# Foreword

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We are honored to introduce Ecology Law Quarterly's 2009–2010 Annual Review of Environmental and Natural Resource Law. Now in its twelfth year, the Annual Review is the product of collaboration among many. First, there are the scholars who form the core of the University of California, Berkeley, School of Law's renowned environmental law program. Their research and teaching depends in part upon the resources, financial and otherwise, of Berkeley Law School's Center for Law, Energy and the Environment. Second are the students who oversee publication. The environmental law program at Berkeley attracts and nurtures some of the nation's finest and most dedicated future environmental lawyers. Those students comprise the editorial board and membership of ELQ, which in turn produces the Annual Review. ELQ is the leading journal in the field because of their passion and commitment. Three students deserve special recognition for their role in this year's Annual Review. Soon to be members of the profession, Emily Jeffers, Rachel Jones, and Sara Gersen devoted a large portion of their final year of law school to assisting and advising the student authors. The Annual Review is infused with their talent and insights.

Finally, this Annual Review would not have been possible without the extraordinary group of student authors whose work appears in this issue. Their aptitude and zeal for the law is evident in the Notes that follow. We are grateful to have had the opportunity to direct this special group of future lawyers.

Law professors and students, legal historians, and countless other scholars seeking insights into the major developments in environmental and natural resource during 2009–2010 will benefit from this Annual Review. The Notes cover a broad range of topics, from developments involving the longstanding federal statutory schemes intended to protect our planet to the implications of terrorist threats to nuclear facilities.[1]



1. The order of the Notes in this issue is not by topic, as they are here introduced. Instead, they are organized by the deciding court and date of decision.

With Congress seemingly paralyzed, the executive branch and the courts are currently the site of nearly all the action in the federal environmental law arena. All but one of the cases in this volume involve challenges to federal agency actions implementing environmental statutes. Although the White House changed hands early in 2009, that change has not yet filtered down. All of the actions challenged in these cases were the product of the Bush administration, and none of the reviewing panels included any Obama appointees. It will be interesting to see how environmental law shifts with the transition to a very different administration, but that is a story for future Annual Reviews.

While these eleven disparate decisions cannot be captured in a single storyline, it is clear that this was a tough year for environmental plaintiffs. This was a very active year for environmental law in the U.S. Supreme Court, which took up five environmental cases and ruled against the environmental side in every one. This volume includes analyses of four of those decisions: one in which the Court continued its periodic and confusing excursions into environmental standing, two in which it took up implementation of the Clean Water Act (CWA), and one adding to its growing body of decisions on liability under Comprehensive Environmental Response Compensation & Liability Act (CERCLA). The Court also decided a case testing the boundaries of injunctive relief under the National Environmental Policy Act (NEPA),[2] but because that case was the subject of an article in an earlier issue of ELQ[3] it is not included in this compilation.

Important as the courts are, their decisions can only be understood in the context of the legislative and administrative landscape. The Notes in this volume provide that essential context. Each of them uses a decision as a lens on a larger landscape, drawing lessons for the development, implementation, and understanding of environmental law.

## STANDING

Standing to file suit is a hurdle that all plaintiffs must overcome. But the standing hurdle is particularly difficult to clear in cases involving pollution, where injury may be slow to manifest, difficult to detect, and spread among a large number of people. Since the 1970s, the federal appellate courts have erected increasingly sturdy barriers to block plaintiffs from accessing courtrooms to advocate for the environment. The two most important cases involving the standing requirement during 2009–2010 continued that trend.

2. Winter v. Natural Res. Def. Council, Inc., 129 S. Ct. 365 (2008).

3. Joel R. Reynolds, Taryn G. Kiekow & Stephen Zak Smith, *No Whale of a Tale: Legal Implications of* Winter v. NRDC, 36 ECOLOGY L. Q. 753 (2009).

When quasi-sovereign interests are implicated, a state can use the parens patriae doctrine to bring suit on behalf of its citizens. Indeed, in the 2007 decision in *Massachusetts v. EPA*,[4] the U.S. Supreme Court recognized that states should be given "special solicitude" in filing suit to protect its citizens. But in *Center for Biological Diversity v. U.S. Department of Interior*,[5] the D.C. Circuit was asked to give tribes the same treatment. In "Tribal Governments Should Be Entitled to Special Solicitude: The Overarching Sentiment of the Parens Patriae Doctrine," Hae-June Ahn contends that the D.C. Circuit misconstrued *Massachusetts v. EPA* in denying standing to a tribal government.[6] Ms. Ahn argues that tribal governments, like states, should be afforded special solicitude and allowed to bring parens patriae suits to protect their members and their quasi-sovereign interests.

*Summers v. Earth Island Institute*[7] is the latest word from the U.S. Supreme Court on what constitutes a cognizable injury for purposes of constitutional standing. In a 5-4 decision, the Court held that an environmental group lacked standing to challenge U.S. Forest Service regulations limiting public participation in logging decisions because a settlement had been reached with respect to the specific project addressed in the complaint. In "Surviving *Summers*," Michelle Fon Anne Lee considers the impact of *Summers* on cases involving "probabilistic" theories of injury.[8] She notes that "probabilistic" cases can be divided into three categories, and argues that *Summers* affects each differently. Ms. Lee suggests that the "increased-risk-as-injury" type of probabilistic injury remains a viable basis for constitutional standing. Finally, Ms. Lee argues that "increased-risk" theories of injury not only survive *Summers*, but in the future should play an important role in establishing constitutional standing.

## ENDANGERED SPECIES ACT

The Endangered Species Act (ESA), perhaps the most controversial of the federal environmental protection laws, is featured in three of this year's Notes. Two look at aspects of the listing process, a keystone decision because it determines whether species are entitled to the law's regulatory protections. Listing decisions are a complex of mix of science and policy which continue to bedevil both the agencies which implement

4. 549 U.S. 497 (2007).
5. 563 F.3d 466 (D.C. Cir. 2009).
6. Hae-June Ahn, *Tribal Governments Should Be Entitled to Special Solicitude: The Overarching Sentiment of the Parens Patriae Doctrine*, 37 ECOLOGY L. Q. 625 (2010).
7. 129 S. Ct. 1142 (2009).
8. Michelle Fon Anne Lee, *Surviving* Summers, 37 ECOLOGY L. Q. 381 (2010).

the ESA and reviewing courts. These two Notes take up difficult questions about what qualifies as a "species" and when a species qualifies for legal protection.

Hatchery-raised fish pose difficult challenges for the ESA. The fishing industry has long relied on hatcheries to boost salmon and steelhead runs depleted by habitat modification. Yet the genetic and behavioral traits of hatchery-raised fish can adversely impact those already-declining wild populations. The legal status of hatchery fish has been uncertain since a district court struck down the National Marine Fisheries Service's (NMFS) practice of listing only wild runs.[9] In *Trout Unlimited v. Lohn*,[10] the Ninth Circuit upheld a listing policy developed in the wake of that decision. The policy makes the delineation of Evolutionarily Significant Units (ESUs) (the entities NMFS considers for listing) independent of the wild or hatchery origin of the fish, and leaves the agency a great deal of discretion to determine the extent to which an abundance of hatchery fish would count against listing the ESU. In "One Fish, Two Fish: Suggestions for the Treatment of Hatchery Fish under the Endangered Species Act," Katy Lum argues that the *Trout Unlimited* decision undermines the purpose of the ESA.[11] Ms. Lum notes the ample scientific evidence indicating that hatchery and wild fish should be placed in separate "conservation units" under the ESA. She argues that changing the manner in which the current classification policies are applied to salmon and steelhead species would allow NMFS and the U.S. Fish and Wildlife Service (FWS) to formulate a hatchery listing policy that is more closely aligned with ESA's goals.

Another vexing issue about listing is the extent to which reductions in historic range should push toward mandating protection. A species qualifies for listing under the ESA if it is in danger of extinction or likely to become so "throughout all or a significant portion of its range."[12] Yet, the courts and the FWS have struggled to define what constitutes a significant portion of the range. The Ninth Circuit returned to these questions in *Tucson Herpetological Society v. Salazar*,[13] the most recent decision in a long-standing dispute over the legal status of the flat-tailed horned lizard. The court agreed with the FWS that species persistence despite the loss of a substantial amount of historic range is evidence that the lost areas do not constitute a "significant portion" of the range. In "Size, Biology, and Culture: Persistence as an Indicator of Significant

9. Alsea Valley Alliance v. Evans, 161 F.Supp.2d 1154 (D. Or. 2001).

10. 559 F.3d 946 (9th Cir. 2009).

11. Katy Lum, *One Fish, Two Fish: Suggestions for the Treatment of Hatchery Fish under the Endangered Species Act*, 37 ECOLOGY L. Q. 561 (2010).

12. 16 U.S.C. § 1532(6), 1532(20) (2006).

13. 566 F.3d 870 (9th Cir. 2009).

Portions of Range under the Endangered Species Act," Alexandra Kamel defends that aspect of the decision, but argues for a more probing look at persistence.[14] She contends that persistence must be evaluated in light of the size of the area lost, its biological importance to the species, and the cultural importance of the species' presence there.

The third Note involving the ESA focuses on the question of whether the government must compensate for the economic costs imposed by species protection. In *Casitas Municipal Water District v. United States*,[15] decided very late in 2008, the Federal Circuit reversed the Court of Federal Claims in a controversial decision involving the intersection of private water rights and endangered species. In determining that water diversions ordered to protect the endangered West Coast steelhead trout under the ESA constituted a physical taking, the court further muddled an already confused area of law. In "'Taking' a Different Tack on Just Compensation Claims Arising Out of the Endangered Species Act," Brian Scaccia argues that current takings doctrine fails to adequately address fairness concerns in endangered species cases.[16] He argues for application of the "nexus" and "rough proportionality" tests articulated in the Supreme Court's development exaction cases to decide when compensation is required for ESA regulations.

## CLEAN AIR ACT

The Ninth Circuit's decisions in *Vigil v. Leavitt*[17]and *Latino Issues Forum v. EPA*[18] upheld EPA's approval of "menu of options" plans under the Clean Air Act (CAA). By virtue of their designation as serious nonattainment areas for particulate matter pollution, Phoenix and California's San Joaquin Valley were required to adopt state implementation plans satisfying the "best available control measures" standard. In "Restoring Webster's Definition of "Best" under the Clean Air Act," Christopher Raftery argues that no reasonable interpretation of the word "best" supports the Ninth Circuit's interpretation of the CAA.[19] He explains that while "best" available control measures are not defined in the CAA, the statute, case law, and EPA's own internal

14. Alexandra Kamel, *Size, Biology, and Culture: Persistence as an Indicator of Significant Portions of Range under the Endangered Species Act*, 37 ECOLOGY L. Q. 525 (2010).

15. 543 F.3d 1276 (Fed. Cir. 2008).

16. Brian Scaccia, "*Taking" a Different Tack on Just Compensation Claims Arising Out of the Endangered Species Act*, 37 ECOLOGY L. Q. 655 (2010).

17. 381 F.3d 826 (9th Cir. 2004).

18. 558 F.3d 936 (9th Cir. 2009).

19. Christopher Raftery, *Restoring Webster's Definition of "Best" under the Clean Air Act*, 37 ECOLOGY L. Q. 595 (2010).

guidance documents all demonstrate that, in this context, "best" means "maximum emissions reductions." Mr. Raftery argues that because the menus fail to meet that standard, the Ninth Circuit authorized a regulatory approach that will undermine the need to clean up the air in nonattainment areas.

## CLEAN WATER ACT

The CWA received considerable attention from the federal appellate courts during 2009–2010, and not always to the benefit of the environment. In "Filling the Regulatory Gap: A Proposal for Restructuring the Clean Water Act's Two-Permit System," Robert B. Moreno[20] analyzes the U.S. Supreme Court's decision in *Coeur Alaska, Inc. v. Southeast Alaska Conservation Council*[21] and its effect on the CWA. The CWA authorizes EPA to issue permits for pollutant discharges into waterways. The law creates two different permit systems, one for conventional industrial discharges under the supervision of EPA, the other for discharge of dredged and fill material under the supervision of the Army Corps of Engineers. The relationship between those two permitting schemes has been unclear. In *Coeur Alaska*, the Supreme Court ruled that the Army Corps of Engineers, rather than EPA, has authority to issue permits for the discharge of "dredged or fill" material. Mr. Moreno argues that *Coeur Alaska* allows industrial dischargers to bypass EPA's strict technology-based effluent regulations in favor of the more lax regulations imposed by the Army Corps of Engineers. He analyzes several ways this problem might be addressed, ultimately favoring an amendment to the CWA that would incorporate EPA's effluent regulations into permits issued by the Corps of Engineers.

For years EPA has wrestled with whether the CWA should apply to application of pesticides, which is also regulated by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). In 2007, the agency issued a regulation providing that no CWA permit was required for pesticides applied in accordance with FIFRA,[22] but the rule was vacated by the Sixth Circuit in *National Cotton Council v. EPA*.[23] In "The Middle Ground of Pesticide Regulation: Why EPA Should Use a Watershed-Based Permitting Scheme in Its New Aquatic Pesticides Rule," Kara Cook explores the implications of the decision, which effectively requires that EPA create a new CWA permitting system for

20. Robert B. Moreno, *Filling the Regulatory Gap: A Proposal for Restructuring the Clean Water Act's Two-Permit System*, 37 ECOLOGY L. Q. 285 (2010).
21. 129 S. Ct. 2458 (2009).
22. 71 Fed. Reg. 68,483 (Nov. 27, 2006).
23. 553 F.3d 927 (6th Cir. 2009).

pesticide use.[24] Ms. Cook does what the Sixth Circuit did not; she offers guidance to EPA on how to make such a permit scheme efficient and effective, by considering applications on a watershed or regional basis.

In *Entergy v. Riverkeeper*,[25] the U.S. Supreme Court held that EPA is permitted under the CWA to compare costs to benefits in determining the best technology available for power plant cooling water intakes. As Justice Breyer bluntly posits in his concurrence, in this era of limited resources and dire environmental problems industry should not be forced to spend billions to save one more fish when those resources could be more wisely spent on other environmental woes. In "Energy v. Water," Olivia Odom argues that the Breyer approach is sensible only if and when those environmental woes are properly defined.[26] According to Ms. Odom, in setting technology standards for the nation's largest water users—electric utilities—EPA grossly oversimplified and, thus, miscalculated the environmental benefits and financial burdens of the technologies it considered. By ignoring the environmental harm caused by power plant water use and consumption, Ms. Odom argues that EPA did not adequately account for the huge potential ecological benefits of restoring instream flows, as well as the financial and social benefits of averting a crisis in the energy-water nexus.

## HAZARDOUS WASTE

Even though thirty years have passed since the federal CERCLA was signed into law, the courts have yet to sort out some of its most important provisions. In "Reasonable Bases for Apportioning Harm under CERCLA,"[27] Robert Guo analyzes the U.S. Supreme Court's decision in *Burlington Northern & Santa Fe Railway Co. v. United States*.[28] The decision appears to have made it easier for CERCLA defendants avoid joint and several liability for the costs of cleaning up contaminated sites. But Mr. Guo argues that the Court's decision contravenes CERCLA's explicit objectives. He proposes a four-part test for determining whether a defendant may force apportionment. He argues that application of this test would increase the availability of money to fund remediation projects and promote settlement of cost recovery lawsuits.

24. Kara Cook, *The Middle Ground of Pesticide Regulation: Why EPA Should Use a Watershed-Based Permitting Scheme in Its New Aquatic Pesticides Rule*, 37 ECOLOGY L. Q. 451 (2010).

25. 129 S.Ct. 1498 (2009).

26. Olivia Odom, *Energy v. Water*, 37 ECOLOGY L. Q. 353 (2010).

27. Robert Guo, *Reasonable Bases for Apportioning Harm under CERCLA*, 37 ECOLOGY L. Q. 317 (2010).

28. 129 S.Ct. 1870 (2009).

PUBLIC LANDS

The 1964 Wilderness Act directed federal land management agencies to inventory "roadless" areas for potential inclusion into the wilderness system. Though Congress designated some of these roadless areas as wilderness, 58.5 million acres remained in limbo. In 2001, the Clinton administration sought to provide more lasting protection for roadless lands under the jurisdiction of the Forest Service by adopting the Roadless Rule, essentially banning road construction and timber harvest in inventoried roadless areas. Before the Rule could take effect, however, the Bush administration replaced it with the less protective State Petitions Rule. In *California v. U.S. Department of Agriculture*,[29] the Ninth Circuit held that the State Petitions Rule violated NEPA and the ESA, and constituted an unlawful revision of the Roadless Rule. The court reinstated the Clinton Roadless Rule. In "At a Dead End: The Need for Congressional Direction in the Roadless Area Management Debate," Monica Voicu argues that the drastic changes occasioned by the revolving door at the White House suggest that agency rulemaking may not be the best way to deal with this inherently value-laden issue.[30] Ms. Voicu argues that Congress is better equipped to settle the debate, and should craft legislation that gives roadless areas lasting protection.

NATIONAL ENVIRONMENTAL PROTECTION ACT

In the wake of 9/11, the question of whether federal agencies should include the possible effects of a terrorist attack in their environmental analyses has emerged. In 2006, the Ninth Circuit rejected the Nuclear Regulatory Commission's (NRC) categorical refusal to evaluate the environmental impact of a terrorist attack on a nuclear fuel storage installation.[31] However, in *New Jersey Department of Environmental Protection v. NRC*,[32] the Third Circuit reached a different result, holding that NEPA does not require such analysis in connection with the renewal of a nuclear facility's license. In "NEPA in the Post 9/11 World," Amanda Lopez sides with the Ninth Circuit.[33] She reasons that the fact that a terrorist attack is a criminal act committed by a third party does not absolve the NRC of responsibility under NEPA. She argues that the

29. 575 F.3d 999 (9th Cir. 2009).

30. Monica Voicu, *At a Dead End: The Need for Congressional Direction in the Roadless Area Management Debate*, 37 ECOLOGY L. Q. 487 (2010).

31. San Luis Obispo Mothers for Peace v. U.S. Nuclear Reg. Comm'n, 449 F.3d 1016, 1035 (9th Cir. 2006).

32. 561 F.3d 132, 136 (3d Cir. 2009).

33. Amanda Lopez, *NEPA in the Post 9/11 World*, 37 ECOLOGY L. Q. 423 (2010).

NRC should be forced to consider the impact of an attack on a nuclear facility, because its decision could alter the extent of damage.

Congratulations to the authors and ELQ for a job once again very well done. We hope you benefit from their work as much as we have.