13 B.C. IND. & COMM. L. REV. 719 (1972) (noting that NIPCC was the problem FACA was invented to solve).

201. See *Cheney v. U.S. Dist. Court for the D.C.*, 542 U.S. 367, 384–85 (2004) (noting that even if FACA authorizes review of executive branch documents, requiring the executive branch to turn over these documents may constitute a violation of separation of powers).

202. *Northeast Iowa Citizens for Clean Water v. Agriprocessors, Inc.*, 489 F. Supp. 2d 881, 886, 899, 901 (N.D. Iowa 2007). For a valuable text, see JOEL A. MINTZ, CLIFFORD RECHTSCHAFFEN & ROBERT KUEHN, ENVIRONMENTAL ENFORCEMENT: CASES & MATERIALS ch. 7 (2007).

203. See John C. Dernbach, *Citizen Suits and Sustainability*, 10 WIDENER L. REV. 503 (2004) (exhibiting impressive heavy-lifting on this issue by Professor John Dernbach).

204. See National Environmental Policy Act § 101(b)(6), 42 U.S.C. § 4331(b)(6) (asserting that it is the continuing responsibility of the federal government to “enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources”); see also Daniel A. Farber, *Taking Responsibility for the Planet*, 89 TEX. L. REV. 147 (2010), available at <http://www.texaslrev.com/sites/default/files/issues/vol89/pdf/Farber.pdf> (reviewing DOUGLAS A. KYSAR, REGULATING FROM NOWHERE: ENVIRONMENTAL LAW AND THE SEARCH FOR OBJECTIVITY (2010)).

205. LAW IN INDIAN COUNTRY, *supra* note 8, at 387.

that transfer pollutants to other media; drawing attention to pollution prevention; bringing about a better accounting of multiple exposures; reducing the friction costs occasioned by complexity and frequent definitions at the boundaries.²⁰⁶

13. Natural Resource Damages

This innovation deserves a separate accolade, especially when one realizes it drifts close to an “eye-for-an-eye” morality in declaring that natural resources “damaged or destroyed” are to be resurrected by expenditures to “restore, rehabilitate, or acquire the equivalent” of that which was lost.²⁰⁷ This goes farther than the pay-as-you-go conventions of customary tort law and invites creative methods for evaluating losses and correcting them.

The environmental laws of the 1970s were bold, ambitious, often inspired, and they looked good on paper.

206. *Id.* The 1979 CEQ rules, a triumph of organized common-sense, furthered NEPA's success as a policy template.

207. *See, e.g.*, Clean Water Act § 311(f)(4)–(5), 33 U.S.C. § 1321(f)(4)–(5) (including in liability for an oil spill the costs and expenses incurred by government in the restoration or replacement of natural resources).