Now in its second year, the Annual Review of Environmental and Natural Resources Law provides practitioners, judges, policymakers, and scholars with timely, in-depth analyses of leading developments in environmental and natural resources law over the prior year. With the Congress stalemated over environmental legislation and no major new international treaties, this year’s Annual Review focuses principally upon domestic judicial decisions and regulatory developments. The year witnessed a number of important decisions in the constitutional and administrative law fields, as well as the development of a variety of innovative approaches for protecting complex ecosystems.

Although a number of environmental and natural resources cases over the past year reached the Supreme Court, the most significant judicial developments may well have been in the intermediate appellate courts. These decisions did not follow any pattern, even within the D.C. Circuit, but they portend significant change in environmental regulation. In American Trucking Ass’ns, Inc. v. EPA,1 the D.C. Circuit shook the foundations of the regulatory state by reviving the nondelegation doctrine in a somewhat new form. In the enforcement area,
another panel of the D.C. Circuit gave teeth to substantial penalties built into the nonattainment provisions of the 1990 Amendments to the Clean Air Act by forcing EPA to withhold federal funding of highway projects that do not conform to pollution implementation plans. These conformity requirements will likely play a substantial role in pressuring nonattainment areas into compliance with the National Ambient Air Quality Standards (NAAQS).

In American Trucking Ass'ns, Inc. v. EPA, a sharply divided panel of the D.C. Circuit, largely affirmed by a divided en banc court, resuscitated and recast the nondelegation doctrine by holding that the EPA's new and revised primary and secondary standards for particulate matter and ozone failed to reflect a sufficiently "intelligible principle" to pass muster under this long dormant doctrine. The majority subjected EPA's analysis of the standards to a heightened level of scrutiny and rejected the regulations as lacking an adequate or meaningful scientific basis, thereby raising the specter of unrestrained delegation. The court suggested that the statute could be permissibly construed as within Congress' power to delegate authority to the extent that EPA developed a comprehensive and systematic health and welfare decisionmaking framework. Coming after almost three decades of judicial deference to EPA discretion in setting NAAQS under the Clean Air Act and Congressional amendment and oversight, this decision potentially opens up EPA's implementation of many of its standard-setting regimes to new lines of attack, imposes potentially irreconcilable and impossible burdens of proof upon agency decisionmakers, and alters the balance of power between administrative agencies and the courts. The implications of these developments will likely be clarified in the near future, as the Supreme Court has granted certiorari.2

Three other important appellate cases also bear on the implementation of the Clean Air Act. In a case that holds the proverbial feet of polluted urban areas to the fire, the D.C. Circuit, in Environmental Defense Fund v. EPA,3 ruled that EPA regulations unlawfully permitted local and federal authorities to approve transportation projects that did not conform to emission limitations imposed by the Clean Air Act. In so doing, the court

3. 167 F.3d 641 (D.C. Cir. 1999).
exposed the Atlanta metropolitan area to the loss of billions of dollars in federal highway funding for failing to develop a long-range regional transportation plan conforming to the state implementation plan for achieving federal air quality targets. In view of the long history of backsliding and extensions plaguing the achievement of the Clean Air Act's goals, this decision bolsters the credibility of the sanctions set forth in the 1990 Amendments to the Clean Air Act and has already spurred urban areas failing to achieve the NAAQS to confront the pollution problems posed by urban sprawl. As explored in the Note on this case, the action-forcing implications of this decision—jeopardizing a principal source of infrastructure funding for a rapidly growing metropolitan area—could not have been more immediate. Soon after the D.C. Circuit's decision, the Georgia legislature established the Georgia Regional Transit Authority and invested it with unprecedented power over land use planning decisions in order to confront the mounting challenges posed by rapid growth surrounding Atlanta. Although the results of this experimental regional agency will not be apparent for some time, the loss of substantial federal highway funding attracted the attention of state and local decisionmakers and spurred the development of new institutions to address regional land use, transportation, and air quality issues.

In a third important development relating to air pollution regulation, the First and Second Circuits confronted the power of states to adopt zero emission vehicle (ZEV) sales mandates. This policy seeks to balance a tangled web of environmental, state sovereignty, and interstate commerce considerations. The courts reached conflicting results: the Second Circuit invalidated New York's ZEV sales mandate as impermissible under Section 209 of the Clean Air Act— which vests near exclusive control over motor vehicle emission control standards in the federal government—while the First Circuit referred the validity of a similar Massachusetts plan to EPA under the primary jurisdiction doctrine. The Annual Review's coverage assesses the judicial responses as well as EPA's efforts to develop a coherent federal regime governing state ZEV mandates.

In a significant decision affecting water pollution regulation, the D.C. Circuit invalidated the Tulloch Rule and limited the

ability of EPA and the Army Corps of Engineers to regulate dredging activities. EPA and the Army Corps of Engineers promulgated the Tulloch Rule to close a loophole that enabled real estate developers to drain wetlands so as to avoid permitting and substantive requirements. Prior to the rule, a developer could drain wetlands through the excavation of ditches so long as they removed the excavated material. Once the wetland was drained, the developer would no longer be subject to wetland jurisdiction. The Tulloch Rule closed this loophole by including within the meaning of "discharge of dredged material," which EPA and the Army Corps may regulate, "[a]ny addition, including redeposit other than incidental fallback, of dredged material, including excavated materials, into waters of the United States which is incidental to any activity, including mechanized landclearing, ditching, channelization, or other excavation." Applying the *Chevron* standard, the D.C. Circuit held that EPA and the Corps had overstepped their authority under Section 404 of the Clean Water Act and had failed to provide a reasonable interpretation of the statute.

The past year also saw the expansion of criminal liability for environmental violations. In *United States v. Iverson*, the Ninth Circuit held that a corporate officer could be held responsible for criminal violations of the Clean Water Act on the basis of circumstantial evidence indicating that the officer had authority to control the illegal activity. This test raises the risk of liability within organizations lacking adequate standards and supervision for activities affecting the environment.

In the natural resources area, the federal district court overseeing the implementation of the Northwest Forest Plan, a management plan developed to protect the habitat of the northern spotted owl, applied a searching standard of review in enjoining a substantial federal timber sale. In *Oregon Natural Resources Council Action v. United States Forest Service*, the court's deep involvement in the litigation that produced the Northwest Forest Plan afforded it the historical context, expertise, and confidence to oversee its implementation.

In *Sierra Club v. Glickman*, the Fifth Circuit interpreted expansively the duty of federal agencies to conserve species

9. 162 F.3d 1015 (9th Cir. 1998).
11. 156 F.3d 605 (5th Cir. 1998).
under Section 701(a)(1) of the Endangered Species Act. In conjunction with its decision to allow standing to an environmental group, the court's decision provides a new tool for promoting species and habitat protection.

Beyond the courts, this past year also saw the development of innovative habitat conservation plans for two ecologically, economically, and politically complex ecosystems. One of the Notes in this issue focuses on the establishment of an ambitious blueprint to restore the Florida Everglades. A second case study examines recent agreements between the United States and Canada to address the recovery of salmon runs in the Pacific Northwest.

The past year also brought promising developments to an important, but largely overlooked, cause of natural resource damage—hardrock mining on federal lands. The General Mining Law of 1872, which remains in place today, was designed to promote development, resource extraction, and settlement in the West. The environmental problems associated with hardrock mining have increased as high-grade veins have been tapped and technological means have been developed to process vast areas of low-grade ore. In their 1999 Crown Jewel decision, the Departments of Interior and Agriculture interpreted traditional limitations on the size of mining claims to limit the environmental effects of a vast low-grade ore exploitation plan. Although this policy decision generated swift Congressional reaction, it represents an important turning point in the nation's shift from a predominant focus on mineral extraction to a policy that balances environmental protection and natural resource development.

The Supreme Court addressed two disputes over the natural resource rights of Native American Tribes in its 1998 Term. The first concerned rights to now valuable coalbed methane gas (CBM) associated with coal mineral estates granted by the federal government to the Southern Ute Indian Tribe in 1934. In the Coal Lands Acts of 1909 and 1910, the federal government reserved coal rights from land patent and other mineral claims, such as oil and gas. At that time, CBM was considered a hazard of coal extraction. It lacked economic value due to the absence of effective technology to capture the gas and the low cost of alternative petroleum raw materials. Advances in gas extraction technology and the rising value of natural gases over the past few decades increased the value of the CBM reserves associated with these properties, producing a high stakes dispute between the owners of the oil and gas rights and the owners of the coal.
rights. In *Amoco Production Co. v. Southern Ute Indian Tribe*, the Supreme Court narrowly interpreted the definition of "coal" in the 1909 and 1910 acts to exclude CBM gas.

The second dispute arose from the tension between Native Americans' traditional usufructuary rights to hunt and fish and state regulation of these activities to conserve wildlife. In *Minnesota v. Mille Lacs Band of Chippewa Indians*, the Supreme Court interpreted a series of mid-nineteenth century events—an 1850 executive order, an 1855 treaty, and Minnesota's entering the Union in 1858—to leave intact an 1837 Treaty recognizing the Chippewa's usufructuary rights to hunt and fish. Although focused upon the complex facts underlying this case, the Supreme Court's decision further develops the subtleties of Indian treaty interpretation.

In *City of Monterey v. Del Monte Dunes*, the Supreme Court clarified some aspects of its takings jurisprudence. In overruling the Ninth Circuit, the Supreme Court held that the *Dolan* "rough proportionality" framework applied only to land use exactions and not to denials of development permits. The Court also established that the Seventh Amendment affords a limited right to a jury trial for takings claims brought pursuant to 42 U.S.C. § 1983 where liability depends upon the resolution of factual disputes. Nonetheless, the Court sidestepped the opportunity to resolve growing doctrinal confusion over the relationship between takings and substantive due process claims.

The past year added another chapter in the nation's long political and legal struggle to address the problem of long-term storage of nuclear waste. In its ongoing effort to resist becoming the nation's principal nuclear waste repository, the state of Nevada sought money from the Nuclear Waste Fund, a federal fund established to defray the additional costs of state oversight and site characterization activities associated with the evaluation of a nuclear waste repository beneath Yucca Mountain. The Ninth Circuit upheld the Department of Energy's denial of this request, rejecting statutory and federalism attacks on the denial of funding.

16. The scope of this right to a jury trial, however, remains to be developed. See, e.g., *Buckles v. King County*, 191 F.3d 1127 (9th Cir. 1999) (distinguishing *Del Monte Dunes* in denying right to jury trial for takings liability).
17. *See Nevada v. United States Dep't of Energy*, 133 F.3d 1201 (9th Cir. 1997).
The Notes in this issue reflect the combined efforts of 14 second-year students and a team of four third-year advisors under the supervision of professors working in environmental and natural resources law. ELQ and the Boalt environmental law faculty endeavor to make this compendium a useful, reliable, and up-to-date resource for practicing lawyers, judges, policymakers, and the academic community working in the ever-changing field of environmental and natural resources law. In order to better achieve these goals, we will be shifting the publication schedule for future Annual Reviews to the spring following the year covered. Therefore, the Annual Review's compendium of Notes spanning developments from September 1, 1999 through August 31, 2000 will be published in Volume 28, Issue 2, which is slated for publication in spring 2001.