Hardrock Minerals, Energy Minerals, and Other Resources on the Public Lands: The Evolution of Federal Natural Resources Law

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HARDROCK MINERALS, ENERGY MINERALS, AND OTHER RESOURCES ON THE PUBLIC LANDS: THE EVOLUTION OF FEDERAL NATURAL RESOURCES LAW

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Mineral law in the United States always has been closely related to public land law. The reason is simple: most large ore bodies have been found on lands that were—and in many cases still are—owned by the federal government. For a century, federal mineral law was considered a subject unto itself, independent of any other public land policy priorities. That is no longer the case. Instead, federal minerals are only one of several federal resources available for disposition or allocation. Mineral extraction now is seldom universally considered the highest and best use of the land, overshadowing all other values.

This article traces the evolution of federal public land and resource law, emphasizing developments pertinent to the minerals industries. The first section provides, in a somewhat jaundiced fashion, a summary of the law as it exists in 1998. Subsequent sections outline the chronology of public land developments since the birth of the Republic.

I. THE TROUBLE WITH FEDERAL PUBLIC LAND LAW IN 1998

The United States in 1998 owns roughly 660 million acres of land in fee, plus less-than-fee interests in many millions more acres, and it controls the seas and seabeds from three to 200 miles offshore.† Only a small fraction of the

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‡ Tyler Professor of Law, University of Kansas. The authors apologize, sort of, for the plethora of references to their own works. Those works are as authoritative as any other, however, and the method is convenient.

1. See generally 1 George Cameron Coggins & Robert L. Glicksman, Public Natural Resources Law § 1:01[2] (1990) [hereinafter PNRL]. References to PNRL include all three volumes of the treatise and the 19 updating Releases published to date.

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government's holdings are devoted to traditional governmental uses such as forts, courthouses, and post offices. The great bulk of the federal lands are under the jurisdiction of four main (and many other lesser) government agencies located in several departments. Those lands are divided into five major national "systems"—parks, forests, wildlife refuges, BLM public lands, and wilderness—each of which is further subdivided into many management categories. The "nongovernmental" federal lands are to be managed for seven major, overlapping resources or uses: water, minerals, timber, livestock forage, wildlife, recreation, and preservation.

Traditional public land law comprised those legal rules and doctrines by which the public domain lands were transferred to states and private entities. Because very few such transactions now occur, the term "public land law" is obsolete; "federal public natural resources law" is a far more accurate description of current law in this area.

In many respects, federal public natural resources law in 1998 is an unholy mess. First, there is just too damn much of it: an estimated 3,000 statutes, plus volumes of regulations, voluminous jurisprudence, agency manuals, arcane doctrines, and thousands of books and articles. Despite this bulk, Congress has ducked many important questions by enacting gobbledygook laws, such as the Multiple-Use, Sustained-Yield Act (MUSA), which use all the right words to say virtually nothing. Some federal laws apply to all of the federal natural resources, but each resource is governed by series of separate laws as well. The allocation mechanism for each federal resource also differs drastically:

- water is "appropriated"
- hardrock minerals are "located"
- fuel minerals are "leased" (and each of the half dozen or so leasing systems differs sharply from the others in some respects)
- common minerals are "sold"
- timber is obtained by "contract"
- forage is allocated by "permit"
- commercial access is pursuant to a "right-of-way"

2. See id. § 7.02[1].
4. See 1 PNRL, supra note 1, § 1.02[2].
5. Id. § 1.02[3][a].
7. See 3 PNRL, supra note 1, §§ 16.01-02.
9. See 3 PNRL, supra note 1, § 24.03.
• hunters and fishermen need written “licenses”

• other recreationists have “implied licenses”

• and the interest of preservationists does not yet have a label.

In each case, the quantum or degree of property right devolving upon the resource recipient also differs drastically. A water right is usufructuary and dependent;10 an unpatented mining claim is defeasible;11 a mineral lease may be conditional;12 a grazing permit is (theoretically) a mere privilege;13 and so on.14

Much public natural resources law is ambiguous if not incomprehensible. Standardless delegations of legislative power abound;15 unreal distinctions are prominent;16 jurisdictional boundaries often are questionable;17 over- and underinclusion is common, as are overlapping provisions and doctrines;18 doctrines are undemocratic;19 much law is obsolete;20 and a lot is unfair.21 Economically, the structure of the law is ridden with unjustifiable preferences, subsidies, and advantages for the privileged few. Consider the following:

• hardrock miners pay nothing for valuable minerals and $5 per acre for fee title to the claim

• national park patrons pay very low access fees

• national park concessionaires pay even lower fees, proportionately22

• western irrigators are heavily subsidized

• federal timber sales consistently lose money

• recreational access to most federal holdings is free

• western ranchers pay less than $.05 a day to feed a half-ton cow

13. See, e.g., 3 PNRL, supra note 1, § 19.02[1].
14. See generally id. § 19.03.
15. See 1 PNRL, supra note 1, § 6.01[3].
17. See id.
18. The bald eagle, for example, is protected by three federal laws while many species are under the aegis of none.
19. For example, only adjacent landowners (for the most part) qualify for grazing privileges under the Taylor Act. See 43 U.S.C. §§ 315-315r (1994).
21. See, e.g., supra note 19.
• surface owners can veto the mining of federal coal

• the government tries to eradicate coyotes, free of charge to the sheep ranchers

• some noncompetitive leasing lives on

• and states take large shares of sale or lease receipts—up to 90% in Alaska—not to mention payments in lieu of taxes and dozens of other subsidies.23

Add to this somewhat slanted picture the cartographic chaos that characterizes land ownership patterns in the West and the resulting plethora of access difficulties,24 revolving-door relationships between resource industries, resource colleges, and federal resource agencies,25 the attitudinal perversities that manifest themselves in Western demagoguery,26 the proliferation of procedural requirements,27 and the ever-present fraud and abuse28—these are some of the reasons why the law as it has evolved can be characterized as an “unholy mess.”

How did this happen? The beginning of this story is the ratification of the United States Constitution, and the beginning is often a good place to start.

II. THE UNITED STATES CONSTITUTION

The year is 1791, and the new Constitution has been ratified by the former colonies, replacing the Articles of Confederation. The rectangular survey system, featuring sections and townships, had then been in place for decades.29 The western boundary of the infant country is the Mississippi River, but most of what lies beyond the Appalachian chain is unknown to the early Americans. As a part of the compromise deal that became the Constitution, the original states with land claims beyond their present boundaries out to the Mississippi ceded those lands to the new national government.30 Thus, at nationhood, the United States owned roughly half of the territory over which it asserted sovereignty.

23. See 1 PNRL, supra note 1, § 5.05.
24. See, e.g., Sierra Club v. Hodel, 848 F.2d 1068 (10th Cir. 1988).
29. See 1 PNRL, supra note 1, § 10C.07[2][a].
A. The Enclave Clause

The Constitution contains two provisions that define federal land ownership and several more that affect it. Article I, on the powers of the legislative branch, grants the United States exclusive jurisdiction over the District of Columbia and such other lands and facilities that the United States may purchase with consent of the state where located.\(^{31}\) This "Enclave Clause" is of minor importance in federal land law because its apparent restrictions (exclusivity, purchase, purpose, and cession) were interpreted largely out of existence more than a century ago,\(^ {32}\) because only a small fraction of the federal lands are held in enclave or quasi-enclave status,\(^ {33}\) and because Congress often has recognized the undesirability of excluding application of all state law from any tract.\(^ {34}\)

B. The Property Clause

The Property Clause in Article IV grants Congress the power to dispose of and make "needful" rules for property belonging to the United States.\(^ {35}\) Although this Clause contains no qualifying language, many long argued that its true meaning was to require Congress to dispose of any lands the United States acquired.\(^ {36}\) This view found some support in the 1845 Pollard's Lessee\(^ {37}\) decision of the Supreme Court. The Pollard Court held that lands submerged beneath navigable waters automatically became state property upon statehood, a manifestation of the equal footing notion.\(^ {38}\) However anomalous, that is still the law, subject to certain exceptions.\(^ {39}\) But some language in the nearly opaque opinion could be construed as opining that the United States had no legislative powers over federal lands within states and indeed was merely a trustee bound to dispose of them.\(^ {40}\)

That latter aspect of Pollard did not survive the 19th century. The Court in Camfield v. United States\(^ {41}\) not only upheld federal power over federal lands, it also extended the federal Property Clause power to private activities on adjacent private lands (in that case, fencing) that interfere with federal purposes.\(^ {42}\) Light v. United States,\(^ {43}\) in 1911, was even more definitive. The Court plainly stated that Congress could do whatever it wished for, to, or with federally owned land,

\(^{31}\) See U.S. Const. art. I, § 8, cl. 17.
\(^{32}\) See Coggins, ET AL., supra note 3, at 173-81.
\(^{33}\) See id. at 173.
\(^{35}\) See U.S. Const. art. IV, § 3, cl. 2.
\(^{36}\) See, e.g., 1 PNRL, supra note 1, § 3.03[3][a].
\(^{38}\) See id. at 224.
\(^{39}\) See 1 PNRL, supra note 1, § 3.03[3][a].
\(^{40}\) Pertinent portions of the opinion are reproduced at Coggins, ET AL., supra note 3, at 58-61.
\(^{41}\) 167 U.S. 518 (1897).
\(^{42}\) See id. at 536-37.
\(^{43}\) 220 U.S. 523 (1911).
including permanently reserving it for conservation.44

Still, the states’ rightists continued to assert the unconstitutionality of federal ownership or a milder variant of that idea, that the United States as a landowner is merely a landowner and thus is fully subject to state law as is any other landowner.45 New Mexico so argued in the seminal Kleppe v. New Mexico46 litigation, decided by a unanimous Court in 1976. Justice Marshall opined in no uncertain terms that congressional power over the federal lands pursuant to the Property Clause is complete, unrestricted, plenary, and preemptive.47 If state law conflicts with the federal rule or the federal purpose, it is preempted. Period.

That should have been the end of the matter, but some still argue the illegitimacy of federal ownership and the sanctity of state law.48 The Sagebrush Rebels of the 1970s did so, and they lost.49 The Wise Users and County Supremacists of the 1990s are doing the same, and they too have lost and will continue to lose.50

C. The Supremacy Clause

The other provisions of the United States Constitution with a fairly direct bearing on public natural resources law include the Supremacy Clause in Article VI51 and the Takings Clause of the Fifth Amendment.52 Kleppe made clear that federal law, where applicable, ousted contrary state or local law on the federal lands.53 The power of Congress to displace state law thus is beyond cavil, but the question whether Congress has done so in any particular instance can be problematic. The general test for preemption is that it will be found if any one of four conditions is present:

• Congress explicitly says so,54

• Congress intended to occupy the entire regulatory field,55

• the state law directly conflicts with federal law,56 or

44. See id. at 527-28.
47. See id. at 543.
48. See e.g., United States v. Vogler, 859 F.2d 638 (9th Cir. 1988).
51. See U.S. CONST. art. VI, § 2.
52. See id. amend V.
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- state law stands as an obstacle to the accomplishment of the federal purpose.\textsuperscript{57}

Congress seldom explicitly preempts, and it virtually never tries to occupy, any entire regulatory field in federal land law (including law applicable to enclaves). Direct conflicts are rare but easy to determine when found. In the 1997 \textit{South Dakota Mining Ass'n} case,\textsuperscript{58} for example, the court held that a county ordinance which barred surface mining activities authorized by the General Mining Law directly conflicted with that federal law and was therefore preempted.\textsuperscript{59} The critical inquiry in most preemption cases, therefore, is whether state law stands as an obstacle to the accomplishment of federal purposes.

The leading modern preemption case in federal natural resources law is \textit{California Coastal Commission v. Granite Rock Co.},\textsuperscript{60} decided by a sharply divided Court in 1987. Granite Rock located valuable white limestone mining claims on national forest land. Although the Forest Service approved Granite Rock's mining plan proposal, the state Coastal Commission insisted that the company apply for a state permit as well (which it refused to do). In Granite Rock's suit to prevent enforcement of the state permit requirement, the Ninth Circuit held that the requirement was preempted,\textsuperscript{61} but the Supreme Court reversed.\textsuperscript{62} Justice O'Connor's majority opinion found no evidence of any preemptive purpose in Forest Service regulations implementing the 1897 Organic Act. In fact, those regulations affirmatively required compliance with state laws and regulations.\textsuperscript{63} Justice O'Connor assumed arguendo that the Federal Land Policy and Management Act (FLPMA)\textsuperscript{64} and the National Forest Management Act (NFMA),\textsuperscript{65} the general land planning and management statutes for the BLM and the Forest Service, preempt the application of state land use plans to unpatented mining claims in the national forests.\textsuperscript{66} But, drawing a tenuous distinction, she concluded that the two statutes did not preempt state regulation of federal land use for environmental protection purposes.\textsuperscript{67} Because Granite Rock never applied for a permit, its facial challenge to the state regulatory scheme had to fail if any possible set of conditions would be permissible as environmental regulation.\textsuperscript{68} The state Commission asserted that it merely sought to impose reasonable environmentally protective regulations, not to ban


\textsuperscript{58} South Dakota Min. Ass'n v. Lawrence County, 977 F. Supp. 1396 (D.S.D. 1997).

\textsuperscript{59} See \textit{id.} at 1405-06.

\textsuperscript{60} 480 U.S. 572 (1987).

\textsuperscript{61} See California Coastal Comm'n v. Granite Rock Co., 768 F.2d 1077 (9th Cir. 1985).


\textsuperscript{63} See \textit{id.} at 583 (citing 36 C.F.R. §§ 228.5(b), 228.8(19)).

\textsuperscript{64} 43 U.S.C. §§ 1701-1785 (1994).


\textsuperscript{66} See Granite Rock, 480 U.S. at 585.

\textsuperscript{67} See \textit{id.} at 586-87.

\textsuperscript{68} See \textit{id.} at 589.
mining on federal lands. The case therefore involved an attempt by the state to impose nonconflicting environmental standards. The dissenters claimed that the state permit requirement was duplicative of the Forest Service program and therefore inherently in conflict with the latter, and that the state permit scheme was indeed a land use control program and therefore preempted by federal statute. The practical upshot of the Granite Rock decision is that a resource developer faced with state as well as federal regulatory requirements will have to go through the state permitting process, perhaps rendering moot or unwise a further challenge to the specific state restrictions.

D. The Takings Clause

The Takings Clause of the Fifth Amendment has had relatively little impact in federal public natural resources law, despite its notoriety in the area of private land use control. The main reason for this is that the claimant seldom can assert a complete property right to the land or resource at issue because the United States has the ultimate fee interest in the property. This conclusion, however, has not prevented substantial litigation over the question of exactly when a private property interest in public natural resources arises such that the takings clause applies. The bulk of this litigation in recent years has centered around attempted federal regulation of mining activities on the federal lands.

The Supreme Court described when a private property right in public resources suffices to trigger the protections of the Takings Clause in its 1985 United States v. Locke decision. The Court held that the forfeiture of valuable unpatented mining claims for sand and gravel due to the holders’ failure to comply with FLPMA’s annual recordation requirement (even though the Lockes missed the deadline by only a day) did not amount to a taking of property rights in those claims. The recordation scheme contained reasonable regulatory restrictions whose application did not impermissibly interfere with the Lockes’ reasonable, investment-backed expectations. In the course of its opinion, the Court noted the attenuated nature of private property rights in public natural

69. The Court also held that the state regulatory scheme was not preempted by the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1465 (1994), or the General Mining Law, 30 U.S.C. §§ 22-45 (1994). See Granite Rock, 480 U.S. at 591-93.
70. See Granite Rock, 480 U.S. at 594.
71. See id. at 604-06 (Powell, J., concurring and dissenting).
72. See id. at 612-14 (Scalia, J., dissenting).
73. See 1 PNRL, supra note 1, § 5.03[1J][d][iv].
74. See U.S. CONST. amend. V (“nor shall private property be taken for public use without just compensation”).
75. See 1 PNRL, supra note 1, § 4.05.
76. See id. See also United States v. Fuller, 409 U.S. 488 (1973); Alves v. United States, 133 F.3d 1454 (Fed. Cir. 1998).
77. 471 U.S. 84 (1985).
78. See id. at 107. Cf. Jones v. United States, 121 F.3d 1327 (9th Cir. 1997) (annual fee requirement did not violate procedural due process); Kunkes v. United States, 78 F.3d 1549 (Fed. Cir.) (provision of Interior Department appropriations bill resulting in abandonment of unpatented mining claim for failure to pay annual rental fee of $100 per claim did not effect a taking), cert. denied, 117 S. Ct. 74 (1996).
resources:

The power to qualify existing property rights is particularly broad with respect to the “character” of the property rights at issue here. Although owners of unpatented mining claims hold fully recognized possessory interests in their claims, we have recognized that these interests are a “unique form of property.” The United States, as owner of the underlying fee title to the public domain, maintains broad powers over the terms and conditions upon which the public lands can be used, leased, and acquired. . . . Claimants thus must take their mineral interests with the knowledge that the Government retains substantial regulatory power over those interests. 79

Similarly, the Court has held that an offshore oil and gas lease does not vest in the lessee a full property interest in the minerals; thus, cancellation of the lease to avoid environmental contamination would not amount to a taking. 80

A series of lower court cases has addressed the issue of when a prospective miner of hardrock minerals seeking to patent its claims acquires a sufficient property interest to invoke the takings clause. 81 In Freese v. United States, 82 the Claims Court held in 1981 that a statute withdrawing from mineral location a national recreation area did not effect a taking by denying the holders of unpatented claims the ability to obtain fee title patents. “At best,” the court remarked, “plaintiff has suffered a denial of the opportunity to obtain greater property than that which he owned upon the effective date of [the statute]. This cannot be deemed the divestment of a property interest, save by the most overt bootstrapping.” 83 In subsequent litigation, the Claims Court held that the Forest Service did not commit a taking by regulating Freese’s unpatented mining claims because his interest was only possessory in nature and the agency’s regulation did not extinguish the essential attribute of that interest. Economically viable development of the claims was still possible. 84

The Freese litigation did not resolve the question of whether the filing of a patent application and the payment of applicable fees gives rise to a compensable right to a patent. The Ninth Circuit ruled in Swanson v. Babbit 85 that no such right arises as long as the Interior Department contests the validity of the patent application. As a result, legislation enacted during such a challenge did not require compensation of the holder of claims made unpatentable by that legislation. 86 In Cook v. United States, 87 however, the Court of Federal

79. See Locke, 471 U.S. at 104-05 (citations omitted). See also Western Energy Co. v. Dep’t of the Interior, 932 F.2d 807, 812-13 (9th Cir. 1991); Western Fuels-Utah v. Lujan, 895 F.2d 780, 789 (D.C. Cir. 1990) (concerning regulation of coal mining).
83. Id. at 758.
84. See Freese v. United States, 6 Cl. Ct. 1 (1984), aff’d, 770 F.2d 177 (Fed. Cir. 1985).
85. 3 F.3d 1348 (9th Cir. 1993).
86. See id. at 1353-54. Cf. Seldovia Native Ass’n, Inc. v. United States, 35 Fed. Cl. 761 (the BLM did

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Claims denied the government's motion for summary judgment on a taking claim, concluding that the filing of a patent application and the payment of the statutory purchase price vested equitable title to the land in the applicants. Swanson was distinguishable because the BLM in Cook never disputed the applicants' compliance with statutory requirements. Rather, its delay in approving the patents was due to its own failure to verify the information in the application relating to the applicants' allegations of a valuable discovery. In two earlier cases, the government's failure to process mining claims in a timely manner did not give rise to compensable takings, even though, in one case, the result was loss of the claims.

A government regulatory action which appears to amount to an attempt to force transfer of title to the government itself or to a third party is susceptible to being characterized as a compensable taking. In United Nuclear Corp. v. United States, for example, the Secretary of the Interior approved the plaintiff's purchase of leases from the Navajo Tribe. After the plaintiff spent millions of dollars exploring for and locating uranium deposits, the Secretary afforded the Tribe a veto power over approval of the company's mining operations. The Tribe subsequently withheld approval, even though the mining plan satisfied applicable federal regulations. The Federal Circuit held that the decision to vest veto power in the Tribe took the plaintiff's property. The leases were valuable property rights, not mere expectancies, and the agency's refusal to approve the mining plan amounted to a destruction of the company's reasonable investment-backed expectations. Further, the Secretary's decision was an effort "to enable the Tribe to exact additional money from a company with whom it had a valid contract." The Court of Federal Claims reached a similar result in the analogous NRG v. United States case, holding that a 1980 statute canceling coal prospecting permits so that the Secretary could negotiate permit and lease cancellation agreements acceptable to the Cheyenne Tribe effected a taking.

not take property of Alaska Native Village by rejecting tract selections under the Alaska Native Claims Settlement Act because no patent to the selected tracts had been issued), reconsideration denied in relevant part, 36 Fed. Cl. 593 (1996).
88. See id. at 439.
89. See id. at 442-43. Cf. Kerr-McGee Corp. v. United States, 32 Fed. Cl. 43, 49-50 (1994) (mere assertion by mineral lease applicant that it has discovered valuable deposit does not provide it with a vested property right for purposes of the takings clause). In Payne v. United States, 31 Fed. Cl. 709 (1994), the court stayed an action under the Tucker Act for compensation for an alleged taking of unpatented mining and millsite claims so that the BLM could assess the validity of the claims. See also Holden v. United States, 38 Fed. Cl. 732, 735-36 (1997).
91. See Last Chance Mining Co., 12 Cl. Ct. at 556-57.
92. 912 F.2d 1432 (Fed. Cir. 1990).
93. See id. at 1437.
94. Id. at 1438.
95. 30 Fed. Cl. 460 (1994).
Assuming that the holder of private mineral rights in public lands is able to satisfy the threshold requirement of showing a vested property interest, the holder is more likely to allege that a taking occurred as a result of adverse economic impact than an attempted forced transfer of title to a third party such as an Indian tribe. Such takings claims for the most part have not fared well. In *Rocky Mountain Oil & Gas Ass’n v. Watt*, for example, the Tenth Circuit found no taking despite the adoption of new, stringent management standards for mineral claims and leases in BLM wilderness study areas. The Federal Circuit in 1990 held that the Uranium Mill Tailings Radiation Control Act of 1978, which required costly reclamation, was not a taking.

An applicant for permission to drill for oil and gas on BLM public lands received a more favorable reception from the Court of Federal Claims in *Bass Enterprises Production Co. v. United States*. The BLM denied drilling permission for a site underneath the proposed Department of Energy Waste Isolation Pilot Plant (WIPP) to give the Environmental Protection Agency (EPA) time to determine whether drilling would comply with its disposal regulations. The court found that the plaintiff suffered a serious financial loss which rendered the lease valueless and interfered with its reasonable investment-backed expectations. Therefore, a permanent taking occurred. On appeal, however, the Federal Circuit reversed. A permanent taking could not have occurred because Congress required the EPA to determine whether condemnation of the leases was necessary to ensure the integrity of the WIPP facility. At most, then, the denial of the drilling permits amounted to a temporary taking: the result of EPA’s determination would be either issuance of the lease or condemnation and compensation of the lessee. The Federal Circuit remanded to determine whether a temporary taking had occurred.

The Claims Court in *Pauley Petroleum, Inc. v. United States* found that deferral of the right to use public mineral resources did not trigger taking liability, although the case was decided before the Supreme Court endorsed the notion of temporary takings in the 1987 case, *First English Evangelical Luther-
an Church v. County of Los Angeles.\textsuperscript{110} Offshore oil lessees asserted that Interior Department regulation of leasehold operations worked an indefinite suspension of their operations. But the court regarded the temporary suspension of the lessees’ right to drill as insufficiently severe as to constitute a taking.\textsuperscript{111} In Eastern Minerals International, Inc. v. United States,\textsuperscript{112} on the other hand, the Court of Federal Claims in 1997 characterized the Office of Surface Mining’s “war of attrition” on a company seeking permit to mine coal as a requisition of its right to lease renewal.\textsuperscript{113}

The government runs the risk of incurring liability for a taking of private property rights in public mineral resources when it attempts to transfer vested interests from one person to another\textsuperscript{114} or imposes regulatory restrictions in the nature of physical invasions. It also risks incurring liability for a temporary taking when the effect of extraordinary delays in processing applications for patents or drilling permission is severe diminution of the value of those interests. Despite a renewed interest in the Supreme Court in extending the scope of the protection afforded property rights by the takings clause and a resulting reworking of the criteria for evaluating takings claims,\textsuperscript{115} however, the courts for the most part have not applied expanded protections in a manner which impairs significantly regulatory authority over federal lands and resources.\textsuperscript{116}

In sum, 200 years of interpretation have made the constitutional meaning in terms of federally owned lands and resources fairly clear. Congress can do as it wishes, including delegating broad management powers to agencies.\textsuperscript{117} Whatever it does overrides contrary state law and seldom affords interests affected a just compensation remedy.

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\textsuperscript{110} 482 U.S. 304 (1987).
\textsuperscript{111} See Pauley Petroleum, 591 F.2d at 1327.
\textsuperscript{112} 39 Fed. Cl. 621 (Fed. Cir. 1997).
\textsuperscript{113} See id. at 625.
\textsuperscript{114} Cf. Preseault v. United States, 100 F.3d 1525 (Fed. Cir. 1996) (taking resulting from conversion of an abandoned railroad easement into a public recreational trail). Due to the proliferation of opinions in the case, one of the dissenting judges characterized it as a decision with “no precedential value.” Id. at 1555 (Clevenger, J., dissenting).
\textsuperscript{116} For nonmineral cases in which the government escaped takings liability, see e.g., Andrus v. Allard, 444 U.S. 51 (1979); Clajon Prod. Corp. v. Patena, 70 F.3d 1566 (10th Cir. 1995); Christy v. Hodel, 857 F.2d 1524 (9th Cir. 1988), cert. denied, 490 U.S. 1114 (1989); Mountain States Legal Found. v. Hodel, 799 F.2d 1423 (10th Cir. 1986), cert. denied, 480 U.S. 951 (1987). In a few instances, however, the courts have invalidated regulatory efforts under the takings clause. The Supreme Court twice invalidated provisions of the Indian Land Consolidation Act, 25 U.S.C. § 2206 (1994), which restricted the descent and devise of land held by Native Americans. See Babbitt v. Youpee, 117 S. Ct. 727 (1997); Hodel v. Irving, 481 U.S. 704 (1987). Both the Court of Federal Claims and the Federal Circuit have afforded a solicitous ear to property owners claiming that restrictions on development of wetlands have worked a taking. See, e.g., Loveladies Harbor, Inc. v. United States, 28 F.3d 1171 (Fed. Cir. 1994); Florida Rock Indus., Inc. v. United States, 18 F.3d 1560 (Fed. Cir. 1994); Bowles v. United States, 31 Fed. Cl. 37 (1994); Formanek v. United States, 26 Cl. Ct. 332 (1992).
\textsuperscript{117} See generally United States v. Grimaud, 220 U.S. 506 (1911).
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III. Acquisition of the Public Domain

Return again to the year 1791. The English ruled Canada; the Spanish had settlements from St. Augustine to San Francisco; French trappers roamed the interior river systems of the continent; and the Russians were exploring the far northwest. Much of this foreign occupation was unknown to the Founding Fathers. They had no way of envisioning a single nation spreading from Key West to Nome, Alaska, and from San Diego to Chicago. But, of course, all this came to pass in less than a century. By 1867, the United States had acquired sovereignty from other nations and title from Indian tribes\textsuperscript{118} to well over a billion acres of land beyond the Mississippi, not counting Texas.\textsuperscript{119}

IV. The Disposition Era, 1789-1934

As indicated above, traditional 19th century public land law comprised the rules and means by which the United States transferred its lands and resources to states or private parties. Disposition was the dominant federal policy throughout the 1800s, but it was not the exclusive policy. Congress experimented with pine tree plantations for ship masts in the South and with lead mine leasing in the Midwest.\textsuperscript{120} The experiments ended because of the fraud and perjury that characterized so much of national settlement. Further, the legislative and executive branches routinely reserved certain lands for forts, Indian tribes, and similar purposes.\textsuperscript{121} With the reservation of Yellowstone National Park in 1872 and the beginnings of the national forest system in 1891, the Conservation Age began to overtake the Disposition Era.

But, from ratification of the Constitution until 1934, the United States sold or gave away over a billion acres. The main recipients were war veterans, states, railroads, ranchers, miners, and, of course, the storied homesteaders.\textsuperscript{122} For purposes of this article, the most important of these giveaways took the form of the General Mining Law (GML) of 1872,\textsuperscript{123} whose principal purpose was to promote mineral development. The GML gave a locator of a mining claim the right to extract the mineral located without charge, the right to exclusive occupation of the surface of the claim, and, in many instances, the right, virtually for free, to receive a fee simple patent to the land upon proof of discovery and assessment work.\textsuperscript{124} As generous as this law was, many claimants nevertheless found ways to abuse it by staking claims for non-mineral purposes or without having discovered valuable mineral deposits.\textsuperscript{125}

\begin{itemize}
  \item \textsuperscript{118} See generally Johnson v. M'Intosh, 21 U.S. (8 Wheat.) 543 (1823).
  \item \textsuperscript{119} See COGGS, ET AL., supra note 3, at 45-49.
  \item \textsuperscript{120} See PAUL GATES, HISTORY OF PUBLIC LAND LAW DEVELOPMENT ch. 4 (1968).
  \item \textsuperscript{121} See, e.g., Fort Leavenworth R. Co. v. Lowe, 114 U.S. 525 (1885).
  \item \textsuperscript{122} See GATES, supra note 120, passim; COGGS, ET AL., supra note 3, at ch. 2.
  \item \textsuperscript{123} See 30 U.S.C. §§ 21-54 (1994).
  \item \textsuperscript{124} See 1 PNRL, supra note 1, § 2.02[3][b].
  \item \textsuperscript{125} See id.
\end{itemize}
Most details of the disposition-oriented statutes are of little concern today because disposition, although theoretically possible in some instances, effectively is a dead letter in 1998. The Taylor Grazing Act of 1934\textsuperscript{126} effectively closed the public domain and ended the land giveaway by withdrawing the remaining unsettled, unreserved lands into grazing districts.\textsuperscript{127} For three generations, therefore, the general outlines of the present federal landed estate (except in Alaska) have been set. Despite various efforts to reform it in recent years, the GML remains on the books (although Congress has adopted a series of moratoria on the issuance of hardrock mineral patents in annual Department of the Interior appropriations legislation).\textsuperscript{128}

The legacies of even the repealed Disposition-Era legislation continue to complicate and bedevil federal land management. One such legacy is the cartographically chaotic land ownership map of the western states. Checkerboarded sections,\textsuperscript{129} the "blue rash" of state school sections,\textsuperscript{130} isolated federal sections,\textsuperscript{131} interspersed hardrock mining claims,\textsuperscript{132} ribbon-shaped ranches along watercourses,\textsuperscript{133} special federal zoning categories\textsuperscript{134}—all of these are highly productive of access disputes and other related difficulties. That the federal lands are concentrated in the West, and that they tend to be least agriculturally productive, exacerbate such problems. Another legacy is attitudinal: engrained in all too many westerners is the notion that the world owes me a living because I am a better person than the rest of you. This attitude and its lesser variants sometimes breed unrealistic expectations as well as outright lawlessness.\textsuperscript{135}

V. THE AGE OF CONSERVATION, 1872-?

In 1872, the Disposition Era was in full swing. The Homestead Act\textsuperscript{136} of 1862 offered free land to all comers; the transcontinental railroads reaped federal sections as the rails sprang forward; new states were forming and old states received land to support A&M colleges;\textsuperscript{137} and Congress legitimized miners' trespasses and gave them the land overlying their claims for pitances.\textsuperscript{138} But 1872, the same year in which the GML was enacted, also marked the inception

\textsuperscript{127} See 3 FNRL, supra note 1, § 19.02.
\textsuperscript{129} See Leo Sheep Co. v. United States, 440 U.S. 668 (1979).
\textsuperscript{132} See 3 FNRL, supra note 1, § 25.03.
\textsuperscript{133} See COGINS, ET AL., supra note 3, at 691-93.
\textsuperscript{134} See, e.g., 43 U.S.C. § 1711(a) (1994).
\textsuperscript{135} See, e.g., Glickman, supra note 26.
\textsuperscript{137} See, e.g., COGINS, ET AL., supra note 3, at 78.
of a new policy. Congress in that year withdrew from availability for exploitation two million acres in northwest Wyoming as a "pleasuring ground" for the people. The reservation of Yellowstone National Park was, strictly speaking, more of a preservational than conservational action, but it unquestionably was the catalytic action that sparked the Age of Conservation. The onset of conservation was the beginning of the end for homesteading; it also removed certain federal lands from areas available for private mineral exploitation.

A. Conservation Reservations

Conservation as a theory and practice is an offspring of the progressive wave that swept the country from 1888 (when the ICC was chartered) to World War I. The word itself was coined by Gifford Pinchot, the first Forest Service chief, and it meant basically retaining lands in federal ownership and managing them in such a fashion as to obtain the most material benefits for the most people in the long run. Science would guide this form of utilitarianism.

Congress, in fits and starts, generally concurred. In 1891, Congress authorized the President to set aside lands as forest reserves, and, in 1897, it specified that these lands were to be used as timber and water storehouses. Congress later decided that Presidents had been overly liberal with this withdrawal authority and repealed the authorization, but not before the 190-million acre national forest system had become a lasting reality. Congress also created a number of new national parks in this era, and, in 1916, formally designated these areas as the national park system, to be managed by the National Park Service. Except for claims that predate withdrawal and reservation, most mining activity was barred in the national parks, and preexisting claims are subject to invalidation for failure to record. Congress also enhanced the park system in 1906 by empowering the President to set aside lands containing features of scientific or archaeological interest as national monuments to be included in the park system.

Another manifestation of the Conservation Age was creation of the national wildlife refuge system. Presidents, by unilateral actions, began reserving lands for wildlife habitat, and Congress added areas for similar purposes at odd intervals during the 20th century. The various wildlife areas were consolidated into a system in 1966 and now comprise about 90 million acres,
much of which is in Alaska.\textsuperscript{149} Congress gave the FWS new organic authority in 1997.\textsuperscript{150} Under that authority, commodity production, including mining activity, is subordinate to the priority uses of the national wildlife refuge system, wildlife-dependent recreational uses.\textsuperscript{151}

Early in this century, therefore, three of the primary conservation land systems had been more or less firmly established. That trend would climax in 1934, when Congress gave up on homesteading and authorized withdrawal of the remaining unclaimed, unreserved lands into grazing districts. Since 1934, nearly all federal lands outside Alaska have been designated for retention and conservation-type or preservation-type management.

Congress for a century concurred in executive withdrawals and itself reserved millions of acres for conservation and preservation, but Congress then as now was loath to spell out specific or precise standards for managing the reserved lands. And, when limits were specified in the law, they often were honored mostly in the breach. The 1897 Forest Service Organic Act, for instance, commanded that only selective timber cutting could be allowed in national forests,\textsuperscript{152} but otherwise it merely gave the Forest Service the most general guidance or limitations. The clearcutting prohibition was uniformly ignored by agency and industry after World War II until a court shut down the practice in 1975.\textsuperscript{153} The multiple use mandate governing formulation of the land use plans designed to control management of the national forests omits reference to minerals,\textsuperscript{154} but the Forest Service has broad discretion to allow and regulate\textsuperscript{155} mining-related activity.

The National Park Service Organic Act set out somewhat more specific reservation purposes but gave the NPS wide discretion to achieve those preservational/recreational purposes.\textsuperscript{156} The agency responsible for wildlife refuges (which had various names until 1966) had no general statutory authority; its operations were governed by individual refuge laws, executive orders, and tradition.\textsuperscript{157} The Reclamation Act of 1902\textsuperscript{158} set limits on who could receive subsidized water and under what conditions,\textsuperscript{159} but the irrigators evaded the limits while the Bureau of Reclamation looked the other way for decades.\textsuperscript{160} The Bureau of Land Management (BLM), the product of a 1946 merger of the Land Office and the Grazing Service, was from its inception a standardless

\begin{footnotes}
\item[149] See Fink, \textit{supra} note 147, at 5.
\item[151] See id. § 5(a) (to be codified at 16 U.S.C. § 668dd(a)(3)(C)).
\item[156] See generally 3 FNRL, \textit{supra} note 7, §§ 16.01-16.02.
\item[158] See, e.g., Schwenke v. Secretary of the Interior, 720 F.2d 571 (9th Cir. 1983).
\item[160] See 3 FNRL, \textit{supra} note 1, § 21B.03.
\item[161] See, e.g., Hamilton Candee, \textit{The Broken Promise of Reclamation Reform}, 40 HASTINGS L. J. 657 (1989).
\end{footnotes}
cipher of the livestock and mining industries.\textsuperscript{162} Not until the 1970s did the BLM, with new statutory powers, try to become a true conservation agency—a venture that died upon the ascension of Secretary James Watt in 1981.\textsuperscript{163}

Another aspect of the progressive/conservation period of 1890-1916 was a degree of judicial activism not seen before or since in federal public land law. The highlight decisions were Buford,\textsuperscript{164} Camfield,\textsuperscript{165} Illinois Central,\textsuperscript{166} Geer,\textsuperscript{167} Kansas v. Colorado,\textsuperscript{168} Winters,\textsuperscript{169} Light,\textsuperscript{170} and Midwest Oil.\textsuperscript{171} These decisions are now fundamental parts of the law. The Buford Court, building on a mining law precedent, held that all citizens have a license to graze their livestock on the public lands. The license was implicitly created by Congress’ knowledge of existing trespasses and its disinclination to do anything about them.\textsuperscript{172} Camfield in 1897 and Light in 1911 confirmed that congressional Property Clause power is plenary, unlimited, and preemptive.\textsuperscript{173} Geer in 1896 and Illinois Central in 1892 concerned the validity of state resources law. In Geer, the Court carved out an exemption from Commerce Clause prohibitions against resource-hoarding by states; Connecticut, said the Court, could forbid export of wild game because, as the owner of wildlife, the state could prevent commerce from even starting.\textsuperscript{174} Geer was premised on one aspect of a public trust notion, and Illinois Central took that doctrine into another dimension. By virtue of the public trust/equal footing doctrine of Pollard, Illinois, at statehood, became the owner of the lands underlying Chicago’s harbor. The Illinois Legislature, perhaps with improper incentives, decided to transfer the harbor to a railroad, Illinois later changed its mind, and the controversy over ownership ended up in the United States Supreme Court. The Court drew on a new and expanded version of the public trust doctrine to hold that Illinois as trustee could not divest itself of an area so important to the people for navigation, commerce, and fishing.\textsuperscript{175} In both cases, conservation of public resources was a central motif.

In Kansas v. Colorado and Winters v. United States, the Supreme Court invented new forms of property entitlements, both now standard aspects of

\textsuperscript{162} See PHILLIP O. FOSS, POLITICS AND GRASS (1960).
\textsuperscript{164} Buford v. Houtz, 133 U.S. 320 (1890).
\textsuperscript{165} Camfield v. United States, 167 U.S. 518 (1897).
\textsuperscript{166} Illinois Central R. Co. v. Illinois, 146 U.S. 387 (1892).
\textsuperscript{168} Kansas v. Colorado, 206 U.S. 46 (1907).
\textsuperscript{169} Winters v. United States, 207 U.S. 564 (1908).
\textsuperscript{170} Light v. United States, 220 U.S. 523 (1911).
\textsuperscript{171} United States v. Midwest Oil Co., 236 U.S. 459 (1915).
\textsuperscript{172} See Buford, 133 U.S. at 322-23. Miners, however, do not have unlimited access rights across federal lands, see, e.g., Clouser v. Espe, 42 F.3d 1522 (9th Cir. 1994), cert. denied, 515 U.S. 1141 (1995); Utah v. Andrus, 486 F. Supp. 995 (D. Utah 1979); Bob Strickler, 106 IBLA 1 (1988), despite arguments by industry to the contrary. See 2 PNLR, supra note 1, § 10E.01[3][c].
\textsuperscript{173} See 1 PNLR, supra note 1, § 3.03[3].
\textsuperscript{174} See Geer, 161 U.S. at 532. See 3 PNLR, supra note 1, § 8.02[2][a].
\textsuperscript{175} See Illinois Central, 146 U.S. at 452-53. See 1 PNLR, supra note 1, § 8.07.
public natural resources law. The Kansas Court arrogated unto itself the power to allocate interstate streams between states. The doctrine of equitable apportionment concedes primacy to Congress, but judicially operates to determine property rights in water when, as usual, Congress fails to act. The Winters doctrine created extensive water rights in the United States. The Court held that when the government reserved land for an Indian reservation, it implicitly reserved sufficient unappropriated water to serve the purpose of the reservation. That holding was later extended to all federal reservations.

Like Kansas v. Colorado, conservation impelled the judicial invention.

Midwest Oil in 1915 also was a triumph of progressive conservationism. President Taft in 1909 withdrew millions of acres from mining availability to protect federal petroleum reserves. He had no statutory warrant for doing so, although Congress gave him such authority the following year. The oil company defendant drilled and produced oil from a withdrawn tract, and the United States sued. The Court upheld the withdrawal. It did not decide whether the President had inherent authority to do it but held instead that Congress, knowing of the practices of prior presidents in withdrawing lands for military, Indian, and bird reservations, created the power by acquiescing in its exercise. Thus, the same rather circular logic used to create rights in trespassing miners and grazers was extended to creation of executive powers necessary to safeguard the public interest.

C. Dormancy

The last (perhaps posthumous) gasp of the progressive conservation era was enactment of the Mineral Leasing Act in 1920. This law removed coal, oil, gas, oil shale, and four chemical minerals from the location system and provided that they henceforth could be obtained only by leasing. Leasing affords the government far more control over the pace and degree of development on the federal land than the long-unregulated location mechanisms. The Supreme Court has often affirmed the Interior Secretary's broad discretion to decide whether or not to grant mineral leases.
The period from the First World War until 1964 was quiescent in public land law terms, at least as compared to the progressive era that preceded it. The Teapot Dome scandal led to considerable Interior Department caution in leasing petroleum resources, and the Depression effectively destroyed the oil and gas markets. The 1920s saw some land reacquisition initiatives but few noteworthy developments. The New Deal of the 1930s transformed the nature of the federal government, but little progress in federal land law occurred because the economic problems overshadowed conservation policies. World War II and its aftermath dominated the decade of the 1940s; conservation was not a prominent national concern.

Some seeds of the Preservation Age were sown in the 1950s. Sentiment for wilderness designation was fueled by the Wilderness Society, whose chief, Howard Zahnizer, enlisted Senator Humphrey of Minnesota in the cause. Pollution problems were exacerbated by boom times in some areas, notably Los Angeles. Social issues, especially segregation, took on new prominence. Development, exemplified by the national defense highway system and dams across the country, was the national priority. But a backlash was brewing.

VI. THE MODERN AGE OF PRESERVATION

The onset of the Age of Preservation may be traced to the Wilderness Act of 1964. It was a truly radical departure, one that could only have come about through the legislative wizardry of President Johnson and Senators Humphrey and Jackson.

A. 1964

Consider the situation on the federal lands in 1964. The BLM was a legislative bastard: it had a low budget, less public esteem, no organic statutory authority, and responsibility for the implementation and enforcement of hundreds, if not thousands, of pieces of congressional flotsam. The Forest Service increasingly was jettisoning its traditional custodial role for more activist lumber production. Recreational use of the federal lands was climbing almost exponentially as prosperity gave Americans more leisure time. The Park and Wildlife Refuge Systems continued to grow in acreage, but not in corresponding financial resources.

The federal land laws in 1964 were heavily tilted toward resource development and exploration. Homesteading was but a minor concern, although many of the 19th and early 20th century homesteading laws were still on the books. The major operative statutes were the General Mining Law of

190. See RODERICK NASH, WILDERNESS AND THE AMERICAN MIND (3d ed. 1982).
1872, the Forest Service Organic Act of 1897, the Reclamation Act of 1902, the Antiquities Act of 1906, the Pickett Act of 1910, the Mineral Leasing Act of 1920, the Taylor Grazing Act of 1934, and the Multiple-Use, Sustained-Yield Act of 1960. Also in the statutory mix was a nascent federal wildlife law in the form of the Lacey Act of 1900, the Migratory Bird Treaty Act of 1918, habitat acquisition laws, the Bald Eagle Protection Act of 1940, and the Fish and Wildlife Coordination Act of 1934. Federal water law, such as it was, was embodied in the Federal Power Act of 1920 and various sketchy Supreme Court doctrines. Alaska, made a state only five years before, was subject to various special laws, including statehood land selections.

In 1964, mining was widely thought to be the highest and best use of the federal lands. Oil companies, fearing declining petroleum reserves, were acquiring vast federal coal leases at little cost and with no developmental responsibilities. Oil shale interest waxed and waned. Offshore oil production and exploration rose dramatically. The “simo” lottery for onshore federal oil and gas leases had not yet experienced the fraud and abuse which would cause its demise a generation later. Clearcutting was replacing selective cutting as the harvest method of choice in the national forests and on the O & C lands. Recreation as a resource had been recognized by Congress in several statutes, but it remained a legal stepchild.

The most notable difference between 1964 and preceding years was the political climate. John Kennedy’s death in 1963 was a strong impelling factor for the wave of Great Society legislation during the rest of the decade. In public land law, the Wilderness Act of 1964 was the critical departure.

207. See supra notes 172-75 and accompanying text.
B. 1960s Legislation

The Wilderness Act, itself a compromise of sorts,\textsuperscript{213} was a part of a legislative package which included the Classification and Multiple Use Act (CMUA) of 1964\textsuperscript{214} and the law establishing the Public Land Law Review Commission (PLLRC).\textsuperscript{215} The Wilderness Act provided prospectors and prospective lessees with a twenty-year window of opportunity in which to locate claims or obtain leases,\textsuperscript{216} but few hardrock claims were located during that period\textsuperscript{217} and, effective January 1, 1984, wilderness areas were withdrawn from new mineral location and leasing.\textsuperscript{218} The CMUA directed the BLM to inventory the lands under its jurisdiction and classify them for their appropriate uses.\textsuperscript{219} Before the BLM classified or the PLLRC reported, however, Congress embarked on a series of initiatives that foreshadowed the deluge of legislation in the 1970s.

In 1965, Congress passed the Land and Water Conservation Fund Act,\textsuperscript{220} which funded and authorized federal and state purchases of land for public recreation. The following year saw the first federal endangered species legislation, a toothless but nevertheless innovative venture.\textsuperscript{221} At the same time, Congress consolidated the wildlife refuges into a management system.\textsuperscript{222} Then, proceeding from the example of the Buffalo National River,\textsuperscript{223} Congress in 1968 set in motion procedures for designating national wild and scenic rivers\textsuperscript{224} (in the process, withdrawing from hardrock mineral location all minerals within a quarter mile of the banks of a designated river\textsuperscript{225} and subjecting mineral leasing to regulation necessary to prevent pollution and unnecessary scenic impairment)\textsuperscript{226} and national trails\textsuperscript{227} (in legislation authorizing the federal land management agencies to issue protective regulations).\textsuperscript{228} The first significant federal pollution statutes became law during this period.\textsuperscript{229} Capping the decade, Congress enacted the National Environmental Policy Act (NEPA) in December, 1969.\textsuperscript{230} These environmental protection statutes would have a significant limiting effect on the ability to explore for and produce minerals on the

\begin{itemize}
\item \textsuperscript{213} See 2 PNRL, supra note 1, § 14B.04.
\item \textsuperscript{214} 43 U.S.C. §§ 1411-1418 (expired 1970).
\item \textsuperscript{216} See 16 U.S.C. § 1133(d)(3) (1994).
\item \textsuperscript{217} See 2 PNRL, supra note 1, § 14B.04(6).
\item \textsuperscript{218} See 16 U.S.C. § 1133(d)(3) (1994). This prohibition was subject to "valid rights then existing." Id. See generally Kathryn Toffenetti, Valid Mining Rights and Wilderness Areas, 20 LAND & WATER L. REV. 31 (1985).
\item \textsuperscript{220} 16 U.S.C. §§ 460J-4 to 460J-11 (1994).
\item \textsuperscript{221} Pub. L. No. 89-669, 80 Stat. 926 (1968) (repealed in 1973).
\item \textsuperscript{222} See 16 U.S.C. § 688d (1994).
\item \textsuperscript{223} 16 U.S.C. § 460m-8 to 460m-14 (1994).
\item \textsuperscript{224} See 16 U.S.C. §§ 1271-1287 (1994).
\item \textsuperscript{225} See 16 U.S.C. § 1280(a)(ii) (1994).
\item \textsuperscript{226} See id. § 1280(i)(6).
\item \textsuperscript{227} See id. §§ 1241-1251 (1994).
\item \textsuperscript{228} See id. § 1246(6).
\item \textsuperscript{229} See, e.g., The Clean Air Act of 1963, Pub. L. No. 88-206, 77 Stat. 392.
\item \textsuperscript{230} 42 U.S.C. §§ 4321-4370d (1994).
\end{itemize}
federal lands.


The PLLRC reported in 1970, soon after enactment of NEPA.231 Many claimed at the time (April 1970 saw the first Earth Day, remember) that the PLLRC Report was obsolete before it was released because it failed to take sufficient account of the environmental enthusiasm then prominent.232 Whether or not those criticisms were fair or accurate, Congress never adopted the recommendations of the Committee bodily. Many recommendations, however, were partially enacted in the Federal Land Policy and Management Act (FLPMA) of 1976.233

The most basic PLLRC recommendation was for congressionally determined dominant uses of the federal tracts.234 Congress, however, instead extended the Forest Service’s authority to manage for multiple use (including mineral production)235 and sustained yield to the BLM.236 Congress in 1976 also explicitly stated its intention to retain the BLM public lands in federal ownership, somewhat contrary to the PLLRC conclusions.237 In many respects, the PLLRC Report was overwhelmed and superseded by the legislative, administrative, and judicial developments of the 1970s.

D. Legislation of the 1970s

Congress in the 1970s laid the basic foundations for modern public resources law. With hindsight, the legislative efforts can be sorted into somewhat discrete categories: pollution laws; wildlife laws; energy laws; and land management laws.

1. Federal Pollution Laws

In the spate of legislation between the Clean Air Act of 1970238 and the Superfund law239 of 1980, Congress established a variety of expensive, complicated mechanisms for combating the various forms of pollution. The primary federal enforcer was and is the Environmental Protection Agency, created by executive order in 1970.240 The Clean Air Act demanded the issuance of na-

234. See PLLRC, supra note 231.
236. See id. § 1732(a).
237. See id. § 1701(a)(1).
tional ambient air quality standards and hazardous air pollutant standards and allowed the states to achieve the desired levels of air quality with, for the most part, whatever means they chose. Some of the resulting regulations applied directly to mining and related activities. The Federal Water Pollution Control Act Amendments of 1972 went further by setting zero pollution goals and requiring all pollution point sources to obtain permits from federal agencies or from state agencies overseen by EPA. The mining industry has been affected by effluent limitations applicable to aspects of mining characterized as point sources as well as by the application of best management practices to nonpoint source activity. Both the Forest Service and the BLM, for example, require those engaged in hardrock mining or oil and gas leasing to comply with state water quality standards promulgated under the Clean Water Act. Congress adopted similar legislation to constrain marine dumping, noise pollution, groundwater contamination, and solid waste disposal between 1972 to 1976. The persistent efforts of the

242. See id. § 7412.
243. The amendments to the statute adopted in 1977 and 1990 constrained the discretion of those states which had not yet succeeded in achieving the national standards by dictating that they impose more stringent controls on certain kinds of sources. See id. §§ 7501-7515.
244. See id. § 7410.
245. See, e.g., National Mining Ass'n v. EPA, 59 F.3d 1351 (D.C. Cir. 1995) (holding that EPA was authorized to include fugitive emissions of hazardous air pollutants in determining whether a plant's emissions are sufficient to subject it to regulation as a major source).
248. See id. §§ 1311(a), 1342(a).
250. In 
251. 43 C.F.R. §§ 3802.3-2(b), 3809.2-2(b) (1997); 36 C.F.R. §§ 228.8(b), 228.112(c)(2) (1997).
254. There is no single "groundwater protection act" similar to the statutes governing air and surface water pollution. Rather, Congress has adopted a host of statutes whose aims include the protection of groundwater resources. See generally Robert L. Glicksman & George Cameron Coggins, Groundwater Pollution I: The Problem and the Law, 35 Kan. L. Rev. 75, 90-140 (1986). One of the most significant of these statutes is the Safe Drinking Water Act, Pub. L. No. 93-523, 88 Stat. 1660 (1974) (codified at 42 U.S.C. §§ 300f-300j (1994), as amended by Pub. L. No. 104-182, 110 Stat. 1615 (1996), which authorized EPA to establish standards for public water systems supplying drinking water, created an injection control program to protect underground sources of drinking water, and provided financial incentives to prevent the contamination of sole source aquifers and wellhead areas.
mining industry to narrow the definition of solid waste under the Solid Waste Disposal Act (also known as the Resource Conservation and Recovery Act, or RCRA)\textsuperscript{256} is indicative of the perceived burdens imposed on the industry by the controls authorized by that statute. Congress did, however, sustain President Ford’s veto of Senator Henry Jackson’s national land use control bill.\textsuperscript{257}

The Carter Administration was concerned more with energy policy than pollution control, but two notable statutes emerged in the Carter years. As a result, by the advent of the Reagan Administration in 1981, all of the current pollution control systems were in place. All of those laws would be amended in future years but all have endured in their main outlines. The first of the two Carter era additions was the Surface Mining Control and Reclamation Act (SMCRA) of 1977,\textsuperscript{258} which sought to establish a national program “to protect society and the environment from the adverse effects of surface coal mining operations.”\textsuperscript{259} SMCRA established systems of coal mining and reclamation standards far more rigorous than anything before it had done. It has great relevance to federal land law because billions of tons of stripable coal underlie federal holdings in the West.\textsuperscript{260} Among other things, SMCRA requires the Interior Secretary to designate areas unsuitable for surface mining activity.\textsuperscript{261} The statute itself places areas such as units of the national park, wildlife refuge, trails, wilderness preservation, and wild and scenic rivers systems off-limits to mining, subject to valid existing rights.\textsuperscript{262} Surface mining within the national forests is also restricted, unless the Interior Secretary finds that mining would not be incompatible with significant recreational, timber, economic, or other values.\textsuperscript{263} In \textit{Utah International, Inc. v. Department of the Interior},\textsuperscript{264} the court held that the unsuitability provision did not result in a taking because the lessee had not obtained permission to mine and could remove its coal by methods other than surface mining in any event.\textsuperscript{265} Even where mining is permitted

\textsuperscript{256} See, e.g., Shell Oil Co. v. EPA, 950 F.2d 741 (D.C. Cir. 1991); American Mining Congress v. EPA, 907 F.2d 1179 (D.C. Cir. 1990); American Petroleum Inst. v. EPA, 906 F.2d 729 (D.C. Cir. 1990), appeal after remand, Steel Mfrs. Ass'n v. EPA, 27 F.3d 642 (D.C. Cir. 1994); American Mining Congress v. EPA, 824 F.2d 1177 (D.C. Cir. 1987). Congress included within RCRA, however, a series of exemptions for various mining, mineral processing, and oil and gas wastes. See generally 2 FNRL, supra note 1, at \S 11B.05[1][d].


\textsuperscript{259} 30 U.S.C. § 1202(a) (1994).

\textsuperscript{260} See generally 3 FNRL, supra note 1, \S 22.04.

\textsuperscript{261} See 30 U.S.C. § 1272(b) (1994).


\textsuperscript{264} 553 F. Supp. 872 (D. Utah 1982).

\textsuperscript{265} See id. at 879. \textit{But compare} The Stearns Co. v. United States, 34 Fed. Cl. 264 (1995) ( takings claim filed by company required to establish valid existing rights before it could conduct surface mining was ripe for review).
on the federal lands, operations must procure permits and abide by regulations issued by the Office of Surface Mining or authorized state agencies.

The second Carter administration addition, adopted in 1980 in response to Love Canal and similar problems, was the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This "Superfund" law not only authorized EPA to conduct or oversee the remediation of hazardous substance releases, it also imposed strict liability on all who contributed to such releases for both resulting response costs and damage to natural resources. CERCLA excludes petroleum products from the definition of a hazardous substance, thereby affording petroleum exploration activities significant relief from response cost liability. The statute does not contain a similar exclusion for mining wastes, however, even if they are not currently subject to regulation as hazardous wastes under RCRA. Accordingly, the courts have concluded that cobalt, copper, asbestos mining and milling wastes and uranium mine tailings all are hazardous substances whose release may give rise to response cost liability under CERCLA.

The effect of the federal pollution control laws on federal land use is difficult to summarize. Agricultural uses, including grazing and silviculture, have not been heavily influenced by pollution statutes because of relatively lenient statutory treatment (i.e., weak or nonexistent controls for logging and farming) attributable to the strength of agricultural lobbyists and a congressional reluctance to establish federal land use controls. Oil and gas operations and hardrock mines, however, have had to live with strict new regulatory regimes whenever they use or encounter brines, leachate, runoff, or haz-

267. See 30 C.F.R. § 740.
270. See id. § 9607(a).
271. See id. § 9601(14).
ardous substances. The Oil Pollution Act of 1990, a response to the *Exxon Valdez* disaster, completes the circle for oil producers; it, too, imposes strict liability for hydrocarbon spills.

In some cases, the federal pollution laws have dictated public land use standards. In the *G-O Road* case, for instance, roadbuilding and timber cutting in a national forest were enjoined because the activities would violate water quality standards. Similarly, a court in 1996 commanded the BLM to ensure compliance with pollution requirements before renewing grazing permits. FLPMA provides that BLM land use plans must insure compliance with all state and federal pollution standards. Mining both on and off the federal lands has become a more costly proposition because of the federal pollution control laws, and, as a result of statutes such as the SMCRA, mining activities are forbidden altogether on portions of the federal lands.

2. Federal Wildlife Laws

In 1970, federal involvement in wildlife regulation largely was an afterthought. The Lacey Act of 1900 backstopped state efforts to control poaching. The Migratory Bird Treaty Act of 1918 set up a nationwide quota system for waterfowl hunting and banned the killing or capture of other migratory birds without federal permission, but the system depended on the cooperation and enforcement efforts of the states. Some obscure federal statutes authorized purchase of bird habitat areas and others required consultation when water projects would destroy habitat. The bald eagle was separately protected, theoretically, as the national symbol by a 1940 act. Still, much sentiment in the “fish and game” communities regarded federal intervention into wildlife regulation as unwarranted if not unconstitutional.

Congress disagreed. A series of federal statutes enacted between 1971 and 1976 essentially federalized much of American wildlife law. Wild horses and burros technically are feral, not wild, but Congress, in the Wild, Free-Roaming

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Horses and Burros Act (WF-RHBA) of 1971\(^{296}\) gave them full protection from killing and harassment when on or near national forests or BLM public lands.\(^{297}\) This law is of most concern to ranchers who abut or use federal lands because the equines compete with the bovines and ovines for scarce forage.\(^{298}\) Wild horse populations have grown considerably since 1970, but the BLM actively removes “excess” horses from the range when their competition with cows is too successful.\(^{299}\)

The Marine Mammal Protection Act (MMPA) of 1972,\(^{300}\) engendered by public outrage over the slaughter of dolphins in tuna harvests and of baby seals for fur, placed a moratorium on further killing of whales, porpoises, sea otters, seals, polar bears, manatees, walruses, sea elephants, and other air-breathing, sea-dwelling creatures.\(^{301}\) The effect of the MMPA on federal land is minimal, but it does restrict many activities on the federal (and state) offshore submerged lands.

The Endangered Species Act (ESA) of 1973\(^{302}\) is the most significant wildlife law ever enacted anywhere. Its scope is worldwide: any species of animal (or plant) can be listed as endangered or threatened wherever found, in all or parts of it range.\(^{303}\) Section 7 of the ESA is drafted without qualifying language. Every federal agency must insure that its actions do not jeopardize a listed species or destroy its habitat.\(^{304}\) This command, to be carried out through extensive and intricate procedures, has turned out to be one of the most stringent land use restrictions in American law. It is buttressed by the section 9 prohibition against taking (harming or harassing or killing) listed species, a ban that extends to habitat destruction on nonfederal lands.\(^{305}\)

Application of the ESA has affected all facets of federal land and resources law. The Supreme Court in the Snail Darter\(^{306}\) case set the tone: the Act is to be interpreted literally, and, because Congress deemed wildlife species to be of “incalculable” worth, the costs of preserving the species cannot be weighed in the balance.\(^{307}\) In the ensuing 20 years, courts have enjoined timber harvests,\(^{308}\) water diversions,\(^{309}\) water developments,\(^{310}\) roads,\(^{311}\) mining

\(\text{\footnotesize\[296\] 16 U.S.C. §§ 1331-1340 (1994).} \)
\(\text{\footnotesize\[297\] See id. § 1333(b). See also 3 PNRL, supra note 1, § 18.04[3][a].} \)
\(\text{\footnotesize\[298\] See Mountain States Legal Found. v. Hodel, 799 F.2d 1423 (10th Cir.), cert. denied, 480 U.S. 951 (1987).} \)
\(\text{\footnotesize\[299\] See 3 PNRL, supra note 1, § 18.04[3][b].} \)
\(\text{\footnotesize\[300\] 16 U.S.C. §§ 1361-1407 (1994).} \)
\(\text{\footnotesize\[301\] See id. § 1371.} \)
\(\text{\footnotesize\[302\] 16 U.S.C. §§ 1531-43 (1994).} \)
\(\text{\footnotesize\[303\] See id. § 1533. See also 2 PNRL, supra note 1, § 15C.02[1].} \)
\(\text{\footnotesize\[304\] See 16 U.S.C. § 1536(a)(2) (1994).} \)
\(\text{\footnotesize\[305\] See id. § 1538(a)(1)(B)-(C).} \)
\(\text{\footnotesize\[306\] Tennessee Valley Authority v. Hill, 437 U.S. 153 (1978).} \)
\(\text{\footnotesize\[307\] See id. at 194.} \)
\(\text{\footnotesize\[308\] See Sierra Club v. Yeutter, 926 F.2d 429 (5th Cir. 1991); see also Thomas v. Peterson, 753 F.2d 754 (9th Cir. 1985).} \)
\(\text{\footnotesize\[309\] See United States v. Glenn-Colusa Irrigation Dist., 788 F. Supp. 1126 (E.D. Cal. 1992).} \)
\(\text{\footnotesize\[310\] See Riverside Irrigation Dist. v. Andrews, 758 F.2d 508 (10th Cir. 1985).} \)
\(\text{\footnotesize\[311\] Cf. Sierra Club v. Babbitt, 65 F.3d 1502 (9th Cir. 1995) (reversing district court’s injunction against road construction on BLM land).} \)
operations,312 and many other projects313 at the behest of those asserting the rights of species to survive.

A recurring question has been the manner in which the land management agencies must comply with the ESA’s consultation requirements when they authorize activities such as mineral leasing through a series of decisions. In North Slope Borough v. Andrus,314 for example, the D.C. Circuit refused to halt the sale of offshore oil and gas leases due to the alleged inadequacy of consideration of the impact on endangered whales. The Outer Continental Shelf Lands Act’s315 segmentation of the leasing process precluded the agency from committing at the leasing stage to authorization of exploration and production. Evaluation of the consequences of those activities on listed species at the time the lessee submitted more concrete proposals for lease development therefore would suffice.316 Similarly, in Cabinet Mountains Wilderness v. Peterson,317 the court endorsed the approval by the Forest Service and the FWS of a hardrock mineral prospecting plan in an area inhabited by threatened grizzly bears, provided the prospectors complied with a series of mitigation conditions. In Conner v. Burford,318 on the other hand, the Ninth Circuit refused to analogize onshore and gas leasing under the Mineral Leasing Act to the segmented process applicable to offshore leasing. The court required the Forest Service to include in a lease a prohibition on substantial development pending issuance of an adequate biological opinion.319 FWS regulations essentially codify that approach.320

Congress enacted two more major wildlife statutes in the 1970s. The Fisheries Conservation and Management Act of 1976321 asserted federal regulatory power over living marine creatures out to 200 miles offshore. The Act contemplates a quota system for taking marine fish somewhat reminiscent of the Migratory Bird Treaty Act system. The Alaska National Interest Lands Conservation Act (ANILCA) of 1980322 provided a special exemption for rural Alaskans who depend on wildlife for subsistence needs.323

Thus, by 1980, the federal government was heavily involved in wildlife


313. See generally 2 FNRL, supra note 1, at ch. 15C.

314. 642 F.2d 589 (D.C. Cir. 1980).


317. 685 F.2d 678 (D.C. Cir. 1982).

318. 848 F.2d 1441 (9th Cir. 1988), cert. denied, 489 U.S. 1012 (1989).

319. See id. at 1455.


323. See 3 FNRL, supra note 1, § 18.03[6].
regulation and protection, although the federal laws constituted a patchwork of coverage and remedies. The MBTA, WF-RHBA, and, especially, the ESA are now integral parts of federal land law, with the last of the three having the greatest potential to affect mineral location and leasing on the federal lands.

3. Federal Energy Laws

The spate of energy-related statutes adopted during the 1970s has but tangential relevance to the federal lands. To the extent these laws aimed at encouraging the development of less environmentally destructive forms of energy and at reducing dependence on foreign energy sources, however, they may have created incentives to engage, both on and off the federal lands, in a greater degree of certain forms of mineral exploration and production activities, such as alternative forms of energy, and a lesser degree of other forms. 324

The impetus for most of these laws was the Arab oil embargo that caused supply shortages and rising petroleum product prices early in the decade. The Emergency Petroleum Allocation Act of 1973 325 provided the federal government with the authority to allocate crude oil and petroleum products and the Federal Energy Administration Act, created in 1974, 326 was vested with the power to impose maximum price controls. The Geothermal Energy Research, Development, and Demonstration Act of 1974 327 sought to promote the development of this form of renewable energy as a hedge against future foreign crude oil supply shortages. The Geothermal Steam Act of 1970 328 had already authorized the Interior Secretary to lease geothermal steam and associated resources through a competitive leasing system similar to the one later established for oil and gas under the Federal Onshore Oil and Gas Leasing Reform Act of 1987. 329 The Energy Policy and Conservation Act, 330 enacted in 1975, sought to further independence from foreign supplies by encouraging coal production, restricting exports of energy products, and creating the Strategic Petroleum Reserve. 331

The pace of enactment of energy-related legislation accelerated during the Carter Administration. The Department of Energy Organization Act of

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324. Tax and other incentives meant to spur the development of nontraditional forms of energy may have induced investments in exploration for and development of those forms of energy instead of for oil or natural gas, for example.
331. See ENVTL. L. INST., ENVIRONMENTAL LAW: FROM RESOURCES TO RECOVERY 457 (Campbell-Moehn, et al. eds., 1995). The 1975 law also required the Secretary of Transportation to set corporate average fuel economy standards for automobile manufacturers. The ELI book contains more complete descriptions of all of the energy-related legislation summarized in this section. See id. at 454-63.
1977,\textsuperscript{332} which established the Department as a cabinet-level agency, symbolized the Administration’s commitment to achieving energy self-sufficiency. The centerpiece of the substantive energy legislation adopted in the late 1970s was the National Energy Act, which included measures aimed at conserving energy use in buildings,\textsuperscript{333} reducing the use of oil and natural gas as boiler fuels,\textsuperscript{334} phasing out price controls for natural gas,\textsuperscript{335} and using the tax code to promote efficient energy use.\textsuperscript{336} The last component of this package was the Public Utilities Regulatory Policy Act of 1978,\textsuperscript{337} which, among other things, promoted generation of electricity by small hydropower projects and other alternative sources of energy and encouraged competition in the supply of electricity by facilitating wheeling and power pooling.

Congress passed another major package of energy legislation two years later. The Crude Oil Windfall Profits Tax of 1980\textsuperscript{338} not only sought to recapture some oil company profits attributable to the decade-long run-up of prices; it also provided tax relief to developers of energy from alternative sources. The Energy Security Act of 1980 included the Geothermal Energy Act of 1980,\textsuperscript{339} which made federal loans available for geothermal exploration. The 1980 legislation also attempted to spur the development of fuels derived from biomass and alcohol,\textsuperscript{340} solar energy,\textsuperscript{341} and of synthetic fuels extracted from coal, shale, and tar sands.\textsuperscript{342} The goal of still other legislation was to prompt the development of thermal energy from the ocean\textsuperscript{343} and of energy from wind.\textsuperscript{344}

Finally, the Pacific Northwest Electric Power Planning and Conservation Act of 1980,\textsuperscript{345} also known as the Northwest Power Act, established mechanisms for allocating hydroelectric power generated on the Columbia River System and placed fish and wildlife protection concerns on a par with power production.\textsuperscript{346} The Act authorized the formation of a policymaking and planning

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\textsuperscript{338} Pub. L. No. 96-223, 94 Stat. 229.
\textsuperscript{346} Confederated Tribes & Bands of the Yakima Indian Nation v. FERC, 746 F.2d 465, 473 (9th Cir. 1984), cert. denied, 471 U.S. 1116 (1985); FereAlaws on Ed. v. Johnson, 743 F.2d 677, 679 (9th Cir. 1984),
body called the Pacific Northwest Electric Power and Conservation Planning Council charged with the responsibility of developing a program for regional conservation and power production to be jointly implemented by the Bonneville Power Administration, the Army Corps of Engineers, the Bureau of Reclamation, and the Federal Energy Regulatory Commission. Environmental groups quickly reacted to the adoption of the Northwest Power Act by resorting to it as a means, along with the ESA, of protecting vulnerable species of anadromous fish in the Columbia Basin.

While novel and theretofore uneconomic forms of energy production were most definitely favored during the 1970s, another form of energy, nuclear power, became the black sheep of the energy source family. The Energy Reorganization Act of 1974 abolished the Atomic Energy Commission and divided up its responsibilities between the Nuclear Regulatory Commission, which took over regulatory functions, and the Energy Research and Development Administration. The atomic energy industry reached a dead end in the 1980s, effectively shutting down uranium exploration and development on the western public lands.

4. Federal Land Management Laws

Two of the most important federal laws enacted in the 1970s outpouring of environmental/conservation/preservation legislation were FLPMA and the NFMA, both passed in 1976. Other significant land management laws adopted during this period included the Geothermal Steam Act of 1970, the SMCRA of 1977, the Resources Planning Act of 1974, the Federal Coal Leasing Act Amendments of 1976, the Public Rangelands Improvement Act of 1978, and the ANILCA of 1980.

FLPMA and the NFMA in conjunction make a strange situation even stranger. Congress in FLPMA extended the multiple use, sustained yield management standard enunciated in the 1960 MUSYA to the BLM public lands, giving the BLM almost the same basic authority as the Forest Service. From that point, however, Congress sharply distinguished between the two

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348. See 3 PNRL, supra note 1, § 21C.06[2][d].
largest federal land management systems for no discernible reason save history. Each agency is required to conduct land use planning, but the planning provisions of the NFMA and the FLPMA differ dramatically. The two agencies' mandates to control livestock grazing now are substantially identical, yet the resemblance between the actual practices of the Forest Service and those of the BLM is largely coincidental. The BLM is subject to interdepartmental quasi-judicial review; the Forest Service is not. The Forest Service has some independent budgetary powers, but the BLM does not. The national forests are deemed reserved and thus entitled to the benefits of implied reserved water rights; not so the BLM public lands. Wilderness designation processes on the two systems also differ, and such designations can dramatically affect mineral exploration and development. For purposes of this article, perhaps the most important distinction between the authority of the two agencies is that the BLM is responsible for mineral development on national forests as well as its own lands. As a result, the NFMA is silent on the permissible extent and manner of mining in the national forests. Whether or not these disparities ultimately make much legal or managerial sense, the fact is that Congress in 1976 — even though it streamlined the law by repealing hundreds of obsolete statutory sections — still saw fit to treat the two systems and the two agencies differently.

Still, both FLPMA and the NFMA were major departures from preexisting law. By adopting FLPMA, Congress for the first time vested the BLM with general organic authority. The stated purposes of FLPMA are somewhat conflicting and not binding except when specifically enacted elsewhere. Its planning provisions are sufficiently vague (if not opaque) as to almost guarantee failure. But the Act gave the agency impetus in the late 1970s to try to professionalize its management to achieve a far broader range of goals. That effort would founder under the leadership of Secretary Watt, and the BLM essentially had to start implementing FLPMA all over again under Presidents Bush and Clinton.

FLPMA deals with a host of topics, including processes such as plan-

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360. See COGGINS, ET AL., supra note 30.
362. See, e.g., 3 PNRL, supra note 1, § 19.05[1].
363. Local decisions in the national forest system are subject to internal review, but the Forest Service has no judicial organ similar to the Interior Board of Land Appeals.
364. See infra notes 398-407 and accompanying text.
369. The Forest Service has authority under the 1897 Organic Act, however, to regulate activities, including mining, for the purpose of preserving the forests from destruction. See 16 U.S.C. § 551 (1994); Clouser v. Esby, 42 F.3d 1522 (9th Cir. 1994), cert. denied, 515 U.S. 1141 (1995).
371. See id. § 1701(b).
372. See id. § 1712. See also COGGINS, ET AL., supra note 30.
373. See 3 PNRL, supra note 1, at ch. 19.
ning,374 the making of withdrawals375 and exchanges,376 wilderness designation,377 and the issuance of rights-of-way,378 all of which may affect the extent of mining activity on the public lands.379 Unlike the analogous provision in the NFMA, the general multiple use mandate of FLPMA encompasses minerals.380 The specific provisions governing mineral interests include a requirement that conveyances of title by the Secretary of the Interior reserve to the United States all minerals, along with the right to prospect for, mine, and remove them.381 The Secretary may convey minerals along with title to the surface, however, upon finding that there are no known minerals or that reservation of mineral rights in the United States is interfering with or precluding appropriate nonmineral development deemed to be a more beneficial use of the land.382 Conveyance of mineral interests is conditioned on receipt of fair market value and administrative costs.383 The Act also requires recordation of mining claims on the BLM public lands. The owner of an unpatented lode or placer mining claim located before FLPMA’s adoption had three years to make an initial filing of a notice of intention to hold the claim.384 Additional filings are due on an annual basis.385 The owners of claims located after the enactment of FLPMA must comply with annual filing requirements.386 Noncompliance is conclusively deemed to constitute an abandonment of the claim.387 FLPMA carved out the California Desert Conservation Area (CDCA),388 specifying that the Area would remain subject to the mining laws, but that any patent issued for mining claims within the area would be subject to “reasonable regulations” designed “to protect the scenic, scientific, and environmental values of the public lands” within the CDCA.389

The National Forest Management Act, passed in reaction to a judicial ban on clearcutting,390 essentially is a micro and macro land use planning law. It is far more detailed and specific than any preceding federal land law, but it focuses on trees and other renewable resources, not minerals. The NFMA retains the multiple use, sustained yield standard (which omits any explicit reference to

375. See id. § 1714.
376. See id. § 1716.
377. See id. §§ 1781-1782.
378. See id.
379. See, e.g., id. § 1712(e)(3) (specifying procedures for withdrawal of lands from operation of the General Mining Law); id. § 1761(a)(2)-(3) (authorizing the issuance of rights-of-way for oil and gas pipelines and slurry and emulsion systems).
381. See id. § 1719(a).
382. See id. § 1719(b)(1).
383. See id. § 1719(b)(2).
384. See id. § 1744(a)(1).
385. See id.
386. See id.
387. See id. § 1744(b): See also United States v. Locke, 471 U.S. 84 (1985) (statutory abandonment provisions did not violate the due process or takings clauses of the Fifth Amendment).
389. See id. § 1781(l).
390. See infra notes 540-45 and accompanying text.
minerals development) but overlays it with a planning process that ultimately will reduce considerably the traditional flexibility accorded to multiple use managers. The Act imposes general restrictions on all timber harvests and more stringent restrictions on harvests by means of clearcuts.

After 20 years, the impact of the NFMA still is not entirely clear. The judicial decisions in which the validity of national forest plans were at issue do not yet form a coherent pattern. As of 1997, the biodiversity provisions of the Act do not equal the biodiversity contentions of the forest preservationists, and the courts are split on whether clearcutting is to be the norm or the exceptional harvest method. In the Pacific Northwest, the meaning of the NFMA is almost irrelevant because restrictions on timber harvests stemming from the ESA, NEPA, and the CWA have eclipsed the NFMA issues.

The Forest Service has long contended that the traditional practice of determining the level of agency operating funds through annual appropriations instead of allowing the agency to retain receipts from timber sales for its own use precludes it from rational management of the resources under its jurisdiction. In 1974, Congress responded to this plea for greater budgetary control by enacting the Forest and Rangeland Renewable Resources Planning Act (RPA), which acknowledges the Forest Service's need for reliable funding estimates to plan for programs such as reforestation. The Act requires that the agency prepare an Assessment every ten years to describe the renewable resources of the nation's forests and rangelands, a Program every five years to propose long-range goals and attach specific costs to planned activities, and an annual Report to evaluate the consistency of Forest Service activities with Program objectives. The RPA also requires the President to submit to Congress a Statement of Policy once every five years to assist in framing budget requests for Forest Service activities and a Statement of Reasons to explain why annual budget requests are inadequate to achieve the goals of the Statement of Policy. The RPA has had little impact on budgetary practices concerning the Forest Service, in large part because the courts have found allegations of noncompliance with provisions such as those requiring a Presidential

392. See id. § 1604. See generally 2 FNRL, supra note 1, § 10.F.05.
394. See id. § 1604(g)(3)(F).
396. See infra notes 540-45 and accompanying text.
397. See 3 FNRL, supra note 1, §§ 20.03[2]-[3], 20.04[1].
398. See COGGINS, ET AL., supra note 3, at 631.
400. See COGGINS, ET AL., supra note 3, at 631.
402. See id. § 1602.
403. See id. § 1606(c).
404. See id. § 1606(a).
405. See id. § 1606(b).
explanation of budgetary shortfalls to be beyond the judicial ken. The statute's planning requirements may have been more effective in improving long-range planning by the agency, but the RPA is "best understood as the last gasp of unfettered Forest Service discretion."407

Of the remaining three important public natural resources statutes enacted during the 1970s, one had little direct relevance to mineral production on the federal lands. The Public Rangeland Improvements Act (PRIA) of 1978,408 as its name indicates, is directed toward grazing activity on the public lands. Like FLPMA, PRIA purports to treat the BLM and the Forest Service alike, but reflects important differences in directing their management of grazing lands. The Act recognized the deteriorating condition of the public rangelands and the need for reform of multiple use management and funding practices.409 It also declared the adoption of a fee for livestock grazing permits based on annual changes in the cost of production to be in the public interest as a means of preventing economic disruption of the western livestock industry.410 PRIA mandates that both the Forest Service and the BLM conduct periodic inventories of range conditions,411 charge fees for grazing which represent the fair market value of that use,412 and implement experimental stewardship programs to explore innovative grazing management policies such as cooperative projects with state agencies.413 But PRIA does not require that the Forest Service give range improvement its highest management priority,414 excludes that agency from the statute's range improvement funding program,415 and exempts the national grasslands administered by that agency from all of its provisions.416 PRIA, like FLPMA, sought to improve the condition of the range while continuing to accommodate the interests of ranchers.417

The other two statutes bear directly on minerals-related activities on the federal lands. The principal purpose of the Federal Coal Leasing Act Amendments (FCLAA) of 1976,418 adopted over President Ford's veto, was to eliminate speculative holding of coal leases occasioned mainly by the Interior Department's failure to enforce the due diligence and continued operation conditions on leasing and the availability of leases on a noncompetitive basis.419

407. COGGINS, ET AL., supra note 3, at 632.
410. See id. § 1901(a)(5).
411. See id. § 1903.
412. See id. § 1905.
413. See id. § 1908(a).
414. See id. § 1903(b).
415. See id. § 1904.
416. See id. § 1907.
419. See 3 PNRL, supra note 1, § 22.01[1]. At the time of the FCLAA's adoption, "a few large companies controlled the vast majority of federal coal deposits and large tracts of federal coal lands remained idle." Hoyl v. Babbitt, 129 F.3d 1377, 1380 (10th Cir. 1997).
The statute replaced the prospecting permits which authorized entry under the pre-1976 Mineral Leasing Act with exploration licenses subject to environmental constraints. The old prospecting permits had vested in permittees the right to explore for coal on the tract covered by the permit and the right to apply for a preference right lease upon the discovery of coal in commercial quantities. The Secretary of the Interior could not deny a preference right lease upon such discovery, but could demand proof that lease operations would be profitable after compliance with applicable environmental requirements. The post-1976 exploration license allows exploration for coal deposits on federal lands, but confers no rights even upon discovery of such deposits. The agency must conduct an environmental evaluation before issuing a license and, under Interior Department regulations, will not issue a license when significant and lasting degradation to the lands involved or to endangered species is likely to result.

The FCLAA also required the Interior Secretary to develop comprehensive land use plans to determine the suitability of lands for leasing. Leasing is barred absent preparation of a land use plan and leasing must proceed in a manner consistent with the plan. Leasing is also dependent on consent of the surface land management agency. To address the ability of speculators under the pre-1976 system to enter the market for federal coal at very low cost, the FCLAA substituted a competitive bidding system for the old noncompetitive preference right leasing program. Competitive leasing is conducted through sealed bidding, and bids are evaluated by the agency for compliance with bid requirements and terms, including payment of fair market value. The district court in the Powder River Coal case reached the dubious conclusion that the disposal of over a billion and a half tons of coal in Wyoming and Montana in 1982 complied with the fair market value requirement. Another of the FCLAA's anti-speculation provisions subjects every lease to a condition of diligent development, typically within ten years of lease issuance. Lessees who fail to satisfy this requirement forfeit their leaseholds. Despite the scope of the statutory changes wrought by the 1976 FCLAA, the statute's impact has been minimized by the dearth of large-scale coal leasing on the federal lands since the early 1970s.

The decade of the 1970s came to a striking close with the adoption in
December 1980 of ANILCA, a statute with significant implications for the fate of mineral production on vast reaches of the federal lands. In one fell swoop, Congress added more than 100 million acres to the national park, wildlife refuge, and wilderness preservation systems, most of it from former BLM lands. This reallocation more than doubled the acreage in the national parks, nearly tripled the size of the wildlife refuge system, and almost quadrupled the size of federal wilderness holdings. Much of this land was thereby made unavailable for mineral exploration and development.

The Act was not uniformly preservationist in character, however. It authorized the sale to Alaskan Natives of title to land beneath meandered waters, approved pending applications for Native selections, and confirmed tentative approvals of pending state land selections, subject to valid existing Native rights. It adopted a preference for subsistence hunting and fishing uses by Alaskan natives to preserve the social and cultural values of rural Alaskans. It recognized access rights across Forest Service lands, perhaps even outside Alaska; and it temporarily mandated minimum timber harvests in the Tongass National Forest. The effect of ANILCA has been to leave 59 percent of Alaska's 375 million acres in federal ownership, about 28 percent in state ownership, 12 percent in the hands of Native Alaskans, and the remaining one percent under private control. Disputes arising from the various selection processes continue to proliferate.

ANILCA also required various assessments of the mineral producing potential of the public lands in Alaska. The statute required the Secretary of the Interior to conduct a study of all federal lands in Alaska north of 68 degrees north latitude and east of the western boundary of the National Petroleum Reserve and in conservation system units (such as national parks and wildlife refuges) established by the Act to determine their potential oil and gas resources. After considering the impact of oil and gas development on wildlife resources, the national need for development of mineral resources, and the national interest in wilderness preservation and protection of wildlife resources, the Secretary was to submit an initial report to Congress by 1980 and subsequent annual reports on the Secretary's progress in implementing the statute. ANILCA required the Interior Secretary to establish an oil and gas

433. See COGINS ET AL., supra note 3, at 144.
435. See id. § 1634.
436. See id. § 1635(e).
437. See id. §§ 3111-3126. See generally 3 FNRL, supra note 1, § 18.03[6].
439. See Adams v. United States, 3 F.3d 1254 (9th Cir. 1993).
440. See COGINS ET AL., supra note 3, at 145.
441. See 1 FNRL, supra note 1, § 10C.03[6].
443. See id. § 3141(a)-(b).
444. See id. § 3141(e), (e).
leasing program under the Mineral Leasing Act on federal lands not covered by this study, except on lands where applicable law prohibits leasing, lands included in the National Petroleum Reserve, and units of the National Wildlife Refuge System where exploration for and development of oil and gas would be incompatible with Refuge purposes.\(^4\) Leases are subject to competitive bidding.\(^5\) Exploration is subject to whatever requirements the Secretary deems appropriate for protecting the land for the purpose for which it is managed under applicable law,\(^6\) and lease suspension and cancellation are authorized to prevent immediate and irreparable damage.\(^7\)

ANILCA also required the submission of reports concerning the impact of oil and gas exploration, development, and production in the coastal plain of the Arctic National Wildlife Refuge. The statute authorized the Secretary to allow exploratory activity within the plain in a manner that avoids significant adverse effects on fish and wildlife resources.\(^8\) But ANILCA barred leasing and production of oil and gas within the Refuge pending further action by Congress.\(^9\) A fierce debate over the appropriate fate of the Refuge has raged ever since, with environmentalists seeking to bar all oil and gas development by designating the entire Refuge as wilderness and proponents of development proposing legislation to open the area to leasing.\(^10\) Finally, ANILCA authorizes the President to transmit a recommendation to Congress that mineral exploration, development, or extraction not permitted in Alaska under ANILCA or other laws be allowed based on an "urgent national need for the mineral activity" which outweighs other public values and potential adverse environmental impacts.\(^11\) Any such recommendation takes effect only upon enactment of a joint resolution of approval.\(^12\)

### VII. EVOLUTION OF FEDERAL PUBLIC LAND LAW IN THE COURTS, 1976-1997

The courts generally displayed a much more restrained bent during the period between 1976 and 1997 than they did in the progressive/conservation era.\(^13\) Nevertheless, simply by confirming previous doctrines, some of constitutional magnitude, and enforcing statutory mandates adopted during the Preservation Age, they have had an enormous impact on the shape of public land law. The Supreme Court occasionally has embarked on important new directions, such as in its interpretation of standing doctrine, with consequences as yet unclear.

\(^{445}\) See id. § 3148(a). See also id. § 3149.
\(^{446}\) See id. § 3148(d).
\(^{447}\) See id. § 3148(f).
\(^{448}\) See id. § 3148(g).
\(^{449}\) See id. § 3142(a).
\(^{450}\) See id. § 3143.
\(^{451}\) See infra Part VII.
\(^{452}\) See 16 U.S.C. § 3232(a)-(b) (1994).
\(^{453}\) See id. § 3232(d).
\(^{454}\) See supra Part V.A.
A. Constitutional Law Decisions

The Supreme Court confirmed the plenary authority vested by the Property Clause in the federal government to manage the public lands, as indicated above, in 1976, Kleppe v. New Mexico.\(^{455}\) In less than convincing fashion, it expounded in the Granite Rock case\(^ {456}\) on the preemptive scope of federal legislation over contrary state environmental and land use regulation.\(^ {457}\) Subsequent attacks on the notion of federal supremacy have met a similar fate. In United States v. Gardner,\(^ {458}\) in 1997, the Ninth Circuit rejected the argument that the Forest Service lacked the authority to restrict grazing on national forest lands in Nevada; the rancher had claimed that title to those lands reverted to the state upon admission to the Union. It also gave short shrift to the rancher’s contention that federal ownership of eighty percent of lands in the state violated the equal footing doctrine. Distinguishing Pollard’s Lessee,\(^ {459}\) the court declared that the equal footing doctrine “applies to political rights and sovereignty, not to economic or physical characteristics of the states.”\(^ {460}\) In other decisions, the lower courts, confirming the teaching of the Camfield decision,\(^ {461}\) approved of agency reliance on the Property Clause to regulate conduct on private land which was harming or threatening to harm federal lands and resources.\(^ {462}\)

After the Supreme Court’s decision in the 1995 Lopez case,\(^ {463}\) opponents of conservation and preservation legislation sought to establish limits on the federal government’s authority to base such legislation on the Commerce Clause, the most important source of regulatory power over the federal lands aside from the Property Clause. These attempts have not succeeded, as the lower courts have rejected constitutional attacks on the Lacey Act,\(^ {464}\) the Bald and Golden Eagle Protection Act,\(^ {465}\) the Eagle Protection Act,\(^ {466}\) and, most importantly, the Endangered Species Act.\(^ {467}\) The Fourth Circuit, however, in 1997 invalidated a regulation extending the Clean Water Act’s dredge and fill permit program to isolated wetlands as beyond the scope of the statute in order to avoid the Commerce Clause issues that would have arisen from a contrary interpretation of the Act.\(^ {468}\)

\(^{455}\) 426 U.S. 529 (1976).
\(^{457}\) See supra Part II.C.
\(^{458}\) 107 F.3d 1314 (9th Cir.), cert. denied, 118 S. Ct. 264 (1997).
\(^{460}\) Gardner, 107 F.3d at 1319.
\(^{461}\) Camfield v. United States, 167 U.S. 518 (1897).
\(^{463}\) See also Stupak-Thrall v. United States, 81 F.3d 651 (6th Cir.), aff’d on rehearing by an equally divided vote, 89 F.3d 1269 (6th Cir. 1996), cert. denied, 117 S. Ct. 764 (1997).
\(^{467}\) See United States v. Bramble, 103 F.3d 1475 (9th Cir. 1996).
In other constitutional developments,\(^{469}\) the Supreme Court has revitalized the Tenth Amendment as a potential limitation on federal regulatory authority,\(^{470}\) but the authority of the federal land management agencies has not been affected. An Eighth Circuit decision temporarily raised the specter of a rebirth of the nondelegation doctrine,\(^{471}\) but the decision was subsequently vacated.\(^{472}\) The Supreme Court in 1992 concluded that provisions in an appropriation bill designed to preclude judicial challenges to timber sales in several national forests did not violate the separation of powers doctrine because they changed underlying laws rather than amounting to congressional interference in ongoing litigation.\(^{473}\)

Perhaps the constitutional law provision whose interpretation during this period has the potential to work the most significant change in public land law is the "case or controversy" requirement of Article III. In a pair of decisions in 1990 and 1992 rendered in part on constitutional and in part on statutory grounds, the Supreme Court erected barriers to standing to sue that it had swept away in the early 1970s in the Mineral King\(^{474}\) and SCRAP\(^{475}\) cases. In the 1990 \textit{Lujan} decision,\(^{476}\) a divided Court held that a large environmental group and its members lacked standing to challenge a series of revocations by the Interior Department of federal land withdrawals. The Court refused to address the merits of the myriad alleged substantive and procedural deficiencies because, among other things, the purported withdrawal review program did not amount to final agency action,\(^{477}\) and, in any event, the affidavits submitted by the plaintiff's members did not allege with sufficient specificity use of the particular lands affected.\(^{478}\) In the 1992 \textit{Lujan} case,\(^{479}\) the Court, speaking again without consensus, held that another environmental group lacked standing to challenge the Interior Department's position that the ESA did not apply to agency activities conducted outside the United States. This time, the affidavits failed to demonstrate a definite time frame in which the group's members intended to visit the sites at which wildlife would allegedly be affected by noncompliance with the ESA.\(^{480}\) A plurality of the Court concluded that the plaintiff failed to satisfy the redressability component of Article III standing as

\(^{469}\) The application of the Takings Clause to activities on the federal lands during this period is analyzed \textit{supra} at Part II.D.


\(^{472}\) See \textit{South Dakota v. United States Dep't of the Interior}, 106 F.3d 247 (8th Cir. 1996).


\(^{477}\) See \textit{id. at} 890-94.

\(^{478}\) See \textit{id. at} 885-89.


\(^{480}\) See \textit{id. at} 564.
well.\textsuperscript{431} In the wake of the two \textit{Lujan} decisions, many observers predicted that environmental groups would find themselves unceremoniously dumped outside the courthouse doors with increasing frequency. Had the prediction been borne out, opponents of development, including mining, on the federal lands would have faced increased difficulties in gaining access to a judicial forum to challenge those activities. The pundits may yet prove to be correct, though these authors doubted the conventional wisdom right from the start.\textsuperscript{432} To date, the two cases have not significantly affected the ability of public interest environmental litigants to convince the courts to reach the merits in public lands cases. The courts have easily distinguished the \textit{Lujan} precedents.\textsuperscript{433} In one case, for example, affidavits demonstrating that an environmental group’s members regularly used areas potentially affected by subsidence from coal mining were sufficient to satisfy the constitutional injury in fact requirement in a suit challenging the validity of Interior Department coal mining regulations.\textsuperscript{434} In another case, the court rejected the contention that the alleged injuries suffered by an environmental group seeking to overturn the Forest Service’s recognition of valid existing rights in mining claims in an area withdrawn from development were too remote simply because third parties (the mining companies) would have to act before mineral development began.\textsuperscript{435}

Indeed, the litigants most frequently thrown out of court on standing grounds subsequent to the \textit{Lujan} cases have been those seeking to challenge restrictions on development.\textsuperscript{436} In \textit{Marathon Oil Co. v. Babbit},\textsuperscript{437} in 1996, an oil company alleging that the government improperly deprived it of its right to bid competitively on an oil and gas lease tract foundered on the redressability component of constitutional standing because the court lacked the power to compel the government to make land available for leasing. In \textit{Wind River Multiple-Use Advocates v. Espy},\textsuperscript{438} a nonprofit corporation representing individuals who sought increased access to minerals in a national forest was barred from seeking judicial review of aspects of a land and resource management plan because removal of the challenged provisions would not necessarily result in elimination of restrictions on development.\textsuperscript{439}

\textsuperscript{431} See \textit{id.} at 571.
\textsuperscript{433} See, e.g., Sierra Club v. Maria, 46 F.3d 606, 611 (7th Cir. 1995); Resources Ltd., Inc. v. Robertson, 35 F.3d 1300 (9th Cir. 1993).
\textsuperscript{436} See, e.g., Mount Evans Co. v. Madigan, 14 F.3d 1444 (10th Cir. 1994); Region 8 Forest Serv. Timber Purchasers Council v. Alcock, 993 F.2d 800 (11th Cir. 1993); Forest Conservation Council v. Espy, 835 F. Supp. 1202 (D. Idaho 1993), aff’d, 42 F.3d 1399 (9th Cir. 1994).
\textsuperscript{437} 966 F. Supp. 1024 (D. Colo. 1997).
\textsuperscript{438} 835 F. Supp. 1362 (D. Wyo. 1993), aff’d, 85 F.3d 641 (Table), 1996 WL 223925 (10th Cir. 1996).
\textsuperscript{439} See \textit{id.} at 1369.
The lower courts also have used the zone of interest test derived from the judicial review provisions of the Administrative Procedure Act to bar access to the courts by developmental interests.\textsuperscript{490} A utility whose competitor was awarded the right to construct a crude oil pipeline through a national forest lacked standing to attack the validity of an environmental impact statement, for example, because its economic interests conflicted with a general public interest in the environment.\textsuperscript{491} The Supreme Court’s 1997 decision in \textit{Bennett v. Spear},\textsuperscript{492} should make it easier for developmental interests to surmount this prudential obstacle to standing under the ESA, the statute involved in that case, but there may still be room for the government to argue that economic interests do not fall within the zone of interests of NEPA.\textsuperscript{493}

The \textit{Lujan} decisions almost certainly have forced public interest litigants of the sort who have initiated much of the most important litigation in the public lands arena in the last three decades to spend more care preparing affidavits and more in attorneys’ time defending against motions to dismiss. These decisions have not appreciably redressed the balance of standing law to the detriment of these litigants, however.

\textbf{B. Environmental Assessment and Planning Decisions}

The Supreme Court’s persistent hostility to NEPA manifested itself during this period, when the Court took the narrow view of every NEPA question it addressed.\textsuperscript{494} In non-public lands cases, the Court decided that substantive review of agency decisions with environmental consequences is unavailable under NEPA.\textsuperscript{495} For example, the Court held that an Environmental Impact Statement (EIS) was not required before allowing the Three Mile Island nuclear power plant to reopen; it reasoned that only proposed actions having a reasonably close connection to a change in the physical environment may trigger EIS preparation responsibilities.\textsuperscript{496} In a 1983 decision, the Court deferred to the Nuclear Regulatory Commission’s implausible conclusion that the risk of radioactive discharge from long-term storage of nuclear waste was nonexistent.\textsuperscript{497}

The tone for the Court’s treatment of NEPA in public lands cases was set in the 1976 \textit{Kleppe v. Sierra Club} case.\textsuperscript{498} In \textit{Kleppe}, the Court refused to require the Interior Department to prepare an EIS addressing the regional conse-

\textsuperscript{490} See, e.g., Nevada Land Action Ass’n v. United States Forest Serv., 8 F.3d 713 (9th Cir. 1993); County of St. Louis v. Thomas, 967 F. Supp. 370, 377 (D. Minn. 1997).
\textsuperscript{492} 117 S. Ct. 1154 (1997).
\textsuperscript{496} See Metropolitan Edison Co. v. People Against Nuclear Energy, 460 U.S. 766 (1983).
\textsuperscript{498} 427 U.S. 390 (1976).
quences of resuming coal leasing in the Northern Great Plains after a moratorium. The agency committed to preparing a national programmatic EIS and site-specific statements on individual leases, but the environmental plaintiffs asserted that the agency was also obliged to prepare a separate EIS to assess the consequences of resumed leasing in the multi-state area of greatest development potential. The Supreme Court disagreed, reasoning that NEPA did not dictate a regional EIS because the agency was involved in no formal "federal action" of regional scope.\textsuperscript{499} In subsequent decisions, the Court held that an EIS need not accompany an appropriations bill because it did not qualify as "legislation,"\textsuperscript{500} refused to require supplementation of an EIS prepared by the Corps of Engineers on a dam project along the Rogue River,\textsuperscript{501} and upheld a regulation issued by the Council on Environmental Quality watering down the requirement that an EIS include a worst case analysis.\textsuperscript{502}

The record in the lower courts was not nearly so one-sided. On the one hand, efforts to rely on NEPA to block mineral development have failed in a series of cases. The Interior Department convinced the Ninth Circuit that the BLM's review of placer gold mining operations causing a cumulative disturbance of five acres or less per year was not a sufficiently major federal action to trigger NEPA evaluation responsibilities.\textsuperscript{503} The mine operators did not receive federal funding, the agency's approval of these mines was nondiscretionary, and its obligation to monitor compliance with regulatory constraints on degradation and issue notices of noncompliance was insufficient.\textsuperscript{504} In other cases involving prospective mineral development, the courts have likewise found NEPA's EIS preparation requirement inapplicable because of the ministerial nature of the agency's activities. The Eighth Circuit ruled in 1980 that issuance of a mineral patent under the GML is not a major federal action, either because approval is nondiscretionary or because issuance of the patent does not by itself enable its holder to do anything.\textsuperscript{505} A Montana district court held that the Forest Service's determination of the validity of a mining claim under the Wilderness Act was a nondiscretionary action for which NEPA evaluation would be pointless.\textsuperscript{506} In Hoyl v. Babbitt,\textsuperscript{507} a Colorado district court refused to require compliance with NEPA in connection with denial of suspension of a coal lease not yet in production because that decision did not alter the status quo.\textsuperscript{508}

Agencies sometimes succeeded in avoiding the responsibility of preparing

\textsuperscript{499} Id. at 405-06.
\textsuperscript{503} See Sierra Club v. Penfold, 857 F.2d 1307 (9th Cir. 1988).
\textsuperscript{504} See id. at 1314.
\textsuperscript{507} 927 F. Supp. 1411 (D. Colo. 1996), aff'd on other grounds, 129 F.3d 1377 (10th Cir. 1997).
\textsuperscript{508} See Hoyl, 927 F. Supp. at 1418.
an EIS based on requirements or commitments to engage in environmental assessment at a later stage of the project\textsuperscript{509} or on previous preparation of a programmatic EIS.\textsuperscript{510} The most recent of this line of cases is the 1997 decision in \textit{Wyoming Outdoor Council v. United States Forest Service}.\textsuperscript{511} Environmental groups asserted noncompliance with NEPA in attacking the process by which the Forest Service planned to issue oil and gas leases in the Shoshone National Forest. The district court rejected the government's contention that it may wait until lease issuance before undertaking an environmental assessment. The agency passed the "go/no go" point when it authorized nearly a million acres of the Shoshone for leasing. Relying on a 1983 D.C. Circuit decision,\textsuperscript{512} the district court concluded that the Forest Service had to either retain the authority to preclude surface disturbing activities pending completion of a complete environmental evaluation or assess the full environmental consequences of leasing at the time of that authorization.\textsuperscript{513} The court nevertheless refused to halt the leases because it concluded that the EIS prepared at the time the agency decided to commit the million acres to leasing was sufficiently site-specific to preclude the need for subsequent, additional evaluation.\textsuperscript{514}

When an EIS is required, judicial review of the adequacy of statements dealing with the potential adverse effects of mineral-related activity is often deferential. The Ninth Circuit concluded that the Park Service did not violate NEPA in its review of the cumulative impacts of mining operations in the parks and preserves in Alaska.\textsuperscript{515} The agency was not obliged to analyze mitigation measures more thoroughly than it did because it had not yet authorized actual mining operations.\textsuperscript{516} Additionally, evaluation of proposals to lease tracts of the Outer Continental Shelf (OCS) for oil and gas exploration\textsuperscript{517} and expand a mine located adjacent to a national forest\textsuperscript{518} also passed muster. In another case involving oil and gas leasing on the OCS, the Second Circuit held that the EIS did not improperly fail to consider separating exploration from production or of leasing tracts other than those selected.\textsuperscript{519}

On the other hand, NEPA challenges have succeeded in delaying or halting

\textsuperscript{509} See, e.g., North Alaska Envtl. Ctr. v. Lujan, 961 F.2d 886 (9th Cir. 1992); Park County Resource Council v. United States Dept of Agric., 817 F.2d 609 (10th Cir. 1987); Village of False Pass v. Clark, 733 F.2d 605 (9th Cir. 1984); County of Suffolk v. Secretary of the Interior, 562 F.2d 1368 (2d Cir. 1977).


\textsuperscript{511} 981 F. Supp. 17 (D.D.C. 1997).


\textsuperscript{513} See \textit{Wyoming Outdoor Council}, 981 F. Supp. at 19.

\textsuperscript{514} See \textit{id.} at 20.

\textsuperscript{515} See Northern Alaska Envtl. Ctr. v. Lujan, 961 F.2d 886 (9th Cir. 1992).

\textsuperscript{516} See \textit{id.} at 890-92.

\textsuperscript{517} See Sierra Club v. Morton, 510 F.2d 813 (5th Cir. 1975).


\textsuperscript{519} See County of Suffolk v. Secretary of the Interior, 562 F.2d 1368, 1386-88 (2d Cir. 1977). For cases reflecting deferential review of agency proposals that did not involve mining, see e.g., Swanson v. United States Forest Serv., 87 F.3d 339 (9th Cir. 1996); Salmon River Concerned Citizens v. Robertson, 32 F.3d 1346 (9th Cir. 1994).
many agency proposals on the basis of insufficient consideration of potential environmental consequences. The most dramatic cases have involved activities other than mining. The Forest Service and the BLM have consistently failed to convince the courts that proposed timber harvesting actions would have insufficient adverse environmental effects to require preparation of an EIS. The two agencies’ failure to comply with NEPA was a significant component of the Ninth Circuit’s decision to shut down timber harvesting in the habitat of the northern spotted owl in the early 1990s. The Forest Service’s evaluation of the consequences of its Roadless Area Review and Evaluation (RARE II) wilderness recommendations for 60 million acres was similarly characterized as deficient.

But NEPA noncompliance has adversely affected implementation of proposals to allow mineral development on the federal lands as well. The BLM’s failure to consider the cumulative impacts of approving placer mining in the watershed of a national wild and scenic river violated NEPA, resulting in the issuance of an injunction preventing the agency from approving any mining plan pending an evaluation of those impacts. A district court enjoined the Interior Department’s coal leasing program on the basis of the agency’s failure to explain a change in the description of the scope of the program from a “minerals allocation recommendation system” to a “minerals activity recommendation system.” The courts have chastised impact statements perceived to reflect a bias in favor of project implementation, such as OCS oil and gas leasing. This kind of judicial scrutiny of NEPA compliance efforts leaves any agency which short-circuits NEPA’s procedures to facilitate development on the federal lands in a potentially precarious position.

FLPMA and the NFMA impose on the BLM and the Forest Service the obligation to engage in formal land use planning as a prerequisite to implementation of their multiple use responsibilities. Subsequent management decisions must conform to the plans. Relatively few cases have tested the willingness of the courts to closely scrutinize the BLM’s compliance with FLPMA planning procedures. In an early case, a federal district court in Nevada approved a vacuous plan that did nothing to halt excessive grazing.

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520. See, e.g., Smith v. United States Forest Serv., 33 F.3d 1072 (9th Cir. 1994); City of Tenakee Springs v. Clough, 915 F.2d 1308 (9th Cir. 1990); Sierra Club v. United States Forest Serv., 843 F.2d 1190 (9th Cir. 1988).
521. See Portland Audubon Soc’y v. Babbitt, 998 F.2d 705 (9th Cir. 1993); Seattle Audubon Soc’y v. Espy, 998 F.2d 699 (9th Cir. 1993).
522. See California v. Block, 690 F.2d 753 (9th Cir. 1982).
524. See id. at 1313.
529. See id. § 1604(o) (NFMA); See also 43 U.S.C. § 1712(e) (1994) (FLPMA).
pressing its reluctance to become a "rangemaster" by engaging in anything more than superficial review, the court set the stage for extremely deferential if not meaningless review of BLM planning activities.\textsuperscript{531} A different court was willing to review the substantive merits of BLM plans for off-road vehicle (ORV) use on the public lands.\textsuperscript{532}

The decisions involving Forest Service planning under the NFMA are far more numerous, but most focus on timber harvesting and its impact on recreational or preservational use of the national forests. In several cases challenging Forest Service management decisions taken under pre-NFMA plans, the courts upheld a decision to sell less timber than the amount called for in the plan\textsuperscript{533} and found that the EISs accompanying proposed timber sales paid insufficient attention to potential adverse impacts on water quality.\textsuperscript{534} When litigants began challenging the validity of the new land and resource management plans (LRMPs) developed under the NFMA, a threshold question was whether the plans were ripe for review before implementation. Most courts decided that they were.\textsuperscript{535} One of the first cases to address the merits of a LRMP was the \textit{Rio Grande} case,\textsuperscript{536} where the court essentially remanded a plan to the Forest Service to start over. The court refused to accept what appeared to be a trumped up justification for a decision to increase harvesting levels regardless of the economic or environmental consequences. The agency failed to identify, for example, the unspecified technology that would rectify damage to the watershed.\textsuperscript{537} Another Colorado district court decision enjoined timber sales pending amendments to the plan to assure that the land was suitable for harvesting and that the lands could be adequately restocked,\textsuperscript{538} as the statute requires.\textsuperscript{539}

One of the more interesting controversies that has developed in the NFMA cases is the extent to which the Forest Service may allow clearcutting. The statute was adopted in the wake of the \textit{Monongahela} decision,\textsuperscript{540} which inter-

\textsuperscript{927} (9th Cir. 1987).
\textsuperscript{531} See \textit{id}. at 1062.
\textsuperscript{532} See \textit{American Motorcyclist Ass'n v. Watt}, 543 F. Supp. 789 (C.D. Cal. 1982). \textit{But cf. Sierra Club v. Clark}, 756 F.2d 886 (9th Cir. 1985) (upholding the BLM's refusal to close area to ORV use because the plan allowed it).
\textsuperscript{537} See \textit{id}. at 984-86.
interpreted the 1897 Organic Act as prohibiting that timber harvesting practice. A federal district court in Texas construed the NFMA provisions that addresses clearcutting\textsuperscript{541} as permitting that practice only in exceptional circumstances.\textsuperscript{542} The Fifth Circuit reversed, concluding that the exceptional circumstances standard "erected too high a barrier to even-aged management"\textsuperscript{543} and that the Forest Service complied with its responsibility to protect forest diversity and resources when it endorsed a plan that adopted clearcutting as the norm. The Sixth Circuit subsequently reversed the district court’s approval of a plan providing for even-aged management on eighty percent of suitable lands, denouncing not only the agency’s predisposition toward clearcutting, but its entire planning process.\textsuperscript{544} The Sixth Circuit never even cited the Fifth Circuit’s opinion. The Supreme Court granted certiorari to review the Sixth Circuit’s decision and, presumably, to resolve the conflict between Circuits on the threshold ripeness issue and, perhaps, on the merits, too. The same district court in Texas whose decision on clearcutting was overruled by the Fifth Circuit recently enjoined timber harvesting in the Texas national forests again because of the Forest Service’s failure to comply with NFMA monitoring and inventorying requirements.\textsuperscript{545}

The provision of the NFMA requiring that LRMPs "provide for diversity of plant and animal communities"\textsuperscript{546} has provided further grist for the judicial mill. One court characterized this provision as so vague as to be virtually devoid of substantive content.\textsuperscript{547} The Seventh Circuit, while treating the diversity requirement more seriously, ultimately approved LRMPs alleged to have slighted that requirement, and it rejected the assertion that the statute requires the setting aside of large, unfragmented habitats. The Forest Service need not promote "natural diversity" above other considerations.\textsuperscript{548}

The NFMA planning provisions for the Forest Service are more detailed and specific than the analogous FLPMA provisions for the BLM. This difference provides the courts with the basis for more closely scrutinizing the Forest Service planning process, and in some cases they have begun to do so. Still, the judicial inclination to defer to agency expertise in technical areas has prompted some courts to afford plan challengers little more than a once-over-lightly.\textsuperscript{549}

\textsuperscript{542} See Sierra Club v. Espy, 822 F. Supp. 356 (E.D. Tex. 1993), vacated and remanded, 38 F.3d 792 (5th Cir. 1994).
\textsuperscript{543} See Sierra Club v. Espy, 38 F.3d 792, 795 (5th Cir. 1994).
\textsuperscript{548} See Sierra Club v. Marita, 46 F.3d 606 (7th Cir. 1995).
C. Preservation Decisions

The statutes adopted during the Preservation Era have radically reshaped the manner in which the federal lands and resources are managed. There is no better or more dramatic example of the impact these laws have had on federal public land law than the ESA. The long-running disputes over the northern spotted owl and the anadromous fish in rivers of the Pacific Northwest highlight the role of the courts in advancing the goal of protecting endangered or threatened wildlife.

The Supreme Court’s decision in the 1978 Snail Darter case\(^ {550} \) illustrated the potentially disruptive impact which noncompliance with the ESA could have on agency projects. The Court’s literal reading of the statute mandated the halting of construction of the Tellico Dam, even though it was close to completion, at least until Congress reversed that result. Judicial insistence on compliance with the statute produced similar results in the case of the northern spotted owl. The Fish and Wildlife Service listed the owl only after a district court in Washington State rejected its explanation for refusing to do so earlier.\(^ {551} \) The designation of the bird’s critical habitat also came in response to a court decree.\(^ {552} \) The failure of the Forest Service and the BLM to take seriously their responsibilities in protecting the owl resulted in the issuance of sweeping injunctions which virtually shut down timber harvesting in affected areas of Oregon and Washington.\(^ {553} \) The Ninth Circuit later approved the Clinton Administration’s plan for protecting the owl in 1996 despite a host of attacks by both the timber industry and environmentalists.\(^ {554} \)

The Ninth Circuit took the statute one step further when it required the Forest Service to reopen a completed LRMP to consider the plan’s effect on the chinook salmon, even though the fish was not listed until after the plan’s adoption.\(^ {555} \) It enjoined both ongoing and announced timber, range, and road projects under the plan to prevent irreversible resource commitments pending compliance with the ESA.\(^ {556} \)

The courts have assisted in implementation of all aspects of the species listing and protection processes. They have enforced the statutory consultation requirements through injunctions,\(^ {557} \) although they have concluded that the FWS need not engage in consultation when it merely provides advice on how to avoid the taking prohibition on private land\(^ {558} \) and that an injunction pre-

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553. See Portland Audubon Soc’y v. Babbitt, 998 F.2d 705 (9th Cir. 1993); Seattle Audubon Soc’y v. Espy, 998 F.2d 699 (9th Cir. 1993).
554. See Seattle Audubon Soc’y v. Moseley, 80 F.3d 1401 (9th Cir. 1996).
557. See, e.g., Thomas v. Peterson, 753 F.2d 754 (9th Cir. 1985); House v. United States Forest Serv., 974 F. Supp. 1022 (E.D. Ky. 1997).
558. See Marbled Murrelet v. Babbitt, 83 F.3d 1068 (9th Cir. 1996).
venting construction of the northern tier oil pipeline was inappropriate because a right-of-way permit did not authorize construction until full compliance with the ESA had been achieved.559 They have rejected as inadequate poorly prepared biological opinions,560 while concluding that action agencies need not adopt the measures recommended by the FWS in such an opinion.561 They have grappled with timing questions in applying the consultation requirements to segmented activities such as hardrock mineral development and oil and gas leasing that are similar to those encountered under NEPA.562 They have enjoined projects deemed to be violative of the statutory duty to avoid jeopardizing species or harming their critical habitat.563 They have interpreted the statute to impose an affirmative duty on agencies to conserve listed species,564 although they have recognized that agencies retain discretion to determine the means of compliance with the duty.565

The ESA’s prohibition on the taking of listed species also has been the focus of judicial concern. The leading case is the Supreme Court’s 1995 decision of *Babbitt v. Sweet Home Chapter of Communities for A Great Oregon*.566 A group of small landowners and loggers challenged the Fish and Wildlife Service’s position that the prohibition on taking applies to significant modification of critical habitat, but the Court deferred to the agency’s interpretation as consistent with the statutory language and purposes.567 Other cases have addressed the issue of whether a substantial risk of injury constitutes a taking,568 and whether the prohibition applies at the individual or population

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561. See Tribal Village of Akutan v. Hodel, 869 F.2d 1192 (9th Cir. 1988); Sierra Club v. Froehlke, 534 F.2d 1289 (9th Cir. 1976).

562. Compare Cabinet Mountains Wilderness v. Peterson, 685 F.2d 678 (D.C. Cir. 1978) (refusing to enjoin hardrock mineral prospecting in grizzly bear habitat because mitigation requirements would avert harm to the species), and North Slope Borough v. Andrus, 642 F.2d 589, 607-10 (D.C. Cir. 1980) (declining to halt sale of offshore oil and gas leases on basis of alleged inadequacy of biological opinion because assessment of impact on endangered species could await more concrete proposals for development), with Conner v. Burford, 848 F.2d 1441, 1445 (9th Cir. 1988), cert. denied, 489 U.S. 1066 (1989) (refusing to allow deferral of specific evaluation of onshore oil leasing until more concrete exploration or production plans).


565. See Pyramid Lake Paiute Tribe v. United States Dept’ of the Navy, 898 F.2d 1410 (9th Cir. 1990) (approving the district court’s finding that the Navy did not violate the affirmative conservation duty in leasing lands and associated water rights to farmers, even though the leases required diversions which left less water for the spawning of listed species).


567. See id. at 697-98.

level.569 The courts have enforced the criminal sanctions imposed by the Act on individuals engaged in prohibited takings or related activities.570 The ESA thus clearly has the potential to impair the ability of the federal land management agencies to authorize and private interests to proceed with mineral development on portions of the federal lands which constitute critical habitat for listed species, although cases involving application of the ESA to minerals development proposals are far fewer than are the analogous NEPA cases.

The courts have played a role in the implementation of other preservation-oriented legislation, such as the Wilderness Act. They have deferred to some571 but not other agency determinations whose effect has been to exclude lands from protection as wilderness. In a 1985 California district court decision, the court overturned the Secretary of the Interior's decision to delete all splitestate lands (such as lands in which the government had conveyed away mineral interests and retained title to the surface) from the inventory of qualifying wilderness areas.572 In a subsequent decision, a Colorado district court halted the withdrawal of allegedly valuable mineral lands from wilderness consideration due to the Secretary’s failure to prepare a supplemental EIS.573 Similarly, in the RARE II case,574 the Ninth Circuit essentially halted logging and other commercial development on more than one-third of all national forest system lands on the basis of the agency’s noncompliance with NEPA in conducting a wilderness inventory.

Even when mineral development in wilderness study areas (WSAs) has been allowed, the courts have upheld agency regulation of those activities as a means of preventing undue degradation and environmental protection.575 The D.C. Circuit prevented the issuance of mineral leases in national forest WSAs absent the retention of agency authority to deny access for environmental protection purposes.576 A Utah district court in 1979 ruled that a company that had acquired mineral location claims before the cut-off date for grandfathering mining and mineral leasing in BLM WSAs could not build a road through a potential WSA to the claims as a result of its potential to impair the suitability of the area for preservation as wilderness.577 The Tenth Circuit held three years later that mineral leasing in WSAs is subject to the nonimpairment standard as to leases issued both before and after that cut-off date.578

569. See Marbled Murrelet v. Babbitt, 83 F.3d 1060 (9th Cir. 1996) (raising but not resolving the issue).
571. See, e.g., Smith v. United States Forest Serv., 33 F.3d 1072 (9th Cir. 1994).
574. See California v. Block, 690 F.2d 753 (9th Cir. 1982).
578. See Rocky Mountain Oil & Gas Ass’n v. Watt, 696 F.2d 734 (10th Cir. 1982). Congress later codi-
Designated wilderness areas have been closed to new mineral location and leasing since January 1, 1984.\textsuperscript{579} In \textit{Clouser v. Espy}, in 1994,\textsuperscript{580} the Ninth Circuit upheld the authority of the Forest Service to regulate access to pre-1984 mineral locations and leases exempted from the Act's development prohibitions to preserve wilderness character.\textsuperscript{581} In \textit{Getty Oil Co. v. Clark},\textsuperscript{582} the BLM approved a pre-designation lessee's application for a permit to drill, but the courts affirmed the reversal of that decision by the Interior Board of Land Appeals based on the agency's failure to evaluate the environmental consequences of drilling.

The cases that have arisen under the Wild and Scenic Rivers Act\textsuperscript{583} have been less frequent but no less contentious. In some instances, agency failure to comply with statutory obligations has not adversely affected agency projects such as timber sales.\textsuperscript{584} In \textit{Oregon Natural Resources Council v. Harrell}, in 1995,\textsuperscript{585} the Ninth Circuit overturned the district court's finding that the Corps of Engineers violated the statutory prohibition on assisting construction of a water development project with adverse effects on river values. Both the Forest Service and the BLM objected to the project because it would impede migration and spawning of anadromous fish. The appellate court, however, interpreted the prohibition on assistance to apply only when a federal agency assists others in taking action with effects on a designated river. In this case, the Corps, by limiting the function of the dam to flood control instead of water conservation, chose an operating mode for the dam rather than licensed its operation.\textsuperscript{586} But the Act contributed to the denial of a mining company's application to build a hydroelectric power facility to generate electricity for its gold mining operation on a wild and scenic river.\textsuperscript{587} The Act also has halted development that did not involve mining or mineral leasing. In the \textit{Donner und Blitzen River} case,\textsuperscript{588} for example, an Oregon district court enjoined implementation of a comprehensive management plan which failed to take adequate account of the adverse effects of grazing on river values and improperly allowed increased vehicle access to the river area.\textsuperscript{589}

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\textsuperscript{580} 42 F.3d 1522 (9th Cir. 1994), cert. denied, 515 U.S. 1141 (1995).
\textsuperscript{581} Id. at 1537-39.
\textsuperscript{584} See, e.g., Newton County Wildlife Ass'n v. United States Forest Serv., 113 F.3d 110 (8th Cir. 1997) (refusing to enjoin timber sales due to failure to prepare timely management plan because preparation of plan is not precondition to approval of sales and issuance of injunction would usurp agency's procedural autonomy).
\textsuperscript{585} 52 F.3d 1499 (9th Cir. 1995).
\textsuperscript{586} See id. at 1505-06.
\textsuperscript{588} See Oregon Natural Desert Ass'n v. Green, 953 F. Supp. 1133 (D. Or. 1997).
\textsuperscript{589} See id. at 1145-49.
D. Multiple Use Management Decisions

The hallmark of the decisions involving judicial review of implementation of the multiple use mandates of statutes such as FLPMA and the NFMA has been deference to agency discretion. Ignoring an early unreported decision in which it took the Forest Service to task for failing to afford “due consideration” to the values reflected in the MUSYA, the same Ninth Circuit later described the MUSYA as a statute which “breathes discretion at every pore.” The court proceeded to uphold reductions of grazing allotments on multiple use grounds. This deferential review posture has become typical of decisions reviewing agency implementation of other multiple use statutes. One court, for example, refused to second-guess the Forest Service’s determination that the imposition of limitations on logging was consistent with reasonable multiple use management, even though it would increase the risk of wildfires. Another deferred to a BLM grazing plan which appeared to allow grazing at levels which would significantly impair the land’s usefulness for other purposes. The courts have regularly upheld restrictions on the use of motorized vehicles in national forests and on BLM public lands. Refusals to restrict motorized access also have been upheld, however. The courts have deferred to agency decisions allowing mineral development despite potential adverse effects on wildlife, another protected multiple use, and have upheld agency decisions which seemed to completely ignore protection of watershed values.

Occasionally, however, the courts read substantive limitations on agency discretion into the statutes. In 1996, for example, the Ninth Circuit interpreted multiple use legislation as precluding an agency from dedicating an area to a single use, in this case preservation. In an earlier decision, the Ninth Circuit enjoined the Forest Service from allowing a mine operator to reopen an access road due to the predicted adverse effects on a fragile population of wild sheep which grazed in the area. The adoption of statutes such as the ESA which elevate the protection afforded to particular resources (such as endan-

594. See, e.g., Northwest Motorcycle Ass'n v. United States Dep't of Agric., 18 F.3d 1468 (9th Cir. 1994). See also Great Am. Houseboat Co. v. United States, 780 F.2d 741 (9th Cir. 1986); Lake Berryessa Tenants' Council v. United States, 588 F.2d 267 (9th Cir. 1979).
595. See, e.g., Humboldt County v. United States, 684 F.2d 1276 (9th Cir. 1982).
596. See, e.g., Sierra Club v. Clark, 774 F.2d 1406 (9th Cir. 1985).
597. See, e.g., Cabinet Mountains Wilderness v. Peterson, 685 F.2d 678 (D.C. Cir. 1982).
598. See 3 PNRL, supra note 1, § 21.02[3].
599. Agency decisions have had the same effect. See, e.g., National Wildlife Fed'n v. BLM, 140 IBLA 85 (1997) (overturning BLM decision allowing grazing in five Utah canyons due to its failure to balance competing resource values).
600. See Seattle Audubon Soc'y v. Moseley, 80 F.3d 1401, 1404 (9th Cir. 1996).
601. See Foundation for N. Am. Wild Sheep v. United States Dep't of Agric., 681 F.2d 1172 (9th Cir. 1982).
garded wildlife) in specific situations is likely to have a more significant effect in narrowing agency discretion afforded by the multiple use statutes. The same is true of the enactment of agency regulations, such as the environmental quality standards increasingly applicable to hardrock mining operations and of agency land use plans, to which subsequent management decisions must conform.

E. Minerals Management Decisions

The application of the mining and mineral leasing laws to activities on the federal lands also has been affected by judicial interpretation. The courts have been called upon to determine the scope of statutory programs such as the General Mining Law’s hardrock mineral location scheme. In the 1978 case of Andrus v. Charlestone Stone Products Co., the Supreme Court declared that water is not a locatable mineral. Two years later, it held that oil shale need not be marketable at present to be patentable. The courts also have assisted in distinguishing between lode and placer claims, a crucial distinction for determining the size and shape of a GML claim. In 1977, the Ninth Circuit held that the Stock-Raising Homestead Act’s reservation of “coal and other minerals” included geothermal resources, rejecting in the process the Interior Department’s view that geothermal resources amounted to nothing more than superheated water. Six years later, in Watt v. Western Nuclear, Inc., the Supreme Court, relying on the statutory purpose of encouraging concurrent development of surface and subsurface resources, determined that “other minerals” also includes gravel. The Tenth Circuit ruled in Aulston v. United States and Exxon Corp. v. Lujan that carbon dioxide and helium are covered by a federal oil and gas lease.

A series of cases have dealt with the GML’s patenting process. In a 1980 decision, the Eighth Circuit ruled that issuance of a patent did not trigger NEPA evaluation requirements because patenting is a ministerial act leaving the surface management agency with no discretion to be affected by the environmental assessment. But the Court of Claims subsequently ruled that the right to a valid patent is only an expectancy which Congress can eliminate without incurring the obligation to compensate. The Ninth Circuit confirmed in

602. See 3 PNRL, supra note 1, § 25.04.
605. See Webb v. Lujan, 960 F.2d 89 (9th Cir. 1992).
609. 915 F.2d 584 (10th Cir. 1990), cert. denied, 500 U.S. 916 (1991).
610. 970 F.2d 757 (10th Cir. 1992).
Swanson v. Babbit\textsuperscript{13} that vested rights arise only after full compliance with the procedures for obtaining a patent.\textsuperscript{614} Substantial compliance will not suffice.\textsuperscript{615} In Mt. Emmons Mining Co. v. Babbit, in 1997,\textsuperscript{616} the Tenth Circuit held that the filing of a patent application with a state BLM office along with all necessary papers required to process the application exempted the applicant from a 1994 congressional moratorium on the issuance of mineral patents and entitled the applicant to processing of its application.\textsuperscript{617} In the Ninth Circuit’s decision of R.T. Vanderbilt Co. v. Babbit\textsuperscript{618} in the same year, the court held that a patent applicant was not exempt from the moratorium given its failure to tender payment of the purchase price before the effective date of the exemption.\textsuperscript{619}

The courts have addressed related issues under several statutes concerning the right to issuance and the duration of mineral leases on the federal lands. Efforts by those who had filed applications for prospecting permits to overturn the Interior Department’s moratorium on coal leasing failed, in part because those filings afforded them no protectable rights.\textsuperscript{620} The D.C. Circuit ruled in 1979 that issuance of a lease to a prospecting permittee under the pre-1976 coal leasing mechanisms is nondiscretionary if the lessee has satisfied all statutory conditions, including the discovery of commercial quantities.\textsuperscript{621} But determinations of profitability had to take into account environmental restrictions imposed on the lessee by the leasing agency.\textsuperscript{622} In Rosebud Coal Sales Co. v. Andrus,\textsuperscript{623} the Tenth Circuit concluded that the Interior Department’s failure to provide timely notice to a FCLAA lessee of its intention to readjust lease terms constituted a waiver of its right to do so.\textsuperscript{624} The same court later held that the FCLAA automatically makes pre-FCLAA leases subject to adjustment at ten-year intervals from the first readjustment after the statute’s adoption.\textsuperscript{625} The D.C. Circuit held in Copper Valley Machine Works, Inc. v. Andrus\textsuperscript{626} that the Interior Secretary had no right to terminate a lease for nonproduction because

\begin{itemize}
  \item 613. 3 F.3d 1348 (9th Cir. 1993).
  \item 614. See also Independence Mining Co. v. Babbitt, 105 F.3d 502 (9th Cir. 1997) (vested rights do not arise before the Interior Secretary has decided whether to contest a patent claim). But cf. Cook v. United States, 37 Fed. Cl. 435 (1997) (patent applicants acquired equitable title by complying with statutory prerequisites and proposing purchase price which was accepted by the BLM).
  \item 615. See Red Top Mercury Mines, Inc. v. United States, 887 F.2d 198 (9th Cir. 1989).
  \item 616. 117 F.3d 1167 (10th Cir. 1997).
  \item 617. See id. at 1171.
  \item 618. 113 F.3d 1061 (9th Cir. 1997).
  \item 619. See id. at 1065.
  \item 621. See Natural Resources Defense Council, Inc. v. Berglund, 609 F.2d 553, 557 n.13 (D.C. Cir. 1979).
  \item 622. See id. at 555 n.3.
  \item 623. 667 F.2d 949 (10th Cir. 1982).
  \item 624. But cf. FMC Wyoming Corp. v. Hodel, 816 F.2d 496 (10th Cir. 1987), cert. denied, 484 U.S. 1041 (1988) (notice sent before anniversary date was sufficient even though adjustment proceedings were not completed until after readjustment).
  \item 625. See Trapper Mining Co. v. Lujan, 923 F.2d 774 (10th Cir.), cert. denied, 502 U.S. 821 (1991).
  \item 626. 653 F.2d 595 (D.C. Cir. 1981).
\end{itemize}
section 209 of the Mineral Leasing Act,\textsuperscript{627} which entitles leaseholders to an extension if leases are suspended "in the interest of conservation," afforded the leaseholder two more seasons of operations. The court interpreted "conservation" broadly to include more than unanticipated stoppages.\textsuperscript{628} The Tenth Circuit distinguished \textit{Copper Valley} in the 1997 \textit{Hoyl} case,\textsuperscript{629} concluding that the de facto suspension doctrine recognized in the earlier decision applies only where the agency takes action which does not apply evenhandedly to leases in other areas.\textsuperscript{630} For that reason, the mere preparation of an EIS did not occasion a de facto suspension.\textsuperscript{631} The court also held that the BLM properly considered the lack of a market for the coal which would be extracted from the lease and the absence of authorization to mine as relevant factors in determining whether to issue a suspension.\textsuperscript{632}

The courts have been increasingly instrumental in the enforcement of statutory and regulatory restrictions on the rights of mining claimants, particularly when those restrictions are designed to protect the environment. In \textit{United States v. Curtis-Nevada Mines, Inc.}\textsuperscript{633} the Ninth Circuit, relying on the Surface Resources Act of 1955,\textsuperscript{634} enjoined a locator from barring recreational access across the surface of its claim. The same statute affords the Forest Service the power to prevent prospecting methods with environmentally destructive potential.\textsuperscript{635} In \textit{Duncan Energy Co. v. United States Forest Service},\textsuperscript{636} the Eighth Circuit upheld the Forest Service's authority to prevent the owner of mineral rights in a national grasslands area from proceeding with exploration absent agency approval of a surface use plan designed to afford the agency the opportunity to perform an environmental assessment. In \textit{Clouser v. Epsy},\textsuperscript{637} the Ninth Circuit extended those holdings by allowing regulation on lands outside the boundaries of the mining claim, at least where another statute supplies regulatory authority. The same court in \textit{United States v. Weiss},\textsuperscript{638} decided in 1981, interpreted the Forest Service Organic Act to vest in the agency sufficient authority to impose reasonable regulations on miners with location claims. The miners do not gain prescriptive rights to avoid regulation simply because the agency long refrained from exercising those powers.\textsuperscript{639} BLM authority to regulate to prevent undue degradation was recognized in the 1988 decision of \textit{Sierra Club v. Penfold}.\textsuperscript{640}

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\textsuperscript{628} See \textit{Copper Valley}, 653 F.2d at 600-02.
\textsuperscript{629} See \textit{Hoyl v. Babbitt}, 129 F.3d 1377, 1383-84 (10th Cir. 1997).
\textsuperscript{630} See \textit{id.} at 1384.
\textsuperscript{631} See \textit{id.}
\textsuperscript{632} See \textit{id.} at 1385.
\textsuperscript{633} 611 F.2d 1277 (9th Cir. 1980).
\textsuperscript{635} See United States v. Richardson, 599 F.2d 290 (9th Cir. 1979), cert. denied, 444 U.S. 1014 (1980).
\textsuperscript{636} See \textit{also} United States v. Doremus, 888 F.2d 630 (9th Cir. 1989), cert. denied, 498 U.S. 1046 (1991).
\textsuperscript{637} 50 F.3d 584 (8th Cir. 1995).
\textsuperscript{638} 42 F.3d 1522 (9th Cir. 1994), cert. denied, 515 U.S. 1141 (1995).
\textsuperscript{639} 642 F.2d 296 (9th Cir. 1981).
\textsuperscript{640} 857 F.2d 1307 (9th Cir. 1988).
The Interior Department’s responsibility to take steps to prevent oil and gas leasing from damaging surface resources also has been the subject of considerable litigation. In Sierra Club v. Peterson, the D.C. Circuit held that NEPA requires the leasing agency to draft a full EIS unless it includes in the lease no surface occupancy stipulations prohibiting surface activities without the agency’s specific approval. In Bob Marshall Alliance v. Hodel, the Ninth Circuit required the leasing agency to consider the no action alternative before leasing. The Tenth Circuit subsequently upheld lease issuance without an EIS in Park County Resource Council v. United States Department of Agriculture, but that decision is not necessarily inconsistent with Peterson and Bob Marshall because the court appeared to assume the agency’s ability to assess and mitigate environmental damage. The courts were more solicitous of leasing without prior environmental assessment in the offshore leasing context. The Ninth Circuit in 1978 allowed casual use by geothermal lessees under the Geothermal Steam Act to proceed based on a programmatic EIS, but indicated that site-specific evaluation might be necessary at the “appropriate phase of development.”

In some instances, business as usual prevailed despite the adoption of statutory and regulatory revisions to the minerals disposition process. A good example is the Powder River Coal case, where the Ninth Circuit upheld a series of coal leases, even though evidence produced by a federal commission supported the conclusion that the tracts were not leased at fair market value as required by the FCLAA.

VIII. LEGISLATIVE STALEMATES, 1981-1997

The pace of legislative change slowed considerably after 1980. Many of the statutes that were adopted since that time have taken the form of modifications to existing statutory programs, such as the federal pollution control laws, rather than of dramatic new initiatives. A 1997 statute defined for the first time a mission for the National Wildlife Refuge System and elevated “wildlife-dependent recreational uses,” including hunting and fishing, to a newly prominent place in the hierarchy of permissible refuge uses. With that notable exception, the essential mandates of the federal land management agencies have remained basically unchanged during this period, although the lands under their jurisdiction have increased or decreased with the creation of new national parks.

641. 717 F.2d 1409 (D.C. Cir. 1983).
643. 817 F.2d 609 (10th Cir. 1987).
644. See 3 FNRL, supra note 1, § 23.02[4][b].
645. See Village of False Pass v. Clark, 733 F.2d 605 (9th Cir. 1984).
646. See Sierra Club v. Hathaway, 579 F.2d 1162 (9th Cir. 1978).
648. See 3 FNRL, supra note 1, § 22.03[3][e].

Congress suspended the application of environmental laws to timber sales in a series of appropriations bills, culminating in the adoption of the 1995 salvage timber sale law. It also used appropriations bills to impose moratoria on the issuance of mineral patents and the listing of endangered species. President Clinton vetoed an appropriations bill which would have forced the Forest Service to adopt an LRMP for the Tongass National Forest with mandatory, minimum timber sales.

A few programs were subject to more lasting overhauls. The Reclamation Reform Act of 1982 amended the processes by which and the standards pursuant to which the Bureau of Reclamation allocates water from federal reclamation projects. The Electric Consumers Protection Act of 1986 requires the Federal Energy Regulatory Commission to afford more weight to fish and wildlife protection purposes in the licensing of hydroelectric dams. The National Forest Ski Area Permit Act of 1986 converted many permits granted under the authority of the 1897 Organic Act to a new system.

The Federal Onshore Oil and Gas Leasing Reform Act (FOOGLRA) of 1987 amended the Mineral Leasing Act by establishing a new bidding and leasing system for oil and gas. Competitive bidding at oral auction replaced the simultaneous lottery system previously in effect. The statute imposes new limits on the size of tracts offered for competitive leasing and sets na-


654. See 2 PNRL, supra note 1, § 15B.05[3].


656. See 3 PNRL, supra note 1, § 20.03[2].


662. See generally 3 PNRL, supra note 1, § 21B.04.


664. See generally 3 PNRL, supra note 1, § 21C.05.


666. See 3 PNRL, supra note 1, § 17.04[3][b][i].


668. See generally 3 PNRL, supra note 1, § 23.03.


670. See id. § 226(b)(1)(A).
tional minimum acceptable bids,671 rentals,672 and royalties.673 Leases may be forfeited for a variety of reasons, including failure to commence drilling within the primary lease term674 and failure to comply with lease terms and applicable laws.675 The Federal Oil and Gas Royalty Management Act of 1982676 authorizes the Interior Department to audit oil and gas lessee operations to facilitate calculation and collection of lease royalties.677

A few entirely new programs have surfaced. In 1983 Congress created the "rails-to-trails" program, which authorized the conversion of abandoned railroad rights-of-way to recreational use.678 It abolished other programs, eliminating both the National Biological Survey679 and the Interior Department's Bureau of Mines in 1995.680

The most dramatic changes in federal public land law in recent years, however, have been the ones that have not been adopted. Following the election of Republican majorities in the 1994 congressional elections, which featured the Contract with America formulated largely by House Speaker Gingrich, a series of bills were introduced whose effect would have been to restore elements of earlier eras of federal public land management. The objective, stated or unstated, of many such bills was "to open public lands more to commodity uses."681

One category of bills sought to end federal ownership or management of public lands or to switch the governing federal land management agency from one subject to a preservation-oriented mandate to one subject to multiple use management standards. The bills authorizing the states to demand the transfer of all BLM lands located within their boundaries682 would have codified the agenda of the County Supremacists and Wise Users and turned back the clock all the way to the pre-New Deal Disposition Era.683 Similarly, legislation was proposed that would have allowed the states to seek title to Forest Service lands after ten years of state management684 and that would have transferred jurisdiction over the national grasslands from the Forest Service to the Secretary of

671. See id. § 226(b)(1)(B).
672. See id. § 226(d).
673. See id. § 226(b)(1)(A).
674. See id. § 226(e).
675. See id. § 188(a).
677. See id. Phillips Petroleum Corp. v. Lujan, 963 F.2d 1380 (10th Cir. 1992), addresses the scope of the agency’s auditing authority, which it has delegated to the Minerals Management Service. See also Santa Fe Energy Prod. Co. v. McCutcheon, 90 F.3d 409 (10th Cir. 1996).
681. See Markowski, Craig Haven’t Forgotten Ambitious Forest Plans, 21 PUBLIC LANDS NEWS No. 2, at 5 (Jan. 18, 1996).
684. See Craig Forestry Bill Would Rewrite Much of NFMA and FLPMA, 21 PUBLIC LANDS NEWS No. 24, at 1 (Dec. 12, 1996). The same bill would have repealed the RPA. Id.
Agriculture. A California legislator introduced a bill to switch lands designated in 1994 as a national preserve back to BLM public lands. A measure designed to provide incentives for the federal government to sell public lands would have allowed Congress to attribute sale revenues toward budget reductions, even though the sales ultimately might cost the government money. The same bill would have authorized the sale of national forest lands used for ski operations to the operators. Had any of these bills been adopted, the inevitable (and intended) result would have been increased mining and mineral leasing activity.

Another category of proposed legislation took the form of efforts to eliminate or subordinate procedures and substantive controls constraining development. Western Senators proposed legislation to remove restrictions derived from land use planning, environmental assessment, and endangered species protection requirements that hindered the Forest Service’s ability to offer allowable sales quantities of timber. Such legislation would essentially codify and expand on a permanent basis some aspects of the 1995 salvage timber sale bill, which exempted those sales from environmental constraints. Another bill proposed to give livestock interests more control over the establishment of grazing policies and to prohibit environmental reviews upon renewal of permits. Two Western Senators introduced a bill to reverse proposed Interior Department regulations by shifting to the government the burden of proving that right-of-way claims based on R.S. 2477 are invalid. The Senate passed a bill in 1997 allowing states to use relatively lenient standards to validate these right-of-way.

President Clinton’s 1996 designation of the Staircase-Escalante National Monument in Utah prompted the introduction of bills, one of which was passed by the House of Representatives, to limit sharply the President’s withdrawal power under the Antiquities Act. Enactment of such legislation would weaken if not negate a statute symbolic of much of what transpired during the Conservation Era. A less sweeping proposal would have opened the Arctic

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685. See Same Story: Domenici Team Talking to Dems About Range Bill, 21 PUBLIC LANDS NEWS No. 2, at 6 (Jan. 18, 1996).
687. See GOP Working on Federal Land Disposal on Several Fronts, 20 PUBLIC LANDS NEWS No. 22, at 4 (Nov. 9, 1995).
688. See id.
690. See Craig, Administration Bash Each Other Over Forest Policy, 22 PUBLIC LANDS NEWS No. 6, at 3-4 (Mar. 20, 1997).
691. See New Draft Domenici Range Bill Due; Grazing Fee Hits Bottom, 21 PUBLIC LANDS NEWS No. 3, at 5 (Feb. 1, 1996).
National Wildlife Refuge (ANWR) to oil and gas development.\(^695\) President Clinton vetoed an appropriations bill to that effect in 1995.\(^696\)

Efforts to revoke other Preservation Era initiatives took the form of proposals to amend the ESA. Some bills would have overturned the Supreme Court’s decision in the *Babbitt v. Sweet Home Chapter of Communities of a Great Oregon.*\(^697\) by limiting the definition of harm in the Act’s taking prohibition to direct actions that kill or injure individual members of listed species.\(^698\) Others would have vested in the states veto power over species listing decisions.\(^699\) Still others would have required the federal government to compensate landowners whose property values were diminished by more than twenty percent as a result of the ESA’s application\(^700\) and eliminated the requirement that action agencies consult with the Fish and Wildlife Service on actions with the potential to jeopardize listed species or their habitats.\(^701\) More moderate bills would have required the Interior Secretary to cooperate with private landowners to minimize the economic impact of regulation through the adoption of habitat conservation plans; authorized the use of tradable development rights so that developers could receive permission to build on certain lands in exchange for agreeing not to develop critical habitat and other lands important for species preservation; and provide for peer review of the science upon which ESA decisionmaking is based.\(^702\)

Efforts to adopt a new wave of preservation-oriented legislation or to eliminate well-entrenched but unjustified subsidies were equally unsuccessful. Some proposed legislation would have expanded the lands subject to preservation-oriented management. A 1997 bill, responding to earlier efforts to open up the ANWR to leasing, would have designated the 1.5 million acre plain as wilderness.\(^703\) Another bill would have protected 20 million acres in the Northern Rockies as wilderness, wild and scenic rivers, and related protected lands categories.\(^704\)

Other bills would have enhanced existing management standards designed to forestall or mitigate environmental harm. The Clinton Administration intro-
duced legislation to increase the base grazing fee and to place a greater emphasis on the adverse environmental consequences of grazing on the public rangelands.705 When that legislation foundered, the Administration sought to achieve some of its goals administratively through the implementation of Rangeland Reform '94.706

A plethora of bills aimed at reforming the General Mining Law to mitigate environmental spillovers attributable to hardrock mining likewise died a quiet death, although one was passed overwhelmingly by the House in 1993.707 An effort to block administrative efforts to accomplish the same result708 was the upshot of a 1997 appropriations rider.709 A recent bill710 would require miners to finance a fund to remediate contaminated abandoned mines. A similar fund already exists for abandoned surface coal mines under the SMCRA.711 Proposed legislation to increase royalty payments to the government also got nowhere.712 Environmentalists introduced their own versions of ESA reform which, among other things, would have precluded consideration of economic impact until after critical habitat designation, during the formulation of habitat conservation plans,713 required designation of critical habitat contemporaneously with listing, and established deadlines for key statutory decisions.714

IX. CONCLUSION

The French saying to the effect that the more things change, the more they stay the same, has particular relevance to federal public land and natural resources law. Assumptions and premises change; legislation is repealed or amended; new administrations bring new public land priorities; and courts announce new doctrines or new emphases. Yet the same conflicts evident for over 200 years remain unresolved. These conflicts, among others, continue to pit:

- federal vs. state governments;
- Republicans vs. Democrats;

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707. See Enviro's Hope to Get Floor Vote on Mining Law in GOP House, 22 PUBLIC LANDS NEWS No. 1, at 7 (Jan. 9, 1997).
708. See Babbitt Orders Up New Mining Regs; Court Backs Patent Plan, 22 PUBLIC LANDS NEWS No. 3, at 1 (Feb. 6, 1997).
712. See Enviro's Hope to Get Floor Vote on Mining Law in GOP House, 22 PUBLIC LANDS NEWS No. 1, at 7 (Jan. 9, 1997).
714. See Conservatives, Environmentalists Fault GOP ESA Bill, 22 PUBLIC LANDS NEWS No. 8, at 6 (Apr. 17, 1997).
• Eastern states vs. Western states;
• Liberals vs. conservatives;
• Federal agencies vs. each other;
• Environmentalists vs. commodity users;
• Conservationists vs. preservationists;
• Exploitative vs. controlled uses;
• Public interests vs. private interests.

The evolution of public natural resources law generally has proceeded from disposition to conservation to preservation, but none of these eras is discrete or exclusive: some elements of each always have been present, though in differing ways and emphases. One starkly unfortunate result of this evolution has been the proliferation of statutes and other legal authorities—many of which were ignored or barely touched on, even in this overly lengthy paper. As stated at the beginning, the law in 1998 is in some respects an unholy mess because of its proximity, conflict, lack of clarity, definition or uniformity, unavailability, complexity, obsolescence, inefficiency, and unfairness.

No one designed the law this way. It is the product of a history characterized by ad hoc responses to perceived problems over time without any real attempt to reconcile the new with the old or to aggregate the disparate parts into a coherent whole. The nation still is operating in that disjointed, accumulative fashion as senators and representatives introduce myriad individual bills on myriad separate subjects in this area.

In general outline, at least, a rough balance seems to have been struck among the various contenders, and it is best described as inertia in favor of the status quo; the all-powerful Congress lacks the ability or desire to institute radical change in any direction. Current reform proposals are pale imitations of the notions floated by both sides just a few years ago, from repeal of the General Mining Law at one end of the spectrum to disposing of the federal lands at the other.