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FISH, DAMS, AND JAMES MADISON: EIGHTEENTH-CENTURY SPECIES PROTECTION AND THE ORIGINAL UNDERSTANDING OF THE TAKINGS CLAUSE

JOHN F. HART*

How would the Supreme Court resolve a case that pitted the habitat-protective provisions of the Endangered Species Act¹ against the Court's regulatory takings doctrine? What the Court has said about regulatory takings in other contexts implies that a landowner prevented from developing land designated as protected wildlife habitat would have quite a strong regulatory takings claim.² Barring development would sharply reduce the land's potential profitability or even deny "all economically beneficial or productive use," thus thwarting the owner's reasonable "investment-backed expectations."4 As for the "character of the government action," enjoining a landowner from disrupting wildlife habitat on her land is not a result that could have been reached using the Court's concept of common-law principles of nuisance or property law. Indeed, critics of environmental legislation have often singled out the Endangered Species Act for the perceived novelty of its principles.⁶ Moreover, when the kind of habitat the government now seeks to protect has been lawfully devel-

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^{1.} Endangered Species Act of 1973, 16 U.S.C. §§ 1531-1544 (2000). The Endangered Species Act, as implemented by the Secretary of the Interior, prohibits not only intentionally harming endangered wildlife but also incidentally harming endangered wildlife by degrading critical habitat, even on private land. 50 C.F.R. § 17.3 (2003).

^{2.} See, e.g., Penn Cent. Transp. Co. v. New York City, 438 U.S. 104, 124 (1978) (stating that the "economic impact of the regulation on the claimant and, particularly, the extent to which the regulation has interfered with distinct investment-backed expectations" have "particular significance" in a regulatory takings analysis); Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1015 (1992) (holding that "where regulation denies all economically beneficial or productive use of land," a regulatory taking occurs); Palazzolo v. Rhode Island, 533 U.S. 606, 617 (2001) (noting that "[where] a regulation places limitations on land that fall short of eliminating all economically beneficial use, a taking nonetheless may have occurred . . .").

^{3.} Lucas, 505 U.S. at 1015.

^{4.} Penn Cent. Transp. Co., 438 U.S. at 124.

^{5.} Id.

^{6.} See, e.g., The Constitution, Regulatory Takings, and Property Rights: Hearings Before the Subcomm. on the Constitution of the House Comm. on the Judiciary, 104th Cong., 1st Sess. (1995) (statement of Roger J. Marzulla, Chairman, Defenders of Property Rights) (testifying that

oped by other "similarly situated owners"—as would often be the case before a species is classified as endangered—this "ordinarily imports a lack of any common-law prohibition," especially if the other owners are allowed to continue their preexisting use.⁷ These points suggest that prohibiting development of privately owned habitat to protect wildlife under the Endangered Species Act or similar state legislation would generally constitute a taking of the landowner's development rights under the Fifth Amendment.⁸

This Article will demonstrate, however, that the modern regulatory takings doctrine rests on an anachronistic understanding of the Takings Clause. Today's doctrine would treat as a taking any habitatpreservation law that severely reduced the use-value of property, unless the law conformed to the common law of nuisance. But this proposition must be tested against historical precedent. The eighteenthcentury fish-passage laws provide a concrete example of early American legislation addressing the conflict between the public's interest in preserving wildlife habitat and landowners' interest in using their property as profitably as possible. Rivers and streams used by migratory fish to pass upstream at spawning season were critical habitat for those species.⁹ When mill dams in eighteenth-century America prevented migratory fish from reaching their spawning grounds, fishermen sought and often obtained legislative relief.¹⁰ In a departure from the common law, laws were enacted that required mill dam owners to modify dams—by installing gates, openings, or slopes—to allow fish to pass upstream. 11 Fish-passage requirements were applied to preexisting dams, even those built with official approval, 12 as well as to dams built after the laws were enacted.¹³ Satisfying fish-passage requirements made dams considerably less efficient and less profitable,

private property rights legislation is needed) [hereinafter Hearings]; see also Hearings, supra (statement of Roger Pilon, Senior Fellow and Director, Center for Constitutional Studies).

^{7.} Lucas, 505 U.S. at 1031.

^{8.} The Fifth Amendment states in relevant part: "nor shall private property be taken for public use, without just compensation." U.S. Const. amend. V. This clause of the Fifth Amendment is generally known as the Takings Clause.

^{9.} See 1 Louis C. Hunter, A History of Industrial Power in the United States 1780-1930, at 144-46 (1979) (explaining that certain fish species need free passage during spawning season).

^{10.} See infra notes 30-43 and accompanying text (discussing early legislative responses to mill dams blocking fish passage).

^{11.} See infra notes 30-43 and accompanying text.

^{12.} See, e.g., Stoughton v. Baker, 4 Mass. (1 Tyng) 522, 528 (1808) (stating that all mill dam owners must allow "sufficient and reasonable passage-way" for fish); see also infra note 76 and accompanying text.

^{13.} State v. Franklin Falls Co., 49 N.H. 240, 241 (1870).

some to the point of impracticability.¹⁴ Occasionally dams were ordered to be torn down altogether because they were found to be incompatible with fish passage.¹⁵ These laws show that the protection of wildlife in eighteenth-century American law did not consist merely of seasonal or quantitative limits on hunting and fishing, but sometimes included regulation of private land use to protect wildlife habitat, over the objections of affected landowners.¹⁶

This history is constitutionally significant because the fish-passage laws were common when the Constitution and the Takings Clause were drafted. In 1791, when the Bill of Rights was ratified, nine states had laws compelling mill dam owners to modify their dams in order to allow fish to pass upstream. The fish-passage laws reflected a wide consensus among contemporary legislators that the constitutional rights of affected landowners were not violated by accommodating the public's interest in natural abundance, instead of sacrificing the public good in order to maximize the value of private property. This evidence of contemporary laws and practices is additionally significant because Virginia's general fish-passage law (to be examined below in detail) had been introduced by James Madison—a preeminent advocate of securing the rights of property—four years before he drafted the Takings Clause. This historical evidence strongly suggests that Madison, his colleagues in Congress, and his contemporaries in the

^{14.} See infra notes 49-53 and accompanying text.

^{15.} See infra note 47 and accompanying text.

^{16.} Cf. Marty Bergoffen, Endangered Species Act Reauthorization: A Biocentric Approach 31 (Elissa C. Lichtenstein ed., 1995) (asserting that Western society did not consider the negative impact of human activities on other species until about 1900); Thomas R. Dunlap, Saving America's Wildlife 5-6 (1988) (asserting that whites "who settled North America saw wild animals as objects to be used and used up"); John F. Beggs, Note, The Theoretical Foundations of the Takings Clause and the Utilization of Historical Concepts of Property in the Ecological Age, 6 Fordham Envil. L.J. 867, 900-01 (1995) (asserting that the Framers of the Constitution "had no concept of, and thus could not comprehend . . . excessive consumption of natural resources").

^{17.} See infra note 175 and accompanying text (noting that Connecticut, Massachusetts, New Hampshire, North Carolina, Pennsylvania, Rhode Island, South Carolina, Vermont, and Virginia had fish-passage laws in 1791).

^{18.} See Act of Oct. 1785, 1785 Va. Acts ch. LXXXII. This statute was Virginia's general fish-passage law. Madison did not draft this legislation, but the question of whether dams should be allowed to block the passage of fish had long been particularly controversial in Madison's own neighborhood as well as a common subject for legislation in Virginia; therefore, he must have been familiar with arguments for and against the measure. See infra notes 60-65, 81-83, 89-91, 111-127 and accompanying text. Earlier in 1785, "laws and regulations which may be necessary for the preservation of fish" had been addressed in the compact between Virginia and Maryland governing the use of the Potomac River. Act of Oct. 1785, 1785 Va. Acts ch. XVII. Madison had helped negotiate this compact on behalf of Virginia, and he pushed for its ratification during the same Assembly session that enacted the general fish-passage law. See infra note 117 and accompanying text.

state legislatures did not view the fish-passage laws as violations of property rights when the Fifth Amendment was proposed and ratified.

The early fish-passage laws, viewed in the light of general principles found in Supreme Court case law, strongly support the validity of comparable applications of species-protection law today, despite the apparently contrary suggestions in the Court's recent regulatory takings cases. The Court has observed that certain kinds of regulatory law that were conventional in the founding era inferred that neither Congress in proposing the Bill of Rights nor the state legislatures in adopting it intended to affect the validity of such regulations and concluded that any modern law imposing no greater restrictions on a landowner than those that could have been imposed under the conventional laws of 1791 does not violate the Bill of Rights.¹⁹ This principle is preeminently identified today with nuisance and property law,20 but its application has not always been so limited.21 The fishpassage laws should be similarly recognized as a part of the American legal tradition that was already established when the Constitution and the Bill of Rights were adopted—as part of "those powers of police that were reserved at the time the original Constitution was adopted."22

The fish-passage laws give concrete indications of how Madison and his contemporaries regarded conflicts between the public interest

^{19.} See, e.g., Keystone Bituminous Coal Ass'n v. DeBenedictis, 480 U.S. 470, 491-92 (1987). Regulations proscribing nuisance-like activity have enjoyed a special status in the Court's doctrine of regulatory takings because "the Takings Clause did not transform" the principle that "property in this country is held under an implied obligation that the owner's use of it shall not be injurious to the community." *Id.* at 492 (quoting Mugler v. Kansas, 123 U.S. 623, 665 (1887)).

^{20.} See Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1029-31 (1992) (explaining that to justify a total taking, "South Carolina must identify the background principles of nuisance and property law that prohibit" the landowner's intended use for his property); Keystone, 480 U.S. at 491-92 (declaring that "the Takings Clause did not transform" the principle that "property . . . is held under an implied obligation that the owner's use of it shall not be injurious to the community") (quoting Mugler, 123 U.S. at 665) (internal quotation marks omitted).

^{21.} See Mugler, 123 U.S. at 663 (denying that "the Fourteenth Amendment of the Constitution takes from the States of the Union those powers of police that were reserved at the time the original Constitution was adopted").

[[]N]either the [Fourteenth] Amendment—broad and comprehensive as it is—nor any other amendment, was designed to interfere with the power of the State, sometimes termed its police power, to prescribe regulations to promote the health, peace, morals, education, and good order of the people, and to legislate so as to increase the industries of the State, develop its resources, and add to its wealth and prosperity.

Id. (quoting Barbier v. Connolly, 113 U.S. 27, 31 (1884)).
22. Id.

in natural abundance and private property rights, today subsumed under the concept of regulatory takings. The early fish-passage acts provide far more reliable guidance for evaluating endangered species laws under the modern regulatory takings doctrine than the historical evidence previously advanced and rejected by the Court in *Lucas*.²³ The fish-passage laws are a numerous body of antecedents from our "legal tradition" that support the conclusion that comparable habitat-protection measures in modern law do not constitute regulatory takings.²⁴

How broad is the precedential force of the early fish-passage laws as support for today's habitat-protection laws? It might be argued that the fish-passage laws stand merely for the proposition that species directly useful to mankind may be protected by regulatory laws that limit the uses of private property, without constituting a taking. This rationale would include the chinook salmon because it provides humans with food, while excluding the snail darter minnow and other species whose survival helps to preserve biodiversity generally, but does not yet have a more particular function. It is not so clear, however, that the founding generation would associate public "advantage" exclusively with direct usefulness. James Madison himself raised the prospect of mankind's "extirpating every useless production of nature;" he felt it was

not probable that nature, after covering the earth with so great a variety of animal & veg[e]table inhabitants, and establishing among them so systematic a proportion, could permit one favorite offspring, by destroy[ing] every other, to render vain all her wise arrangements and contrivances.²⁷

Destruction "not only of individuals, but of entire species," Madison insisted, was "forbidden . . . by the principles and laws which operate in various departments of her [that is, nature's] economy."²⁸

^{23.} See Lucas, 505 U.S. at 1028 n.15 (conceding that the Court's regulatory takings doctrine is "largely" unsupported by "early American experience," and asserting that the practices of some of the states before 1897 "were out of accord with any plausible interpretation" of the Takings Clause).

^{24.} See id. at 1035 (Kennedy, J., concurring).

^{25.} JOURNAL OF THE HOUSE OF DELEGATES OF VIRGINIA [Oct. 1778], at 797 (White ed., 1827).

^{26.} James Madison, *Preliminary Draft of an Essay on Natural Order, in* 14 The Papers of James Madison 100, 101 (Robert A. Rutland et al. eds., 1983).

^{27.} Id. at 102.

^{28.} James Madison, Address to the Agricultural Society of Albemarle, Virginia, in 3 LETTERS AND OTHER WRITINGS OF JAMES MADISON 68 (1865); see infra notes 192-194 and accompanying text (noting Madison's concerns regarding the destructive impact of humans on other animal and plant species).

I. FISH-PASSAGE LAWS IN EARLY AMERICA

A. Overview

From the seventeenth century until well into the nineteenth century, water from rivers and streams—dammed and channeled through mill wheels—furnished America's primary source of mechanical power.²⁹ Mill dams, however, incidentally blocked migratory fish from both passing upstream to spawn and returning downstream. This obstruction prompted complaints from citizens who were accustomed to obtaining fish from those creeks and rivers. In the early eighteenth century, legislatures began to prohibit maintaining mill dams that obstructed the seasonal passage of fish.³⁰ For example, Rhode Island required the owners of all mill dams "where any fish usually pass" to make "good and sufficient" openings permitting fish to "pass and repass," between April 21 to June 1.³¹ By 1800, thirteen states had laws prohibiting mill dams on some or all of their rivers from obstructing the passage of fish.³²

The fish-passage laws extended the reach of the common law. Although completely obstructing the upstream passage of fish by fixed fishing devices—weirs, fish-hedges—was held to be a private nui-

^{29.} See Hunter, supra note 9, at 1 (discussing the evolution of American stationary power, particularly the development of water power); Victor S. Clark, 1 History of Manufactures in the United States, 1607-1860, at 174-80 (1929) (discussing the importance of mills in early American society). First among the "great natural powers of the country" that Providence had given America, Tench Coxe cited the "numerous mill seats . . . by which flour, oil, paper, snuff, gunpowder, iron-work, woolen cloths, boards and scantling, and some other articles, are prepared or perfected." Tench Coxe, A View of the United States of America 12 (P. Wogan et al. eds., 1795). Coxe asserted that it was "the duty of government" to encourage such manufactures, "especially as it can be done by water-means, and not by men diverted from their farms." Id. at 256.

^{30.} See Act of Feb. 16, 1709, 1709-1710 Mass. Acts ch. 7; Act of Jan. 16, 1735, 1735-1736 Mass. Acts ch. 21. The use of fishing devices (weirs, fish-hedges, nets) to trap fish passing upstream was already regulated. See, e.g., Records of the Colony of New Plymouth in New England: Laws 1623-1682, at 49 (David Pulsifer ed., 1861) (prohibiting the setting of any nets in Sandwich River that would "stopp the passage" of herrings or alewives "or hinder their coming up . . . during their season").

^{31.} Act of Aug. 1735, 1735 R.I. Laws 271.

^{32.} See Act of May 1798, 1798 Conn. Acts; Act of Feb. 15, 1799, 1799 Ga. Laws ch. 4; Act of Feb. 22, 1797, 1797 Ky. Acts 123; Act of Feb. 19, 1799, 1799 Mass. Acts; Act of 1787, 1787 N.C. Laws ch. 15; Act of June 18, 1790, 1790 N.H. Laws ch. 18; Act of Mar. 28, 1800, 1800 N.Y. Laws ch. 74; Pa. Act of Feb. 22, 1774, ch. 694, reprinted in 8 The Statutes At Large of Pennsylvania (James T. Mitchell & Henry Flanders eds., 1902); Act of 1798, Laws of the State of Rhode Island 513-14; S.C. Act of Dec. 21, 1792, No. 1557, reprinted in 5 The Statutes at Large of South Carolina 217 (Thomas Cooper ed., 1839); Laws of the State of Tennessee 384 (Edward Scott ed., 1821) (1787 N.C. Laws ch. 15, adopted as Tennessee law in Mass. 1796); Act of Mar. 8, 1787, 1787 Vt. Acts & Resolves 14; Act of Dec. 21, 1792, 1792 Va. Acts ch. 43.

sance,³³ incidentally obstructing fish by operating a mill dam on a non-navigable watercourse was not recognized as a public nuisance by the contemporary common law.³⁴ As in England, statutes compensated for this deficiency in the common law.³⁵

The fish-passage laws varied in their provisions. Some laws applied to the rivers of an entire jurisdiction,³⁶ while others applied only to particular rivers.³⁷ Some laws applied only to the upstream passage of fish,³⁸ while others applied to the downstream passage as well.³⁹ Some fish-passage laws declared that dams obstructing fish were nuisances,⁴⁰ while others did not.⁴¹ The fish-passage laws also varied in the specificity of the physical adaptations required. Some laws simply required dam owners to make "a sufficient passage-way... through or round such dam,"⁴² leaving the details to be worked out locally. Other laws imposed much more specific requirements, such as building a

slope . . . ten feet wide, tightly built, and planked up the sides . . . two feet in depth at least, and the length of every slope shall be four times its perpendicular height, with basons therein, at eight feet distance from each other, sufficient to

^{33.} See Weld v. Hornby, 7 East 195, 198-200 (K.B. 1806) (holding that an impermeable stone weir across a river must be removed because it harmed the plaintiff's fishery); Joseph K. Angell, A Treatise on the Law of Watercourses § 84, at 82-83 (5th ed. 1854).

^{34.} See People v. Platt, 17 Johns. 195, 212 (N.Y. Sup. Ct. 1819); Commonwealth v. Knowlton, 2 Mass. (1 Tyng) 530, 535 (1807) (holding that the statutory offence of blocking the passage of salmon with a mill dam was "clearly not an offence at common law"). A mill dam would constitute a public nuisance at contemporary English common law if it obstructed navigation. See 4 William Blackstone, Commentaries on the Laws of England 167 (1769) (noting that "common" [that is, public] nuisances include "[a]nnoyances in . . . public rivers, by rendering the same inconvenient or dangerous to pass"). In State v. Franklin Falls Co., 49 N.H. 240, 250 (1870), the New Hampshire Supreme Court held that a dam obstructing the passage of fish was "a public nuisance punishable at common law by indictment." This contention did not gain general acceptance, however. See John M. Gould, A Treatise on the Law of Waters § 187, at 358 (3d ed. 1900).

^{35.} See 4 Ann. c. 21, § 5 (1705) (requiring mill owners in two counties to "keep open one Scuttle or small Hatch of a Foot Square" for salmon to pass upstream); 1 Geo. I Stat. 2 c. 18, § 14 (1714) (prohibiting new dams that hinder salmon from passing upstream to spawn in certain English rivers).

^{36.} See, e.g., Act of 1787, 1787 N.C. Laws ch. 15.

^{37.} See, e.g., Conn. Act of Oct. 1764, reprinted in 12 The Public Records of the Colony of Connecticut 297 (Charles J. Hoadly ed., 1881) (prohibiting the placement of obstructions on the Paucatuck River).

^{38.} See, e.g., Act of Feb. 1759, 1759 Va. Acts ch. XXXII.

^{39.} See Act of Feb. 22, 1792, 1792 Mass. Acts ch. 30; S.C. Act of Dec. 21, 1792, No. 1557, reprinted in 5 The Statutes at Large of South Carolina 217 (Thomas Cooper ed., 1839).

^{40.} See, e.g., Act of Oct. 1793, 1793 Conn. Acts.

^{41.} See, e.g., Pa. Act of Feb. 22, 1774, ch. 694, reprinted in 8 The Statutes at Large of Pennsylvania (James T. Mitchell & Henry Flanders eds., 1902).

^{42.} Act of Feb. 27, 1743, 1743-1744 Mass. Acts ch. 26.

afford resting places for fish, in their passage up the said slope, and shall be fixed in the dam eighteen inches below the common height of the water, and contiguous to the deepest part of the river.⁴³

Some specifications for preserving the passage of fish were quite severe in their impact. A New Hampshire law prohibited dams on the Merrimack River from extending more than halfway across the river. A Connecticut statute required opening "a sluice-way in such dam twelve feet in width, and within six inches of the bottom of [the] river." These requirements would sharply reduce the head of water available for mill power during the relevant seasons. Where such openings were not sufficient to allow the passage of fish, legislatures sometimes authorized existing dams to be pulled down, or prohibited new dams altogether.

Any sizeable opening in a dam would spill a lot of water that could otherwise furnish power, thus lessening the capacity of the mill.⁴⁹ Several kinds of evidence indicate that for mill owners the economic impact of complying with fish-passage requirements must have been considerable. The value of water power is indicated by the fact that mill owners would undergo the trouble and expense of litigation over a change of as little as six inches in dam height.⁵⁰ Many mill owners violated fish-passage requirements despite increasingly heavy

^{43.} Act of Feb. 1772, 1772 Va. Acts ch. XXXIII.

^{44.} Act of June 18, 1790, 1790 N.H. Laws ch. 18; see also Act of 1787, 1787 N.C. Laws ch. 15 (requiring one quarter of the width of rivers to be left for passage of fish).

^{45.} Act of Oct. 1793, 1793 Conn. Acts; see also Act of Feb. 1748, 1748 R.I. Laws (requiring dams on the Pawcatuck River to have a "Space or Breach . . . ten Feet wide to the Bottom of the River or Mud-Sill, if requir'd thereto, for the fish to take their course through"); Act of Feb. 19, 1799, 1799 Mass. Acts (requiring "sluice-ways of the width of eight feet, and in depth, within eighteen inches of the mud-sill").

^{46.} Hunter, *supra* note 9, at 146 (citing Peter J. Coleman, The Transformation of Rhode Island, 1790-1860, at 76 (1963)).

^{47.} See Act of Mar. 1761, 1761 Va. Acts ch. XX (requiring a mill owner whose dam obstructed the passage of fish to pull down and destroy the dam); Act of Dec. 16, 1791, 1791 Va. Acts ch. XXXV (appointing commissioners to examine Banister River and recommend whether to "break[] down the mills built thereon" to promote passage of fish).

^{48.} See Act of Mar. 1761, 1761 Va. Acts ch. XI (authorizing "any person or persons whatsoever to pull down" any dam erected in a certain part of a river); cf. Act of Oct. 1785, 1785 Va. Acts ch. LXXXII (authorizing new dams to be built or new dams to be rebuilt only if passage of fish was not obstructed).

^{49.} See HUNTER, supra note 9, at 152 (discussing the negative impact of wasting water on the productivity of mills).

^{50.} See Eppes v. Cralle, 15 Va. (1 Munf.) 258 (1810) (concerning a mill owner who sought to raise an existing dam by six inches); Calhoun v. Palmer, 49 Va. (8 Gratt.) 88, 99 (1851) (concerning a mill owner seeking to raise an existing dam by five to six inches).

penalties.⁵¹ In addition, legislatures sometimes exempted particular mills from the fish-passage laws on the ground that compliance would be prohibitively onerous,⁵² or authorized exemption of mills on particular rivers on the ground that the benefit of the fish did not outweigh the costs imposed on the mills.⁵³

The legislative judgment that the normal operation of an otherwise legitimate mill dam was interfering unacceptably with the public interest in enjoying the natural supply of fish seems to reflect a determination of which competing use of water was "of more consequence to the community at large," rather than the premise that obtaining fish for food was necessary or uniquely important. Most mill dams would be used to power grist mills, which also contributed to the food supply. Fish, meanwhile, were used for fertilizer as well as for food. And the objective of preserving the fish run was itself often sacrificed in favor of other uses of water power unrelated to food, when these were deemed to be of greater "public utility."

^{51.} See infra notes 81-83 and accompanying text.

^{52.} See, e.g., Ga. Act of Feb. 2, 1798, reprinted in DIGEST OF THE LAWS OF THE STATE OF GEORGIA 370 (Horatio Marbury & William H. Crawford eds., 1802); Ga. Act of Feb. 15, 1799, reprinted in supra, at 557, 558.

^{53.} See infra notes 86-88 and accompanying text; Act of Dec. 16, 1791, 1791 Va. Acts ch. XXXV (appointing commissioners to examine Banister River mills and "inquire if the obstructions were removed, whether the fish which might pass up the said river, would be an object sufficient to justify the breaking down the mills thereon, or to compel the owners to make slopes in their dams"); Act of Jan. 2, 1805, 1805 Va. Acts ch. LXIII (appointing commissioners to investigate and determine "whether it will be of most public utility to compel [owners of dam across Reed Creek] to make a slope in their dam for the passage of fish, or to suffer the said dam to remain as at present erected, for the purpose of carrying on their iron works").

^{54.} Ga. Act of Feb. 2, 1798, reprinted in DIGEST OF THE STATE LAWS OF GEORGIA, supra note 52, at 370 (exempting certain mills because an earlier fish-passage statute had "in its operation borne hard upon Joseph Ray and Bazil Lamar, by preventing the prosecution of their design to erect merchant mills upon Little River," and declaring that "it is of much more consequence to the community at large, to encourage the manufactory of flour, than the inconsiderable advantages resulting to a few individuals, from the egress of the fish in the aforesaid river").

^{55.} Cf. Hudson County Water Co. v. McCarter, 209 U.S. 349, 356 (1908) ("On this principle of public interest and the police power, and not merely as inheritor of a royal prerogative, the State may make laws for the preservation of game, which seems a stronger case.") (citing Geer v. Connecticut, 161 U.S. 519, 534 (1897)).

^{56.} HUNTER, supra note 9, at 8-14.

^{57.} Percy Wells Bidwell & John I. Falconer, History of Agriculture in the Northern United States 1620-1860, at 87-89 (1941); *see also* 3 The Diaries of George Washington 1748-1799, at 330 (John C. Fitzpatrick ed., 1925).

^{58.} See, e.g., Act of 1767, 1767 R.I. Pub. Laws (providing that "the owners of the Furnace Hope shall not be required to open any fish-way through their dam").

^{59.} Act of Jan. 2, 1805, 1805 Va. Acts ch. LXIII (appointing commissioners to investigate and determine "whether it will be of most public utility to compel [owners of dam

B. Virginia

1. Before 1785.—In 1759 Virginia's General Assembly began to prohibit mill dams from obstructing "the passage of fish." Petitioners complained that they had been "formerly well supplied" with fish but were "now deprived thereof by . . . mill-dams." Because of mill dams, the annual fish runs upstream were "in a great measure obstructed" —or "quite obstructed" or "entirely obstructed." In response, the Assembly enacted special acts ordering owners and operators of mills on particular rivers to make "opening[s] or slope[s]" in their dams "sufficient to let fish pass" as before. Incidental obstruction of fish was targeted by the new law; intentionally catching fish during their annual "running" was already prohibited.

Petitions tended to assert that divine Providence had supplied the rivers with fish in order to feed everyone in the vicinity, "but more Especially, the poorer Sort whose families were Chiefly Supported thereby." Fish of passage were a "great blessing and advantage which kind providence intended . . . bountifully to bestow on all such as should live on or near" the rivers. Fish were "Providential Succour" that had afforded petitioners "Great Relief and Satisfaction of

across Reed Creek] to make a slope in their dam for the passage of fish, or to suffer the said dam to remain as at present erected, for the purpose of carrying on their iron works").

- 60. Act of Feb. 1759, 1759 Va. Acts ch. XXXII.
- 61. Act of Nov. 1769, 1769 Va. Acts ch. XX.
- 62. Id.
- 63. Act of Feb. 1759, 1759 Va. Acts ch. XXXII.
- 64. Act of Mar. 1761, 1761 Va. Acts ch. XIV; see also Act of Mar. 1761, 1761 Va. Acts ch. XX (requiring a mill owner who blocked fish passage entirely on Rockfish River to tear the mill down).
- 65. Act of Feb. 1759, 1759 Va. Acts ch. XXXII. The Assembly had previously expressed concern that "many of the rivers and creeks of this colony are stopped and choaked up by ... hedges, weirs or stone stops, in or cross the same, whereby the passage of boats ... and of fish, is obstructed, to the great damage of the inhabitants." Act of Oct. 1748, 1748 Va. Acts ch. XXIX. That statute, however, had specifically exempted from its prohibitions "any mill built upon a river above navigable water" and "any mills already built, or that hereafter shall be built, pursuant to the laws relating to water mills." *Id.*
- 66. Virginia General Assembly Legislative Petitions, Culpeper County, Oct. 19, 1778, No. 672-P, *in* Virginia Legislative Petitions, 6 May 1776-21 June 1782 (Randolph W. Church ed., 1984); Virginia General Assembly Legislative Petitions, Orange County and Culpeper County, Oct. 19, 1778, No. 673-P *in* Virginia Legislative Petitions, *supra*. These petitions are located in the Virginia State Library in Richmond, Virginia.
- 67. See, e.g., Act of Feb. 1772, 1772 Va. Acts ch. XXXIV. A "fish dam," like a weir, was a fixed device erected in a stream for catching fish. Id.
- 68. Virginia General Assembly Legislative Petitions, Lunenburg County and Mecklenburg County, Oct. 31, 1776, No. 181-P, *in* Virginia Legislative Petitions, *supra* note 66.
- 69. Virginia General Assembly Legislative Petitions, Sussex County, Oct. 31, 1776, No. 180-P, in Virginia Legislative Petitions, supra note 66.

Themselves & families."⁷⁰ Losing these fish caused "Impoverishment" as well as "Injury."⁷¹ Fish were a "natural supply of Provisions" that "all Men may equally partake of."⁷² One petition expressed "hope that the interests of a few"—that is, owners of dams downstream—would not prevail over "such advantages which kind providence . . . intended to bestow on such Numbers," that is, fishermen upstream.⁷³

In many cases the Assembly granted relief to such petitions.⁷⁴ For individual dam owners, the economic impact of the Assembly's fish-passage measures could be severe.⁷⁵ The special acts made little allowance for protecting investment-backed expectations. The existing mills were subjected to the same fish-passage requirements as future mills, merely receiving a longer time to comply.⁷⁶ Nor did the Assembly exempt long-established dams or even dams built in reliance upon the provisions of the river-clearing law enacted in 1748.⁷⁷ The Assembly generally tried to accommodate both water power and fish pas-

^{70.} Virginia General Assembly Legislative Petitions, Culpeper County, Oct. 19, 1778, No. 672-P, *in* Virginia Legislative Petitions, *supra* note 66. A fishing rights petition asserted that

[[]T]he Bountiful Creator having given man Dominion over the Fish for Food, & appointed their habitation in the waters, which he made incapable of separate or individual Property, manifested his Intention that this Providential Supply of Sustenance should ever remain in common to be caught indifferently by all whose necessity or other circumstances should prompt to seek them

Virginia General Assembly Legislative Petitions, Caroline County, Nov. 21, 1777, No. 479-P, in Virginia Legislative Petitions, supra note 66.

^{71.} Virginia General Assembly Legislative Petitions, Lunenburg County and Mecklenburg County, Oct. 31, 1776, No. 181-P, in Virginia Legislative Petitions, supra note 66.

⁷². Journals of the House of Burgesses of Virginia 1773-1776, at 80 (John Pendleton Kennedy ed., 1905).

^{73.} Virginia General Assembly Legislative Petitions, Sussex County, Oct. 31, 1776, No. 180-P, *in* Virginia Legislative Petitions, *supra* note 66.

^{74.} See, e.g., Act of Mar. 1761, 1761 Va. Acts ch. XIC (requiring owners of mills on Meherrin, Nottaway and Appomattox rivers to "make an opening or slope" in their mill dams "at least ten feet wide, sufficient for the passage of fish over the same").

^{75.} See supra notes 49-51, 53 and accompanying text.

^{76.} See Act of Mar. 1761, 1761 Va. Acts ch. XIV (stating that owners of existing mills had nine months to build openings for the passage of fish and that future mills must feature an opening for fish passage); Act of Nov. 1769, 1769 Va. Acts ch. XX (requiring all current mill owners to construct a fish passage-way before March 1, 1771, and all future mills to include a passage-way); Act of Feb. 1772, 1772 Va. Acts ch. XXXV (granting trustees the authority to determine which existing mill dams needed openings to facilitate the passage of fish).

^{77.} The Act of 1748 "for clearing Rivers and Creeks" had categorically exempted from its operation "any mill built upon a river above navigable water" and "any mills already built, or that hereafter shall be built, pursuant to the law relating to water mills." Act of Oct. 1748, 1748 Va. Acts ch. XXIX. The "Act concerning water mills" authorized "any person, intending to build a water mill, on some convenient run," who had land on only one bank, to invoke a procedure for condemning and purchasing an acre of private land on the other bank. Act of Oct. 1748, 1748 Va. Acts ch. XXVI.

sage, but even existing mills were not necessarily allowed to continue operating.⁷⁸ The Assembly directed one mill owner to "pull down and destroy his . . . mill and mill house,"⁷⁹ besides prohibiting the future erection of "any mill" whatsoever in that river "below the forks thereof."⁸⁰

The substantial threat that the fish-passage acts posed to the profitability of operating mill dams is further indicated by the evidence of evasion. For example, one petition charged that mill owners on a certain river previously directed by special acts to make fish slopes in their dams had "by art and cunning contrived to build the said slopes in such manner so as to entirely defeat the good intention of the said Laws."

The Assembly acted on such reports, making the design and performance specifications for fish slopes increasingly exacting and appointing trustees to monitor their effectiveness, thereby further increasing burdens for mill owners.

The Assembly also was willing to abandon fish-passage measures completely if the fish run in a particular river appeared to be irretrievably depleted. The Rapidan River, for example, was the subject of an Act of 1759 requiring all mill owners to "make an opening or slope in their respective mill dams, at least ten feet wide, sufficient to let fish

^{78.} See Act of Mar. 1761, 1761 Va. Acts ch. XX (requiring one mill owner to destroy his dam because it entirely obstructed the passage of fish).

^{79.} Id. (explaining that the mill dam had "entirely obstructed the passage of fish"); see also Act of Dec. 16, 1791, 1791 Va. Acts ch. XXXV (appointing commissioners to determine whether mills on the Banister River should be broken down or required to make openings or slopes to promote the passage of fish).

^{80.} Act of Mar. 1761, 1761 Va. Acts ch. XX. Besides providing that an offender must pay a heavy penalty, the act authorized "any person or persons whatsoever to pull down" a dam in this part of the river. *Id.*

^{81.} Virginia General Assembly Legislative Petitions, Sussex County, Oct. 31, 1776, No. 180-P, *in* Virginia Legislative Petitions, *supra* note 66.

^{82.} For example, a 1759 Act merely required mill dam slopes to be "at least ten feet wide, sufficient to let fish pass over." Act of Feb. 1759, 1759 Va. Acts ch. XXXII. Thirteen years later, however, the Assembly heightened the specifications, requiring slopes to be

[[]T]en feet wide, tightly built, and planked up the sides, so as to confine the water from spreading off the said slope, two feet in depth at least, and the length of every slope shall be four times its perpendicular height, with basons therein, at eight feet distance from each other, sufficient to afford resting places for fish, in their passage up the said slope, and shall be fixed in the dam eighteen inches below the common height of the water, and contiguous to the deepest part of the river.

Act of Feb. 1772, 1772 Va. Acts ch. XXXV.

^{83.} See Act of Feb. 1772, 1772 Va. Acts ch. XXXV (appointing trustees to regulate the making of slopes for fish passage and granting them authority to direct the manner in which the slope is built and to determine in what part of the year the slope is to be kept open).

pass over such mill-dams."⁸⁴ Mill owners eventually sought repeal. One petition alleged that "so scarce are Fish—even when they have a free Passage . . . that those caught are not nearly sufficient to defray the loss of time and expenses."⁸⁵ An Assembly committee's investigation confirmed that although "some years ago considerable quantities of fish" had been taken on the Rapidan, the fish were now "much decreased."⁸⁶ Because "the advantage of having those mills not made subject to the conditions of the said act, is greater to the public than they would be benefitted by the fish, if there was no obstruction to their passage," the petitions seeking repeal were "reasonable."⁸⁷ The Act of 1759 regulating mill dams on the Rapidan River was accordingly repealed in 1778.⁸⁸

2. James Madison and the Act of 1785.—In late 1785, James Madison, as chair of the Committee on Courts of Justice, introduced a bill "concerning mill-dams and other obstructions of water courses" in the House of Delegates of the Virginia General Assembly.⁸⁹ This bill had been drafted by the committee of revisors appointed in 1776 to produce a code.⁹⁰ It was now amended, in ways not pertaining to fish, and enacted.⁹¹

The Act of 1785 applied to the entire state the fish-passage requirements from the earlier special acts. As the special acts had done, the Act of 1785 emphatically subordinated the interests of a mill-site owner to the goal of preserving the annual fish run. No new mill could be built on any water course until after a local jury—summoned by the county sheriff at the direction of the county court—had evaluated "whether, and in what degree fish of passage . . . will be obstructed thereby." If the jury found that "fish of passage" would be obstructed by the new dam, it was then to consider:

^{84.} Act of Feb. 1759, 1759 Va. Acts ch. XXXII.

^{85.} Virginia General Assembly Legislative Petitions, Orange County and Culpeper County, Nov. 12, 1778, No. 806-P, in Virginia Legislative Petitions, supra note 66.

^{86.} JOURNAL OF THE HOUSE OF DELEGATES OF VIRGINIA, supra note 25, at 97.

^{87.} Id.

^{88.} See Act of Oct. 1778, 1778 Va. Acts ch. XXXIX (repealing the act entitled "An act to oblige owners of mills on the river Rapidan to make openings or slopes in their mill dams for the passage of fish," because it did not "answer the purposes for which it was intended").

^{89.} JOURNAL OF THE HOUSE OF DELEGATES OF VIRGINIA [Oct. 1785-Jan. 1786] (1786).

^{90. 2} The Papers of Thomas Jefferson 305, 307, 467 (Julian P. Boyd et al. eds., 1950).

^{91.} Act of Oct. 1785, 1785 Va. Acts ch. LXXXII.

^{92.} See id.

^{93.} Id.

^{94.} Id. This requirement of permitting fish to pass applied even where "the person proposing to build such mill and dam shall have the fee-simple property in the lands on

[W] hether, all circumstances weighed, it be reasonable that such leave should be given, and shall give or not give it accordingly; and if given, they shall lay the party applying under such conditions for preventing the obstruction, if any there will be, of fish of passage... as to them shall seem right.

Therefore, the jury could either withhold permission to build the dam, ⁹⁶ or give permission to erect the dam but require measures sufficient to permit fish to pass⁹⁷—typically, making an "opening or slope" in the dam. ⁹⁸ The jury was not authorized, however, to weigh the benefits of having a new mill against the benefits of the fish run; the Assembly tacitly reserved that power for itself. ⁹⁹

The Act of 1785 also addressed a second situation in which a prior special act had given permission for a mill dam to operate, subject to requirements intended to allow fish to pass. The Assembly made even this permission only provisional:

Where the owner of any mill now standing, or licensed to be built, hath by any act of assembly been compelled to make locks, slopes, or opening, for navigation, or the passage of fish, the same shall be continued under the conditions imposed by such act, and shall be deemed sufficient in law, so long as the dam now standing, or building, shall remain: But it shall not be lawful to rebuild such dam in future, but on [i]nquiry by jury into the obstructions of fish and navigation, and the

both sides of the stream." *Id.* The Act's restrictions also applied even to those who owned the stream-bed itself. *Id.* Many Virginia land grants had included the beds of Virginia rivers and streams, even those capable of being navigated. *See* 2 Papers of Thomas Jefferson, *supra* note 90, at 466-67.

^{95.} Act of Oct. 1785, 1785 Va. Acts ch. LXXXII (emphasis added). As under the special acts, the danger sought to be avoided from dams was incidental rather than intentional destruction of fish. See id. Structures put in the river for the purpose of catching fish were addressed separately as hedges and weirs. Id.

^{96.} *Id.* For an earlier example of a complete prohibition, see Act of Mar. 1761, 1761 Va. Acts ch. XX (making it unlawful to "erect any mill, or raise any dam" on part of Rockfish River).

^{97.} Act of Oct. 1785, 1785 Va. Acts ch. LXXXII (granting the court authority to place conditions on the building of a mill and dam in order to protect fish passage).

^{98.} See, e.g., Act of Mar. 1761, 1761 Va. Acts ch. XIV (requiring mill owners on certain rivers to make an "opening or slope" in their mill dams to allow the passage of fish).

^{99.} See, e.g., Act of Dec. 16, 1791, 1791 Va. Acts ch. XXXV (appointing commissioners to examine Banister River and report "whether the fish which might pass up the said river would be an object sufficient to justify breaking down the mills built thereon, or to compel the owners to make slopes in their dams").

^{100.} Act of Oct. 1785, 1785 Va. Acts ch. LXXXII.

means of preventing the same, . . . to be applied for and conducted in the manner before directed in other cases. 101

Rebuilding was common because dams of that era were prone to bursting after heavy rain or the sudden release of an unusual quantity of water from an upstream mill. The owner who needed to rebuild his dam might be told to undertake more onerous measures for permitting fish to pass or even denied permission to rebuild. This could occur even where a dam had been built specifically in reliance on less onerous conditions; dam owners now bore the risk that the fish-passage conditions imposed originally might be proved insufficient by experience in the meantime. The sudden sud

The economic impact of the Act of 1785 on individual mill owners merits emphasis. The Virginia Assembly chose to allow fish passage priority over the potential or existing use of mill sites, even if this reduced the value of the mill site, or eliminated it. ¹⁰⁵ A mill site might have been purchased long before the Act of 1785, but constructing a mill dam would be allowed only on condition that the passage of fish be preserved. ¹⁰⁶ Even in the case of repairing existing mill dams, this law accorded no vested right to rebuild according to specifications previously approved by the county court; preserving the passage of fish would have to be addressed anew. ¹⁰⁷ For many owners of mills or mill sites, the imposition of fish-passage requirements would make op-

^{101.} Id. (emphasis added). These restrictions were imposed in the face of increasing demand for milling capacity; Virginia's flour exports were flourishing. See Arthur G. Peterson, Commerce of Virginia, 1789-1791, 10 Wm. & MARY COLL. Q. HIST. MAG. 302, 307 (1930) (2d ser.) (noting that Virginia's flour exports increased from 76,350 barrels in 1791 to 108,824 barrels in 1792).

^{102.} See Virginia General Assembly Legislative Petitions, Nathaniel West Dandridge, Dec. 6, 1780, No. 1376-P, in Virginia Legislative Petitions, supra note 66 (recounting the damage caused when "in hasty rains this dam above being broke, carried in a torrent that of your Petitioner before it, which frequently happening..."); John F. Hart, Property Rights, Costs, and Welfare: Delaware Water Mill Legislation, 1719-1859, 27 J. Legal Stud. 455, 465-66 (1998); John T. Cumbler, Reasonable Use: The People, the Environment and the State, New England 1790-1930, at 23 (2001).

^{103.} See Act of Mar. 1761, 1761 Va. Acts ch. XX (ordering a mill owner to "pull down and destroy" his mill); Act of Dec. 16, 1791, 1791 Va. Acts ch. XXXV (appointing commissioners to examine Banister River and recommend whether to "break[] down the mills built thereon" to promote passage of fish).

^{104.} See Act of Oct. 1785, 1785 Va. Acts ch. LXXXII (allowing mill owners previously forced to make openings for the passage of fish to continue operating the mill, but prohibiting them from rebuilding in the future without permission from a jury).

^{105.} See id. (authorizing juries to withhold permission to erect a dam or, if allowing construction, to impose any conditions necessary to prevent the obstruction of fish passage).

^{106.} See id. (prohibiting the construction of any dam that obstructs the passage of fish).

^{107.} See id. (requiring jury permission to rebuild any dam).

erating an otherwise feasible mill economically impractical.¹⁰⁸ For others, fish-passage requirements would make operating a mill much less lucrative.¹⁰⁹ For every owner of a mill or mill site, fish-passage requirements would substantially lower the head of water available to drive the mill works.¹¹⁰

James Madison, who lived in Orange County near the Rapidan River, 111 had been exposed to the public policy conflict posed by dams and the fish runs long before he reviewed the fish-passage bill as committee chair in 1785. Indeed, Madison's own vicinity had been one of the first to seek and obtain fish-passage requirements, and the first to obtain exemption. 112 In 1759, petitions from Orange County and Culpeper County led to a special act—the first of its kind in Virginia-requiring every dam owner on the Rapidan River to "make an opening or slope . . . at least ten feet wide, sufficient to let fish pass over such mill-dams." In a petition presented to the House of Burgesses in 1774, however, the upstream fishermen complained that the measures imposed under the Act of 1759 were insufficient and prayed that "Owners of Mills on the Rapidanne and Robinson Rivers may be obliged to make Slopes or Gates in their Dams sufficient for the passage of Fish."114 In 1778, the Assembly received another petition to this effect, followed by three counter-petitions, signed by some 480 residents of Orange County and Culpeper County. 115 These four petitions prompted investigation by an Assembly committee and eventually led the Assembly to repeal its Act of 1759 governing the

^{108.} See HUNTER, supra note 9, at 145 (noting that one owner decided not to build a mill after discovering that he would be required to provide an opening for fish passage for five to six weeks).

^{109.} See supra notes 48-50 and accompanying text.

^{110.} See HUNTER, supra note 9, at 146 (noting that fish-passage laws were especially burdensome in the summer, because mill owners were forced to release water for fish passage, rather than storing it for power).

^{111.} See 1 The Papers of James Madison 212 (William T. Hutchinson & William M.E. Rachal eds., 1962) (illustrating the proximity of Orange County to the Rapidan River).

^{112.} Act of Feb. 1759, 1759 Va. Acts ch. XXXII (requiring Rapidan River dam owners to construct openings for fish passage); Act of Oct. 1778, 1778 Va. Acts ch. XXXIX (repealing the fish-passage requirement of 1759).

^{113.} Act of Feb. 1759, 1759 Va. Acts ch. XXXII.

^{114.} JOURNALS OF THE HOUSE OF BURGESSES OF VIRGINIA 1773-1776, *supra* note 72, at 112 (emphasis added).

^{115.} See Virginia General Assembly Legislative Petitions, Culpeper County, No. 672-P, in Virginia Legislative Petitions, Supra note 66; Virginia General Assembly Legislative Petitions, Orange County and Culpeper County, No. 673-P, in Virginia Legislative Petitions, supra note 66; Virginia General Assembly Legislative Petitions, Orange County and Culpeper County, No. 673-A-P, in Virginia Legislative Petitions, supra note 66; Virginia General Assembly Legislative Petitions, Orange County and Culpeper County, No. 806-P, in Virginia Legislative Petitions, supra note 66.

Rapidan River in an Assembly session in which Madison was elected to serve. Not long before the October 1785 session, moreover, Madison took part in negotiating Virginia's compact with Maryland governing the use of the Potomac; the compact enumerated "laws and regulations which may be necessary for the preservation of fish" as a matter reserved for future agreement. 117

In 1785, Madison would have been well acquainted with the history of the controversy in his neighborhood, with the arguments made by his constituents against imposing fish-passage requirements on mill owners, and with existing laws addressing this issue for other rivers. Not only had Madison's father been active in local government throughout this era, but James Madison himself represented Orange County in the Assembly of 1776, 118 which entertained two fish-obstruction petitions from other counties, 119 and again in the first session of the 1778 Assembly. 120

The arguments articulated in the 1778 petitions from Madison's county would have been commonly expressed in the neighborhood before then. Mills had been erected before the first regulations, "with considerable Labour and Expence to the Owners and in Legal man-

^{116.} See Act of Oct. 1778, 1778 Va. Acts ch. XXXIX (repealing act obligating mill owners on the Rapidan River to make openings for fish passage); see supra notes 85-88 and accompanying text. After serving about a month in 1778, Madison was excluded from the Assembly because he also served on the Council of State. 1 The Papers of James Madison, supra note 111, at xlii.

^{117.} Act of Oct. 1785, 1785 Va. Acts ch. XVII. The preservation of fish was enumerated separately from preserving navigation, and fishing rights were already addressed in the compact. *Id.* Mill dams were a potential obstruction to fish in the upper reaches of the Potomac. Act of Oct. 1785, 1785 Va. Acts ch. XIX (requiring the proprietors of mills on the south branch of the Potomac River to "make and fix in each mill dam, a proper slope for the passage of fish up the same," separate from canals built for the passage of boats); Va. Joint Res. No. 20, Mar. 28, 1860, Acts of the General Assembly, 1859-60, at 701, 702 (1860) (asserting that a recent decision by a Maryland court would be "destructive of all manufacturing privileges" on the Potomac "from the Great Falls to its source (an extent of more than two hundred miles)"). In the same session of October 1785, Madison chaired a special committee to draft the bill ratifying Virginia's compact with Maryland, and pressed for its ratification. *See* 8 Papers of James Madison 461 n.1 (Robert A. Rutland & William M.E. Rachal eds., 1973).

^{118. 1} THE PAPERS OF JAMES MADISON, supra note 111, at xli.

^{119.} Virginia General Assembly Legislative Petitions, Sussex County, Oct. 31, 1776, No. 180-P, *in* Virginia Legislative Petitions, *supra* note 66; Virginia General Assembly Legislative Petitions, Lunenburg and Mecklenburg Counties, Oct. 31, 1776, No. 181-P, *in* Virginia Legislative Petitions, *supra* note 66.

^{120. 1} The Papers of James Madison, *supra* note 111, at xlii. After serving approximately one month in the House of Delegates, Madison was disqualified because he was also serving on the Council of State. *Id.*

ner as far as might be."¹²¹ Grist mills afforded the community "very considerable . . . Ease and Conveniency"; losing the mills would "distress some thousand of persons depending solely on them for their necessary supplies of Meal[,] reducing those persons to the hard necessity of beating [that is, pounding by hand] all they want for the use of their families."¹²² If fish slopes were required, "the Proprietors are ruin'd, and Five Hundred Families put to the outmost distress . . . O Horrid Arrogancy! To compel your Petitioners to employ three, or four, of their best Hands, to pound corn in a Mortar to gratify a few individuals"¹²³

Those who signed petitions seeking repeal of the fish-passage requirements included many substantial members of the community, as shown by such indicia as governmental office¹²⁴ and commissions in the county militia. Madison knew many of these people personally. ¹²⁶

^{121.} Virginia General Assembly Legislative Petitions, Orange County and Culpeper County, Oct. 19, 1778, No. 673-A-P, in Virginia Legislative Petitions, supra note 66; see also Virginia General Assembly Legislative Petitions, Orange County and Culpeper County, Oct. 19, 1778, No. 673-P, in Virginia Legislative Petitions, supra note 66 (noting that mills were built "with . . . vast Labour and Expence"). Notably, petitions defending the grist mills did not assert that the mill owners had a right to use their land in the manner desired, or a right to recoup their investment. Rather, these petitions argued for avoiding hardship to the mill owners and the mill customers, and asserted that only "a few Individuals" favored fish-passage measures. *Id.*

^{122.} Virginia General Assembly Legislative Petitions, Orange County, Oct. 19, 1778, No. 673-A-P, *in* Virginia Legislative Petitions, *supra* note 66.

^{123.} Virginia General Assembly Legislative Petitions, Orange County and Culpeper County, Oct. 19, 1778, No. 673-P, in Virginia Legislative Petitions, supra note 66.

^{124.} The Orange County and Culpeper County petition of 1778 was signed by Thomas Chew, Johnny Scott, and Lawrence Taliaferro. Virginia General Assembly Legislative Petitions, Orange County and Culpeper County, Nov. 12, 1778, No. 806-P, in Virginia Legislative Petitions, supra note 66. Chew had served as sheriff of Orange County. See Irving Brant, James Madison: The Virginia Revolutionist 49 (1941). Scott had represented Orange County in the General Assembly twice. See The General Assembly of Virginia July 30, 1619-January 11, 1978: A Bicentennial Register of Members 142, 150 (Cynthia Miller Leonard ed., 1978). Scott and Taliaferro had been justices of the peace. See Justices of the Peace of Colonial Virginia, 1757-1775, 14 Bull. of the Va. State Lib. 61 (H.R. McIlwaine ed., 1921) (commissions entered 1768). Scott and Taliaferro, like Madison, had been members of the county's Committee of Safety in the revolutionary crisis of 1775. See W.W. Scott, A History of Orange County Virginia 65 (1907).

^{125.} Johnny Scott, Zachary Herndon, Lawrence Taliaferro, Hay Taliaferro, Thomas Merry, Charles Porter Jr., Moses Willis, Lewis Willis, and James Sleet were commissioned as officers in the Orange County militia between 1768 and 1781. See Scott, supra note 124, at 260-62. These men all signed the same Orange County and Culpeper County petition. Virginia General Assembly Legislative Petitions, Orange County and Culpeper County, Nov. 12, 1778, No. 806-P, in Virginia Legislative Petitions, supra note 66.

^{126.} Thomas Chew was Madison's great-uncle, as well as a neighbor. Brant, *supra* note 124, at 49. The closeness of the Chew and Madison families is reflected by the fact that three members of Thomas Chew's family were godparents of James Madison's siblings. *Id.*

In 1785, then, Madison knew that the fish-passage bill he was introducing would represent for many of his constituents, including some of the most substantial and best known to him, a highly unwelcome return to the prior status quo of 1759 to 1778 under the special act for the Rapidan River. His tacit support for this measure, in the face of the wishes of his constituents and the economic interests of those he knew best, would not have reflected a casual choice. If Madison had believed that legislation burdening property owners entitled them to compensation for the decreased value of their property, he could not have supported the fish-passage provisions of the Act of 1785. If Madison had believed that a land owner, who had invested substantial capital in acquiring or developing land for a lawful purpose, obtained some kind of vested right to use it accordingly, unless compensated, he could not have supported the Act of 1785. 128

By 1785, Madison was criticizing state legislation generally for encroaching on private rights, and using his position in the Virginia legislature to counter such encroachments. Madison also articulated at this time a constitutional requirement that government must com-

at 52. Hay Taliaferro, Lawrence Taliaferro, Thomas Bell, William Bell, and Charles Porter were also members of the same social circle as Madison. See Virginia Moore, The Madisons: A Biography 88-89 (1979); Philip Slaughter, A History of St. Mark's Parish, Culpeper County, Virginia 74-77 (1877). Madison and his father had served with Johnny Scott and Lawrence Taliaferro on Orange County's revolutionary Committee of Safety in 1775. See Scott, supra note 124, at 65 (listing members of the Committee of Safety). Madison and Scott owned adjoining land. See 8 The Papers of James Madison, supra note 117, at 99 (granting a deed of land in Orange County to Madison). We can infer that Madison would have known the militia officers, because Madison's father was head of the militia as county lieutenant from 1767 to 1778; Madison himself was appointed county lieutenant in 1781 but resigned his position. See Scott, supra note 124, at 262.

^{127.} See supra notes 112-116, 121-126 and accompanying text.

^{128.} See Act of Oct. 1785, 1785 Va. Acts ch. LXXXII (allowing a jury to require any mill owner whose dam was inhibiting fish passage to construct a slope or opening, and also granting courts the authority to prohibit owners from rebuilding mills if doing so would obstruct fish passage).

^{129.} See Letter from James Madison to Caleb Wallace (Aug. 23, 1785), in 8 Papers of James Madison, supra note 117, at 351 (recommending New York's Council of Revision as a model in part because it protects "private rights" from "fluctuating & ind[i]gested laws" enacted by the legislature); id. at 353 (declaring that "I see no reason why the rights of property[,] which chiefly bears the burden of Government & is no much an object of Legislation[,] should not be respected as well as personal rights in the choice of Rulers"); Letter from James Madison to Thomas Jefferson (Oct. 3, 1785), in 8 Papers of James Madison, supra, at 375 (deploring prospect that South Carolina will issue paper money and "legalize a suspension of judicial proceedings which has been already effected by popular measures"); Letter from James Madison to James Madison Sr. (Nov. 18, 1785), in 8 Papers of James Madison, supra, at 422 (reporting that in the current session of the Virginia Assembly "paper Money" had "more Adversaries than I expected"). Madison's views were later reflected in Article I, section 10 of the Constitution.

pensate for taking private property,¹³⁰ which he later included in his draft of the Fifth Amendment.¹³¹ The same session of the Assembly session of 1785-86 enacted a law—also introduced by Madison for his committee¹³²—requiring compensation whenever any private land was taken for highways.¹³³

This juxtaposition suggests that Madison and his colleagues distinguished between taking land for a public use and regulating the use of land for the public good. They required compensation for taking highway land, while regulating mill sites without compensation, even though the economic detriment imposed on landowners by the fish-passage laws—lowering or eliminating the value of a mill site—would usually be much greater than that imposed by laying out a rural highway. 134

II. THE FISH-PASSAGE LAWS AND THE MODERN REGULATORY TAKINGS DOCTRINE

What weight would the Court give the foregoing historical evidence in a modern case presenting a similar conflict between fish and dams, pitting the Endangered Species Act against the regulatory takings doctrine? To explore the precedential significance of the late eighteenth-century fish-passage laws today, let us assume an extreme case: that a private landowner wishes to develop a dam site on a non-navigable river, that endangered fish must ascend this river in order to spawn, ¹³⁵ that protecting these fish is incompatible with the profitable operation of a dam on this site, and that the property in question

^{130.} See Letter from James Madison to Caleb Wallace (Aug. 23, 1785), in 8 Papers of James Madison, supra note 117, at 351 (recommending that the future constitution of Kentucky "may expressly restrain" the legislature "from seizing private property for public use without paying its full Valu[e]").

^{131.} See John F. Hart, Land Use Law in the Early Republic and the Original Meaning of the Takings Clause, 94 Nw. U. L. Rev. 1099, 1132 (2000) (discussing the legislative history of the Takings Clause).

^{132.} See Journal of the House of Delegates [Oct. 1785-Jan. 1786] (1786); 2 Papers of Thomas Jefferson, supra note 90, at 448-63 (setting forth the text of the highway bill).

^{133.} Act of Oct. 1785, 1785 Va. Acts ch. LXXV.

^{134.} See supra notes 46-53, infra notes 158-159, and accompanying text (discussing the costs imposed on landowners by fish-passage laws and the costs associated with losing land for public roads).

^{135.} See Wildlife and Fisheries, 50 C.F.R. § 17.11 (2002) (designating Atlantic salmon with "historical river-specific characteristics," found in certain rivers in Maine, as endangered species); id. (designating "all naturally spawned populations" of chinook salmon in tributaries of various certain rivers in Oregon, Washington, California, and Idaho as endangered species).

affords no profitable alternative use.¹³⁶ Under these circumstances, prohibiting the obstruction of fish by this dam would deny the owner the only profitable use of the site. Assume further that local law has not previously prohibited dams from obstructing the passage of fish.¹³⁷

According to Lucas v. South Carolina Coastal Council, ¹³⁸ a regulatory restriction having an economic impact of this magnitude—denying the owner "all economically beneficial or productive use of land" ¹³⁹—would be deemed a regulatory taking unless the same use of land would be prohibited by "background principles of nuisance and property law." ¹⁴⁰ The majority held, moreover, that the "early American experience" bearing on the Takings Clause was "entirely irrelevant" to this conclusion. ¹⁴¹

136. Even if the land parcel containing the dam site had other profitable uses, the Court might deem the right to erect a mill dam to be the relevant property interest-the socalled denominator used for assessing diminution of value—if local law treated this right as a separate estate in land. See Pennsylvania Coal Co. v. Mahon, 260 U.S. 393, 414 (1922) (finding that the right of subjacent support was a separate estate in land under the law of Pennsylvania, and stating that a law making it "commercially impracticable to mine certain coal has very nearly the same affect for constitutional purposes as appropriating or destroying it"); Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1007, 1016-17 n.7 (1992) (stating that if a regulation "requires a developer to leave 90% of a tract in its natural state," the Court might "analyze the situation as one in which the owner has been deprived of all economically beneficial use of the burdened portion of the tract," and suggesting the importance of "whether and to what degree the State's law has accorded legal recognition and protection to the particular interest in land with respect to which the takings claimant alleges a diminution in (or elimination of) value"); Palazzolo v. Rhode Island, 533 U.S. 606, 631 (2001) (discussing but not ruling on the petitioner's claim that the upland portion of his land was distinct from the wetland portion); see also Stoughton v. Baker, 4 Mass. (4 Tyng) 522, 528 (1808) (explaining that under Massachusetts law a "mill-privilege" was an estate in fee giving its owner "a right to erect a dam to raise water sufficient to drive his mill").

137. Cf. Holyoke Co. v. Lyman, 82 U.S. 500, 512-13 (1872) (upholding Massachusetts fish-passage law; such laws had been enacted in Massachusetts "throughout her history, commencing even before the Revolution . . . in an unbroken series to the present time").

138. 505 U.S. 1003 (1992).

139. Id. at 1015.

140. Id. at 1031. The Court also declared:

A law or decree with such an effect must, in other words, do no more than duplicate the result that could have been achieved in the courts [by non-statutory means]—by adjacent landowners (or other uniquely affected persons) under the State's law of private nuisance, or by the State under its complementary power to abate nuisances that affect the public generally, or otherwise.

Id. at 1029 (citations omitted).

141. Id. at 1028 n.15 ("The practices of the States prior to incorporation of the Takings and Just Compensation Clauses [in 1897]—which, as Justice Blackmun acknowledges, occasionally included outright physical appropriation of land without compensation... were out of accord with any plausible interpretation of those provisions.") (citations omitted).

In America, the prohibition against dams obstructing fish passage has generally been statutory in character.¹⁴² According to the *Lucas* majority, then, no weight whatsoever would be given to the fact that statutes prohibiting fish obstruction by dams were common when the Takings Clause was drafted and ratified, and our hypothetical prohibition against building a dam would be held to be a regulatory taking.

Only Justice Kennedy's concurrence in *Lucas* holds out the prospect of a different result, by indicating that sources of law other than judicial precedent are relevant to the regulatory takings analysis.¹⁴³

[R]easonable expectations must be understood in light of the whole of our legal tradition. The common law of nuisance is too narrow a confine for the exercise of regulatory power in a complex and interdependent society. The State should not be prevented from enacting new regulatory initiatives in response to changing conditions, and courts must consider all reasonable expectations whatever their source.¹⁴⁴

Under Justice Kennedy's reasoning, a numerous class of statutory precedents like the fish-passage laws would be relevant to a regulatory takings analysis, especially because they were common when the Bill of Rights was adopted. For the *Lucas* majority, however, the only relevant legal tradition for this purpose is the common law itself. 146

The *Lucas* majority's insistence that severe regulatory restrictions on land use must be derivable exclusively from the common law rests on a historical claim.¹⁴⁷ The majority says that "early American experience" is "entirely irrelevant" to defining the scope of the Takings Clause because the "practices of the States *prior* to incorporation of the Takings and Just Compensation Clauses" in 1897 "occasionally included *outright physical appropriation* of land without compensation" and were therefore "out of accord with *any* plausible interpretation of those provisions." This apparently refers to the fact that certain states did not pay compensation for one type of eminent domain, the taking of unimproved land for highways. 149

^{142.} See supra notes 30-53 and accompanying text.

^{143.} Lucas, 505 U.S. at 1035 (Kennedy, J., concurring).

^{144.} Id. (citations omitted).

^{145.} See id.

^{146.} Id. at 1028 n.15, 1029.

^{147.} Id. at 1028-29.

^{148.} Id. at 1028 n.15. The majority is responding to historical evidence set out in Justice Blackmun's dissenting opinion. See id. at 1055-58 (Blackmun, J., dissenting).

^{149.} Id. at 1028 n.15; see id. at 1056-58 (Blackmun, J., dissenting) (noting that "[e]ven into the 19th century, state governments often felt free to take property for roads . . .

Situated in its historical context, however, even the taking of unimproved land for highways without payment was compatible with the Takings and Just Compensation Clauses. James W. Ely, Jr. considers the highway laws at length before concluding that when the Fifth Amendment was ratified in 1791 the practice of eminent domain in America was generally governed by an established "common law principle of compensated takings." William B. Stoebuck's conclusion that "early state courts were justified in their claim that compensation was a principle of the common law" law reflects a painstaking review of the eighteenth-century highway laws. 152

First, it is essential to appreciate that by 1791 most states—nine out of fourteen—observed the compensation principle for any land taken for a road, either directly by paying compensation¹⁵³ or indirectly by utilizing rights to use additional acreage previously reserved for this purpose in land grants.¹⁵⁴ Three states paid only for improved

without paying compensation to the owners," and that "the Fifth Amendment's Takings Clause originally did not extend to regulations of property, whatever the effect").

150. James W. Ely, Jr., "That due satisfaction may be made:" The Fifth Amendment and the Origins of the Compensation Principle, 36 Am. J. Legal Hist. 1, 7-11, 15 (1992) (discussing the different systems used by colonies governing compensation when private land was taken for roadways).

151. William B. Stoebuck, A General Theory of Eminent Domain, 47 WASH. L. REV. 553, 583 (1972).

152. Id. at 579-83.

153. See Act of Oct. 1714, reprinted in The Public Record of the Colony of Connecticut 297 (Charles J. Hoadly ed., 1881) (requiring compensation for any "damages sustained by any person thereby"); Act of Feb. 27, 1787, ch. 67, § 4, 1787 Mass. Acts 133 (requiring "reasonable satisfaction" to be paid "if any person be damaged in his property by the laying out or altering such highway"); Act of Feb. 8, 1791, § 1, 1791 N.H. Laws (requiring compensation for any "damage done to any owner of land"); Act of Oct. 1784, ch. 14, 1784 N.C. Sess. Laws (requiring compensation for "such damage as private persons may sustain"); Act of May 1715, 1715 R.I. Laws 73 (requiring compensation for "the price of such land"); Act of Mar. 9, 1787, 1787 Vt. Acts & Resolves (requiring "a meet recompence for the damage done by laying such road"); Act of Oct. 1785, 1785 Va. Acts ch. LXXV (directing jury to inquire "what damage it will be . . . taking into estimation as well the use of the lands to be laid open for such road, as the additional fencing, which will thereby be rendered necessary"). The Fifth Amendment, along with the rest of the Bill of Rights, was ratified December 15, 1791.

154. See Commonwealth v. Fisher, 1 Pen. & Watts 462 (Pa. 1830).

From the first settlement of this country, both under the proprietors and the State, the invariable usage and law was, in the sale of vacant land to any applicant, to add six acres for every hundred, for roads, etc. These six acres were never paid for by the applicant; they were not any particular and specific or designated six acres, but they were thrown in, that whenever the Commonwealth thought a public road necessary, through any part of the state, it might make it without interfering with the private right of any individual. The right of the State to take six acres out of every hundred sold, is not an implied right, but an express reservation. It infringes no private right, nor does it injure any man by using this right. The very

or enclosed land;¹⁵⁵ two states were internally split, in some counties paying for all highway land but in other counties paying only for enclosed land.¹⁵⁶ Only in a minority of states, then, did outright physical appropriation of even unimproved land occur without compensation.

Second, the practice of taking unimproved highway land without payment, in the five states where it persisted, was a plausible—and longstanding¹⁵⁷—adjustment of the benefits of being linked to the

utmost which can be required is, that it should pay for improvements put by the owner on the part afterwards used by the state.

Id. at 464-65; see also M'Clenachan v. Curwin, 3 Yeates 362, 371-73 (Pa. 1802); Act of 1700, 1700 Pa. Laws ch. 55. In 1682, Delaware was acquired by William Penn, proprietor of Pennsylvania, and was annexed to Pennsylvania the same year. John A. Munroe, Colonial Delaware: A History 79-87 (1978). Delaware's land grants, like Pennsylvania's, included six additional acres per hundred reserved for future roads. See id. at 74-75. When Delaware obtained a separate legislature in 1704, it retained the Pennsylvania laws until modified. Id. at 120-21. Delaware retained Pennsylvania's system of highway compensation as well as its land grant practices. See Act of 1751, § 13, Del. Laws ch. CXXXI.a. (1751); Act of Mar. 31, 1764, § 3, Del. Laws ch. CLXXXIV.a. (1764).

155. These were Georgia, New Jersey, and South Carolina. See Stoebuck, supra note 151, at 581-82 (stating that in colonial times Georgia compensated a landowner if enclosed lands were taken, but provided no compensation for unenclosed land, while South Carolina provided compensation if improved land was taken, but not for unimproved land); Ely, supra note 150, at 9-10 (discussing the evolution of New Jersey's scheme for compensating landowners).

156. For Maryland, compare Act of Mar. 1774, § 5, 1774 Md. Laws ch. XXI (providing compensation for "damages . . . by occasion of carrying the said road through such improved ground"), with Act of Nov. 1790, § 8, 1790 Md. Laws ch. XXXII (providing landowners in Cecil, Baltimore, Montgomery, Frederick, and Washington counties compensation for "amount of damages sustained"), and Act of Nov. 1791, § 11, 1791 Md. Laws ch. LXX (providing for a similar requirement to be extended to Harford County landowners). For New York, compare Act of Oct. 29, 1730, 1730 N.Y. Laws ch. 555 (providing to landowners in Kings, Queens, Richmond, and Orange counties compensation for "the true Value of the Lands so laid out into an High Way or Road"), and Act of April 3, 1775, 1775 N.Y. Laws ch. 1730 (providing to landowners in Albany and Tryon counties compensation for "the Value of such cleared and improved Lands through which the said Roads should be laid out"), with Act of Feb. 2, 1789, 1789 N.Y. Laws ch. 14 (providing to landowners in Suffolk, Kings, and Queens counties compensation for "the true value of the land so laid out into a highway or road, with such damages as he shall sustain thereby"). Some New York land grants had reserved the right to use lands for roads. See Act of 1719, 1719 N.Y. Laws ch. 372.

157. See Scudder v. Trenton Del. Falls Co., 1 N.J. Eq. 694, 723-24 (N.J. Ch. 1832) (finding that, since before 1765, New Jersey had taken private land for "ordinary roads" without compensation); Lindsay v. Comm'rs, S.C.L. (2 Bay) 16, 23 (S.C. 1796) (finding that because the legislature of South Carolina had exercised the power to take land for roads without compensation "from the first establishment of civil government in it, to the present day," this power was "as much a part of the common law of South Carolina, as any other part of that great and valuable system," a "part of the lex terrae") (Grimke and Bay, JJ.); see also Patrick v. Comm'rs, 7 S.C.L. (4 McCord) 204, 205 (S.C. 1828) (finding that acts using the state's power to take private property for public uses without making just compensation "has been so long existing [that] . . . under any of the definitions [it was] a law of the land"); see also State v. Dawson, 10 S.C.L. (3 Hill) 50, 52 (S.C. 1836) (holding that a

highway network and the damages associated with laying out new roads where settlement was highly dispersed; a high ratio of all private land there was unimproved, unimproved land was low in value, and many inhabitants lacked convenient access to the highway network. Legislators seem to have presumed that "the opening of roads through the then greatly unsettled parts of the country, would enhance the value of the lands over which they were laid out, quite equal to the damage caused by their appropriation." The offsetting benefits principle is still utilized in eminent domain proceedings and could

landowner whose land is taken as a public road under the authority of a legislative act did not have a constitutional right to demand compensation as a condition to using his property):

If this were a new power claimed by the legislature, and now for the first time attempted to be exercised, it might be a grave question, whether the right of eminent domain would authorize the appropriation of private property for any public use, unless the Act making the appropriation contained a provision for compensation But this is not the fact. This power has been recognized and acted on from the first settlement of the country I think, therefore, it may be considered, that the power here contended for, is a tacit condition of every grant made in this state.

Id. at 52-53; cf. Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1027 (1992) (finding that takings jurisprudence has "traditionally been guided by the understandings of our citizens regarding the content of, and the State's power over, the 'bundle of rights' that they acquire when they obtain title to property").

158. Stoebuck, supra note 151, at 582-83 (explaining that colonists presumed that a road would always add value to unimproved land and therefore compensation was unnecessary); Ely, supra note 150, at 11 (explaining that the primitive dirt roads of the colonial era intruded little upon a landowner's property and that unimproved land was of little monetary value). Legislators sometimes manifested concern that the benefits landowners received from having such immediate access to the new highway might not be offset against damages. See Act of Nov. 1791, § 11, 1791 Md. Laws LXX (providing that in assessing damage to landowners, a jury is "required to consider the convenience, benefit and advantage (if any) by reason of such road passing over such land"). Even in states where compensation was required for all lands, it was understood that the benefit of a road might completely offset the value of the land taken in individual cases, resulting in no compensation. Sec. e.g., Commonwealth v. Coombs, 2 Mass. (2 Tyng) 489, 492 (1807) ("[T]he new highway may essentially benefit his farm, and . . . he may suffer very little or no injury by the location."); Commonwealth v. Cambridge, 7 Mass. (7 Tyng) 158, 167 (1810) ("[W]e impute no irregularity to the declaration of any owner of land, over which the way is prayed for, that his private benefit from the way is equal to any damage he may sustain.").

159. See Parham v. Inferior Court of Decatur County, 9 Ga. 341, 346 (1851) (referring to state Acts of 1799 and 1812). After observing that conditions were now "widely different" in Georgia, that land had "risen in value" generally, and that now "[i]n many parts of the State, unopened lands are more valuable than cultivated fields, if for nothing else, yet for the timbers upon them," the court proceeded to invalidate laws permitting the taking of unenclosed land for roads without compensation because they now violated "the principle of compensation for private property" and the fundamental right to hold property. *Id.* at 347, 355.

justify an award of no compensation even today. 160 The assertion in *Lucas* that the practice of eminent domain at the time of the Takings and Just Compensation Clauses was inconsistent with "any plausible interpretation of those provisions," 161 then, is not only unsupported for a majority of states in 1791, it is also inaccurate even for the minority of states that permitted the taking of unimproved land for highways without compensation.

Regulation of land use—extending far beyond the principles of common-law nuisance—was also common when the Takings Clause was adopted, 162 and had been common since the colonial period. 163 Therefore, land use regulation, like the common law of nuisance, should be recognized as part of the "historical compact recorded in the Takings Clause." The practice of regulating land use without compensating landowners, moreover, was entirely consistent with a "plausible interpretation" of the Takings and Just Compensation Clauses: 165 the literal interpretation, which was also the original interpretation. 166 The Just Compensation Clause refers to taking property,

^{160.} United States v. Sponenbarger, 308 U.S. 256, 266-67 (1939) (holding that governmental activities that "inflict slight damage upon land in one respect and actually confer great benefits when measured as a whole . . . in substance take nothing from the landowner"); Bartz v. United States, 633 F.2d 571, 578 (Ct. Cl. 1980) (holding that riparian landowners were not entitled to compensation when a dam constructed by the government allegedly caused flooding on a portion of farmland, because the landowners derived greater benefits than the damage caused by the government's activity). Today, of course, the road network is so much more extensive and the value of unimproved land so much higher than two centuries ago that the marginal value of improved access would generally be far less than the value of the unimproved land taken for a road.

^{161.} Lucas, 505 U.S. at 1028 n.15.

^{162.} See Hart, supra note 131, at 1107-30 (discussing land use law between 1776 and 1789).

^{163.} See John F. Hart, Colonial Land Use Law and Its Significance For Modern Takings Doctrine, 109 Harv. L. Rev. 1252, 1259-81 (1996).

^{164.} Lucas, 505 U.S. at 1028; see Keystone Bituminous Coal Ass'n v. DeBenedictis, 480 U.S. 470, 491-92 (1987) (discussing the government's power to regulate land use through nuisance laws).

^{165.} Lucas, 505 U.S. at 1028.

^{166.} See id. at 1014 (explaining that before 1922 "it was generally thought that the Takings Clause reached only a 'direct appropriation' of property"); id. at 1028 n.15 (stating that Justice Blackmun, in his dissent, was "correct that early theorists did not believe the Takings Clause embraced regulations of property"). Because the literal meaning of the Takings Clause comports with the original understanding of that clause, the entire doctrine of regulatory takings is anachronistic. Cf. Austin v. United States, 509 U.S. 602, 628-29 (1993) (Kennedy, J., concurring) ("[W]e risk anachronism if we attribute to an earlier time an intent to employ legal concepts that had not yet evolved."); McIntyre v. Ohio Elections Comm'n, 514 U.S. 334, 371 (Thomas, J., concurring) (criticizing "analysis that is largely unconnected to the Constitution's text and history").

but regulating a landowner's use only "figuratively" takes property. ¹⁶⁷ Even today's Court claims only that the Takings Clause "can be read" to include regulation. ¹⁶⁸ The distinction between taking land and regulating the use of land may seem arbitrary from an economic perspective, ¹⁶⁹ but it was evidently part of "the understandings of our citizens" when the Takings Clause was ratified in 1791. ¹⁷¹

The fish-passage laws contemporary with the adoption of the Takings Clause prohibited obstruction of migratory fish by mill dams. These prohibitions allowed most mill dam owners to continue operating—albeit less profitably, because of reduced capacity—but in some cases effectively prevented the profitable utilization of mill sites. This would mean destroying the value of the owner's "mill privilege," as mill sites had little alternative use value. The Nine states had fish-passage laws when the Fifth Amendment was ratified in 1791. Eight of these nine states observed the compensation principle even in taking unimproved land for highways, to the fish-passage laws cannot be associated with any ambiguous commitment to the compensation

^{167.} Williamson County Reg'l Planning Comm'n v. Hamilton Bank, 473 U.S. 172, 199 n.17 (1985).

^{168.} Lucas, 505 U.S. at 1028 n.15.

^{169.} See generally Richard A. Epstein, Takings: Private Property and the Power of Eminent Domain 182-94 (1985).

^{170.} Lucas, 505 U.S. at 1027.

^{171.} See Hart, supra note 131, at 1147-48 (arguing that the failure of the drafters of the Takings Clause to address land use regulation, when it was so commonly practiced, demonstrates that they understood the clause not to address regulation).

^{172.} See supra notes 30-59 and accompanying text.

^{173.} See supra notes 44-48, 52, 79-80 and accompanying text.

^{174.} See Stoughton v. Baker, 4 Mass. (4 Tyng) 522, 528 (1808) (explaining that a land-owner "took a fee in the *mill-privilege*, as it is usually called in this state," meaning that because he had "a privilege to build a mill, he necessarily had a right to erect a dam to raise water sufficient to drive his mill").

^{175.} Act of Oct. 1785, 1785 Conn. Laws; Mass. Act of Mar. 4, 1790, reprinted in Private and Special Statutes of the Commonwealth of Massachusetts 272 (1805); N. H. Act of June 18, 1790, ch. 18, reprinted in 5 Laws of New Hampshire 527 (Henry Harrison Metcalfe ed., 1916); N.C. Act of 1787, ch. 15, reprinted in 1 The Public Acts of the General Assembly of North-Carolina 437 (James Iredell & Francois-Xavier Martin eds., 1804); Pa. Act of Feb. 22, 1774, ch. 694, reprinted in 8 The Statutes at Large of Pennsylvania 386 (James T. Mitchell & Henry Flanders eds., 1902); id. at 388; The Public Laws of the State of Rhode-Island and Providence Plantations 490, 501-03 (1798); S.C. Act of Mar. 26, 1784, No. 1226, reprinted in 7 The Statutes at Large of South Carolina 531 (David J. McCord ed., 1840); Vt. Act of Mar. 8, 1787, reprinted in Laws of Vermont 1785-1791, at 253 (John A. Williams ed., 1965), 14 State Papers of Vermont (1966); Act of Oct. 1785, 1785 Va. Acts ch. LXXXII.

^{176.} See supra notes 153-154 and accompanying text. The ninth state was South Carolina. See supra note 155 and accompanying text (noting South Carolina's long-established policy of compensating for improved or enclosed land taken for highways, but not for unimproved unenclosed land).

principle in exercising the power of eminent domain.¹⁷⁷ Rather, they reflect what Justice Holmes later called "the constitutional power of the State to insist that its natural advantages shall remain unimpaired by its citizens."¹⁷⁸

The fish-passage laws show that when legislators of the late eighteenth century perceived that certain uses of private property threatened the habitat of useful wildlife, they acted to modify the rights of property owners accordingly. The regulation of dams to protect the spawning of migratory fish was part of "the laws and practices of our ancestors.' "179 Such regulation was conventional when Americans formed the first "State constitutions, or other forms of social compact," and it was part of "the understandings of our citizens" an amajority of states when the Takings Clause was ratified in 1791. In many states, such regulation of dams continued long after ratification of the Takings Clause. Particularly because James Madison introduced Virginia's fish-passage law, the power to enact such regulatory laws should be recognized as one that "the Takings Clause"

^{177.} The reason Justice Scalia gave for dismissing state practice before 1897 as "entirely irrelevant" to interpreting the Takings Clause was that some states took unimproved land for highways without cash compensation, which he viewed as incompatible with "any plausible interpretation" of the Takings Clause. Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1028 n.15 (1992). This is an anachronistic conclusion, because it ignores the concepts of implied reservation and offsetting benefits. See supra notes 157-160 and accompanying text. But even granting that interpretation for South Carolina would not suggest that the practices of the other eight states were incompatible with the Takings Clause and thus irrelevant to the historical question of whether the fish-passage laws were understood to violate property rights in 1791, when the Takings Clause was ratified.

^{178.} Hudson County Water Co. v. McCarter, 209 U.S. 349, 356-57 (1908).

[[]I]t is recognized that the State as quasi-sovereign and representative of the interests of the public has a standing in court to protect the atmosphere, the water and the forests within its territory, irrespective of the assent or dissent of the private owners of the land most immediately concerned What it may protect by suit in this court from interference in the name of property outside of the State's jurisdiction, one would think that it could protect by statute from interference in the same name within. On this principle of public interest and the police power, and not merely as the inheritor of a royal prerogative, the State may make laws for the preservation of game, which seems a stronger case [The State] finds itself in possession of what all admit to be a great public good, and what it has it may keep and give no one a reason for its will.

Id. at 355-57.

^{179.} Mugler v. Kansas, 123 U.S. 623, 668 (1887) (quoting Pumpelly v. Green Bay Co., 80 U.S. 166, 178 (1872)).

^{180.} Munn v. Illinois, 94 U.S. 113, 124 (1877).

^{181.} Lucas, 505 U.S. at 1027.

^{182.} See supra note 175.

^{183.} See, e.g., 1887 Va. Acts ch. LXI.

did not transform,"¹⁸⁴ as part of "those powers of police that were reserved at the time the original Constitution was adopted."¹⁸⁵ Such regulatory power should therefore be accommodated in the "constitutional culture" of the Takings Clause just as the common-law doctrine of nuisance has been accommodated.¹⁸⁶

What modern habitat-protection measures are sufficiently comparable to the fish-passage laws to find support in this category of precedent? It might be argued that the range of analogy should be confined very narrowly, to species we eat. But the fish-passage laws were not intended simply to promote the supply of edible fish. The fish in question were sometimes protected for use as fertilizer instead of food, while the mills burdened by the operation of these laws were usually grist mills that contributed directly to the local food supply. ¹⁸⁷ Rather, the fish-passage laws were aimed broadly at "public utility" ¹⁸⁸ and "consequence to the community at large." ¹⁸⁹

Nor should we attribute to the founding generation the premise that only wildlife directly useful for consumption or production can be proper objects of legislative concern. Although "the drafters of the Bill of Rights were ecologically ignorant," this does not mean that they could not anticipate the negative ramifications of human impact on the natural world. James Madison himself viewed with concern mankind's potential for "extirpating every useless production of nature to convert the whole productive power of the earth into a supply

^{184.} See Keystone Bituminous Coal Ass'n v. DeBenedictis, 480 U.S. 470, 492 (1987); see also McIntyre v. Ohio Elections Comm'n, 514 U.S. 334, 360 (1995) (Thomas, J., concurring) (using "practices and beliefs held by the Founders" to ascertain the original understanding of First Amendment).

^{185.} Mugler v. Kansas, 123 U.S. 623, 663 (1887).

^{186.} Lucas, 505 U.S. at 1027-28.

^{187.} See supra notes 54-59 and accompanying text (explaining the intent and purpose of the fish-passage laws).

^{188.} Act of Jan. 2, 1805, 1805 Va. Acts ch. LXCIII; see also JOURNAL OF THE HOUSE OF DELEGATES OF VIRGINIA (1778), supra note 25, at 97. The Virginia legislative committee recommended that a fish-passage law applying to the Rapidan River be repealed because "the advantage of having those mills not made subject to the conditions of the said act, is greater to the public than they would be benefitted by the fish, if there was no obstruction to their passage." Id.

^{189.} See Ga. Act of Feb. 2, 1798, reprinted in Digest of the Laws of the State of Geor-Gia, supra note 52, at 370.

^{190.} Eric T. Freyfogle, Should We Green the Bill?, 1992 U. ILL. L. REV. 159, 160.

^{191.} Robert Beverley's survey of the natural production of Virginia, in which he prominently featured fish, had concluded that "all that the English have done, since their going thither, has been only to make some of these Native Pleasures more scarce, by an inordinate and unseasonable Use of them; hardly making Improvements equivalent to that Damage." Robert Beverley, The History and Present State of Virginia 156 (Louis B. Wright ed., University of North Carolina Press 1947) (1705).

of those particular plants & animals which serve his own purpose." ¹⁹² It was

not probable that nature, after covering the earth with so great a variety of animal & veg[e]table inhabitants, and establishing among them so systematic a proportion, could permit one favorite offspring, by destroy[ing] every other, to render vain all her [that is, nature's] wise arrangements and contrivances. 193

And even a generation that lacked ecological knowledge could speculate on the potential impact of human activity on whole species as well as on particular populations. Madison himself argued that

we can scarcely be warranted in supposing that all the productive powers of [the earth's] surface can be made subservient to the use of man, in exclusion of all the plants and animals not entering into his stock of subsistence The supposition cannot well be reconciled with symmetry in the face of nature, which derives new beauty from every insight that can be gained into it. It is forbidden also by the principles and laws which operate in various departments of her economy. . . . [I]t is difficult to believe that it lies with him so to remodel the work of nature as it would be remodelled, by a destruction not only of individuals, but of entire species. 194

These observations by the drafter of the Takings Clause should caution us against imputing to his contemporaries a narrow, unimaginative view of which parts of the natural world were potentially beneficial to man's well-being.

The Supreme Court should hold categorically, then, that modern habitat-protecting laws do not violate the Takings Clause. The rationale of public utility reflected in eighteenth-century fish-passage legislation is broad enough to protect tiny bearers of biodiversity like the snail darter as well as sizable comestibles like the chinook salmon. Especially given the "changed circumstances" represented by the

^{192.} James Madison, Preliminary Draft of an Essay on Natural Order (1791), in 14 THE PAPERS OF JAMES MADISON, supra note 26, at 101.

^{193.} Id. at 102.

^{194.} James Madison, Address to the Agricultural Society of Albemarle, Virginia (1818), in 3 Letters and Other Writings of James Madison, supra note 28, at 67-68.

^{195.} See Wildlife and Fisheries, 50 C.F.R. § 17.11 (2002) (designating the snail darter as a threatened species and various populations of chinook salmon as endangered species).

^{196.} Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1031 (1992) (stating that "changed circumstances or new knowledge may make what was previously permissible no longer so"); see also Hudson County Water Co. v. McCarter, 209 U.S. 349, 356 (1908) (declaring that the "public interest" in river water "grows more pressing as population grows" and that "[t]he private right to appropriate [river water] is subject not only to the

accelerating pace of extinction and the "new knowledge"¹⁹⁷ that supports the value of preserving biological diversity, the history of the early fish-passage laws should lead the Court to affirm "the constitutional power of the State to insist that its natural advantages shall remain unimpaired by its citizens"¹⁹⁸ in the context of habitat-preservation laws.

CONCLUSION

Today's regulatory takings doctrine—governing any regulatory law not explainable by common-law principles of nuisance or property law¹⁹⁹—ignores the original understanding of property rights contemporary with the Takings Clause. At the time of the framing and ratifying of the Constitution and Bill of Rights, a wide range of regulatory laws restricted land use in ways that went far beyond common-law nuisance and property principles.200 That historical evidence demonstrates the soundness of Justice Kennedy's assertion that "the whole of our legal tradition," not just the "common law of nuisance," 201 is relevant to defining landowners' "reasonable expectations" of their rights as to developing their property.²⁰² Moreover, the fact that James Madison and his colleagues addressed only appropriation in the Takings Clause and not regulation, despite the contemporary abundance of regulatory restrictions on land use, indicates that they did not view laws regulating land use as violations of property rights. This historical context exposes as mere "anachronism" 203 the Court's premise that the Takings Clause "can be read" to extend to regulation generally as well as to actual appropriation of property. 204 The entire regulatory takings doctrine rests on a strained reading of the text and is divorced altogether from the text's original meaning.²⁰⁵

rights of lower owners but to the initial limitation that it may not substantially diminish one of the great foundations of public welfare and health").

^{197.} Lucas, 505 U.S. at 1031.

^{198.} Hudson County Water Co., 209 U.S. at 356-57.

^{199.} Lucas, 505 U.S. at 1029-31 (holding that "regulations that prohibit all economically beneficial use of land," cannot be implemented without compensation unless the state could do so under common-law principles of nuisance or property law).

^{200.} See supra notes 162-170 and accompanying text.

^{201.} Lucas, 505 U.S. at 1035 (Kennedy, J., concurring).

^{202.} Id. at 1034.

^{203.} Austin v. United States, 509 U.S. 602, 628-29 (1993) (Kennedy, J., concurring) ("[W]e risk anachronism if we attribute to an earlier time an intent to employ legal concepts that had not yet evolved.").

^{204.} Lucas, 505 U.S. at 1028 n.15.

^{205.} Cf. McIntyre v. Ohio Elections Comm'n, 514 U.S. 334, 370-71 (Thomas, J., concurring) (criticizing "analysis that is largely unconnected to the Constitution's text and history"). See Hart, supra note 131, at 1107.

More particularly, the fish-passage laws discussed here were prominent among the regulatory laws familiar to the founding generation. In 1791, when the Takings Clause was ratified, nine states had laws prohibiting mill dam owners from obstructing the passage of fish.²⁰⁶ These laws, which went beyond the rules of common-law nuisance, 207 substantially lowered the capacity and, therefore, the usevalue of mill sites. Four years before James Madison drafted the Takings Clause, he had successfully introduced a fish-passage bill in Virginia and negotiated a compact between Virginia and Maryland that addressed fish preservation. 208 Madison did not draft the fish-passage bill himself, but given the long history of prior controversy in his vicinity regarding mill dams and fish and Virginia's prior legislation on the subject, he could hardly have been unfamiliar with the principles and interests at stake.²⁰⁹ This history indicates that those who framed and ratified the Takings Clause did not view such prohibitions as violating rights of property, and that the fish-passage laws were part of "those powers of police that were reserved at the time the original Constitution was adopted."210

The fish-passage laws show that when legislators of the late eighteenth century perceived that certain uses of private property threatened the habitat of useful wildlife, they acted to modify the rights of property owners accordingly. Indeed, legislators of that era protected fish populations on rivers where they were still numerous, not just the surviving remnants in a few remote rivers. Their objectives were broad—"consequence to the community at large"²¹¹—rather than narrowly concerned with feeding local residents. James Madison himself viewed with concern mankind's potential for "extirpating every useless production of nature to convert the whole productive power of the earth into a supply of those particular plants & animals which serve his own purpose."²¹² He posited that this pros-

^{206.} See supra note 175 and accompanying text.

^{207.} See supra notes 33-35 and accompanying text.

^{208.} See supra notes 89-91, 112-116 and accompanying text.

^{209.} See supra notes 111-127 and accompanying text.

^{210.} Mugler v. Kansas, 123 U.S. 623, 663 (1887).

^{211.} See Ga. Act of Feb. 2, 1798, reprinted in DIGEST OF THE LAWS OF THE STATE OF GEORGIA, supra note 52, at 370 (stating that the purpose of the Act was to benefit the community at large through the manufacture of flour, despite the fact that a few individuals would be injured by preventing fish from passing upriver to spawn).

^{212.} James Madison, Preliminary Draft of an Essay on Natural Order (1791), supra note 192, at 101.

pect was "forbidden . . . by the principles and laws which operate in various departments of her [that is, nature's] economy."²¹³

Given these observations by James Madison, we should not read into his Takings Clause a narrow view of what parts of the natural world were potentially beneficial to man's well-being. Rather, we should incorporate the broad rationale of "public utility"²¹⁴ found in this eighteenth-century legislation. Especially given the "changed circumstances" represented by today's accelerating pace of extinction, and the "new knowledge"²¹⁵ that supports the value of preserving biological diversity, the history of the early fish-passage laws should lead the Court to hold categorically that habitat-protection laws do not violate the Takings Clause, affirming "the constitutional power of the State to insist that its natural advantages shall remain unimpaired by its citizens."²¹⁶

^{213.} James Madison, Address to the Agricultural Society of Albemarle, Virginia (1818), supra note 194, at 68.

^{214.} Act of Jan. 2, 1805, 1805 Va. Acts ch. LXIII; see also JOURNAL OF THE HOUSE OF DELEGATES OF VIRGINIA, supra note 86, at 97 (recommending that a fish-passage law applying to Rapidan River be repealed because of greater advantage to the public).

^{215.} Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1031 (1992).

^{216.} Hudson County Water Co. v. McCarter, 209 U.S. 349, 356-57 (1908) (Holmes, J.). "[The State] finds itself in possession of what all admit to be a great public good, and what it has it may keep and give no one a reason for its will." *Id.* at 357.