

A DOZEN LANDMARK NUISANCE CASES AND THEIR ENVIRONMENTAL SIGNIFICANCE

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Over four centuries, nuisance law has proved its versatility. Originally a near strict liability doctrine restraining uses that interfered with traditional agrarian and domestic uses, nuisance evolved to accommodate the Industrial Revolution, providing nuisance defendants with defenses like suitability of uses to their location; use of best available technology; and a high standing bar for private plaintiffs alleging public nuisances, making injunctive relief unlikely. In the mid-twentieth century, the Restatements were interpreted by some courts to endorse wholesale balancing of the gravity of harmful activities versus their economic value to the defendant and society, not just limited to the issue of injunctive relief versus damages, but whether a nuisance existed at all. This transformation of nuisance doctrine, like the earlier transformation was the product of instrumentalism: a perceived need to accommodate economic growth, as judges were able to deny nuisance plaintiffs relief based on value judgments about the relative value of development versus environmental quality.

In recent years, the U.S. Supreme Court has intervened to stop federal nuisance law from being applied to interstate pollution, including greenhouse gas emissions. The Court did so not on the basis of congressional intent but on its visions of federalism and judicial competency. While these decisions seem to remove nuisance law from the foremost pollution threat in our time, the doctrine may regain relevance if the Court proceeds to narrowly interpret the scope of federal environmental legislation protecting resources like isolated wetlands and groundwater, thereby eliminating displacement arguments. If those resources are not federally regulated, nuisance doctrine would give injured landowners a remedy, just as it has afforded those injured by emissions from hog farms, recently the subject of multimillion dollar damage suits.

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This Article traces the evolution of nuisance law, examining a dozen landmark cases, revealing a doctrine that began by protecting traditional agrarian and domestic uses, yet was malleable enough to accommodate perceived development priorities in the nineteenth and twentieth centuries. The Article does suggest that where not federally displaced or preempted by state statutes, nuisance law today remains a viable cause of action for injured landowners, particularly where the issue is left to juries. Given the evident hostility of the Supreme Court, nuisance may not be available to combat greenhouse gas emissions, despite the felt necessities of the twenty-first century like the evident damages due to unrestrained atmospheric pollution and ocean acidification. But nuisance doctrine could supply injured parties a remedy against unregulated activities. Those parties might encourage courts to rediscover nuisance's strict liability roots and return the doctrine to its origins: protecting against uses that inflict substantial injuries on their neighbors and the public at large.

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INTRODUCTION

Nuisance, once called the “dust-bin of the law,”¹ or worse,² has become more prominent in recent years as statutory and regulatory measures have been unable to protect the public from neighboring harms.³ From the Old French word *nuisir*, meaning “to harm,”⁴ courts early on interpreted nuisance to prevent harm to traditional domestic and agrarian uses, invoking the Latin phrase *sic utere tuo ut alienum non laedas* (use your property so as not to interfere with other people’s).⁵ Originally imposing something close to strict liability, nuisance historically was elastic enough to combat odors,⁶ smoke,⁷ vibrations,⁸ and, more recently, hog

1. Albert C. Lin, *Public Trust and Public Nuisance: Common Law Peas in a Pod?*, 45 U.C. DAVIS L. REV. 1075, 1082 (2012) (citing *Awad v. McColgan*, 98 N.W.2d 571, 573 (Mich. 1959) (“Nuisance is the great grab bag, the dust bin, of the law. It comprehends interference with an owner’s reasonable use and enjoyment of his property by means of smoke, noise, or vibration; the obstruction of private easements and rights of support; interference with public rights, such as free passage along streams and highways, the enjoyment of public parks and places of recreation, and, in addition, activities and structures prohibited as statutory nuisances.”)).

2. See WILLIAM L. PROSSER, *HANDBOOK OF THE LAW OF TORTS*, § 86, at 571 (4th ed. 1971) (“There is perhaps no more impenetrable jungle in the entire law than that which surrounds the word ‘nuisance.’”).

3. The term nuisance can mean either a private nuisance or public nuisance. See RESTATEMENT (SECOND) OF TORTS § 821A (AM. LAW INST. 1979). Private nuisance is a nontrespassory but substantial and unreasonable use interfering with neighboring landowners’ use and enjoyment of land. *Id.* § 821D. Public nuisance, on the other hand, is a substantial and unreasonable interference with public rights. *Id.* § 821B; see also *infra* notes 28–32, 46 and accompanying text.

4. See WEBSTER’S THIRD NEW INTERNATIONAL DICTIONARY OF THE ENGLISH LANGUAGE UNABRIDGED 1548 (3d ed. 2002).

5. *Sic utere tuo ut alienum non laedas*, OXFORD REFERENCE, <https://www.oxfordreference.com/view/10.1093/oi/authority.20110803100504563> (last visited Apr. 4, 2020).

6. See, e.g., *City of Fort Smith v. Western Hide & Fur Co.*, 239 S.W. 724, 725–26 (Ark. 1922) (defendant’s hide and fur sales operation, which emitted offensive odors and attracted flies, was a public nuisance, even though it possessed a license from the city; the distinction between public and private nuisance “lies merely in the extent of the injury or annoyance . . .”).

7. See generally, e.g., *Atlanta Processing Co. v. Brown*, 179 S.E.2d 752, 754 (Ga. 1971) (stating that a jury was justified in finding that the defendant’s animal processing plant emitting gases, fumes, and smoke with a “strong, pungent and nauseating odor,” was a public nuisance).

8. See, e.g., *Transcon. Gas Pipe Line Corp. v. Gault*, 198 F.2d 196 (4th Cir. 1952) (noise and vibrations from defendant’s compressor gas station that greatly disturbed neighbors created a public nuisance).

feedlots⁹ and greenhouse gas (“GHG”) pollution,¹⁰ although the ability of the doctrine to provide remedies against GHG emitters is doubtful as of this writing.¹¹

Defendants in nuisance cases have long invoked a variety of defenses, like the suitability of the alleged nuisance to its location or use of best available means to reduce interference, to reduce their liability.¹² A prominent defense is the concept of “special injury,” or injury that is different in kind from that suffered by the general public.¹³ Generalized public injuries, the theory goes, are remedied only by actions brought by public officials, not private litigants.¹⁴ Other public nuisance cases have faltered recently on grounds of statutory displacement of federal common law nuisance remedies,¹⁵ under a Supreme Court opinion finding displacement by the federal Clean Air Act.¹⁶ The displacement cases seemed to ignore congressional intent in favor of the Court’s vision of separation of powers and judicial competency, both of which serve an antiregulatory agenda.¹⁷

Despite the recent success of some nuisance defendants at avoiding judicial consideration of the merits of nuisance allegations,¹⁸ the ancient doctrine should not

9. See, e.g., *Bormann v. Bd. of Supervisors*, 584 N.W.2d 309, 311 (Iowa 1998) (interpreting the effect of a right-to-farm statute); *Labrayere v. Bohr Farms, LLC*, 458 S.W.3d 319 (Mo. 2015) (same); H. Claire Brown, *North Carolina Jury Awards Neighbors \$473.5 Million in Smithfield Hog Waste Suit*, COUNTER (Aug. 3, 2018), <https://thecounter.org/north-carolina-jury-fines-smithfield-foods-nuisance-lawsuit-hog-farm-manure/>; *infra* Section I.L (discussing *McKiver v. Murphy-Brown*).

10. See cases cited *infra* notes 15–16.

11. See *infra* notes 187–95 and accompanying text.

12. See *infra* notes 35, 48, 105, 136, 187–89, 192–93 and accompanying text.

13. See RESTATEMENT (SECOND) OF TORTS § 821C(1) (AM. LAW INST. 1979) (“In order to recover damages in an individual action for a public nuisance, one must have suffered harm of a kind different from that suffered by other members of the public exercising the right common to the general public that was the subject of interference.”); see also *Hopi Tribe v. Ariz. Snowbowl Resort Ltd. P’ship*, 430 P.3d 362, 371 (Ariz. 2018) (concluding that the Tribe did not suffer “special injury” because “anyone and everyone who visits the Peaks, not just the Tribe, will suffer substantial environmental harm.”); *infra* notes 97–103 and accompanying text.

14. RESTATEMENT (SECOND) § 821C(1).

15. *City of San Mateo v. Chevron Corp.*, 294 F. Supp. 3d 934, 937 (N.D. Cal. 2018) (currently on appeal); *City of New York v. BP P.L.C.*, 325 F. Supp. 3d 466, 472 (S.D.N.Y. 2018); *City of Oakland v. BP P.L.C.*, 325 F. Supp. 3d 1017, 1024–26 (N.D. Cal. 2018) (foreclosing cities’ claims on the ground that federal courts need to defer to the legislative and executive branches in international matters); *infra* notes 192–93.

16. *Am. Elec. Power Co. v. Connecticut*, 564 U.S. 410, 423–24 (2011) (deciding that the Clean Air Act displaced federal common law, relying on *City of Milwaukee v. Illinois*, 406 U.S. 91 (1981)); see *infra* Section I.K; see also *infra* notes 171–80 and accompanying text.

17. See *Am. Elec. Power Co.*, 564 U.S. at 428 (“It is altogether fitting that Congress designated an expert agency, here, EPA, as best suited to serve as primary regulator of greenhouse gas emissions. The expert agency is surely better equipped to do the job than individual district judges issuing ad hoc, case-by-case injunctions. Federal judges lack the scientific, economic, and technological resources an agency can utilize in coping with issues of this order.”).

18. See Albert C. Lin, *Dodging Public Nuisance*, 11 U.C. IRVINE L. REV. (forthcoming 2021).

be dismissed as anachronistic. As this Article illustrates, the flexibility inherent in nuisance balancing—in which modern courts assess the gravity of the harm suffered by plaintiffs¹⁹ against the utility of the defendant’s conduct²⁰—has been repeatedly invoked to affect actions damaging to the public interest, most recently against North Carolina hog farms.²¹ Beginning in the early seventeenth century, for the last 400 years nuisance doctrine has been a prominent part of Anglo-American law, sometimes restraining new developments, sometimes ratifying them.²² What had been a doctrine skeptical of new developments and fitted to protect an agrarian society from change became, during the Industrial Revolution, a malleable principle that often accommodated industrial development through changing the definition of what constituted a nuisance.²³ Over the years, nuisance has shown itself to be a flexible doctrine capable of adapting to the felt conditions of the times.²⁴ If not

19. RESTATEMENT (SECOND) § 827 (“In determining the gravity of the harm from an intentional invasion of another’s interest in the use and enjoyment of land, the following factors are important: (a) The extent of the harm involved; (b) the character of the harm involved; (c) the social value that the law attaches to the type of use or enjoyment invaded; (d) the suitability of the particular use or enjoyment invaded to the character of the locality; and (e) the burden on the person harmed of avoiding the harm.”).

20. *Id.* § 828 (“In determining the utility of conduct that causes an intentional invasion of another’s interest in the use and enjoyment of land, the following factors are important: (a) the social value that the law attaches to the primary purpose of the conduct; (b) the suitability of the conduct to the character of the locality; and (c) the impracticability of preventing or avoiding the invasion.”).

21. *See infra* Section I.L.

22. *See* MORTON J. HORWITZ, *THE TRANSFORMATION OF AMERICAN LAW 1780-1960* 74–78 (1977).

23. *Id.* at 76–77 (discussing the evolution of public nuisance doctrine to include defenses to private damage claims, especially during the transportation revolution; while the formal doctrine, according to Professor Horwitz, “appeared to change very little, judges began to establish a variety of ingenious variations . . . [t]he effect of [which] was that individuals who sought damages due to injuries from great works of public improvement were frequently denied the benefits of a nuisance doctrine that . . . seemed to provide the injured party with all the advantages.”); *see also* Paul M. Kurtz, *Nineteenth Century Anti-Entrepreneurial Nuisance Injunctions—Avoiding the Chancellor*, 17 WM. & MARY L. REV. 621, 623 (1976) (explaining that had nuisance law not evolved away from its strict liability origins, the doctrine would have posed a substantial threat to the industrial revolution, since “[c]onsistent application of the 18th-century standard of nuisance law in the 19th century would have burdened the entrepreneur with a heavy potential liability,” possibly stifling economic development progress due to the potential liability); Jeff L. Lewin, *Compensated Injunctions and the Evolution of Nuisance Law*, 71 IOWA L. REV. 775, 779–85 (1986) (describing “a profound revolution” of nuisance law in the nineteenth century from its property origins (providing redress against acts on the defendant’s land interfered with use of the plaintiff’s land) to tort law (incorporating defenses of “fault” and “reasonableness”), thereby decreasing liability).

24. OLIVER WENDELL HOLMES, JR., *THE COMMON LAW* 1 (1881) (“The life of the law has not been logic: it has been experience. The felt necessities of the time, the prevalent moral and political theories, [and] intuitions of public policy . . . have had a good deal more to do with the syllogism in determining the rules by which men should be governed. The law embodies the story of a nation’s development through many centuries, and it cannot be dealt with as if it contained only the axioms and corollaries of a book of mathematics. In order to know what it is, we must know what it has been, and what it tends to become.”).

displaced through court interpretation nor preempted by statutes, the doctrine remains capable of playing an important role in curbing unregulated pollution and in supplying remedies for neighbors injured by poorly regulated animal feedlots.²⁵

This Article illustrates the adaptability of nuisance law to respond to evolving technologies and scientific methods of ascertaining harm. Nuisance may continue to evolve in the future, as harms continue to outstrip legislatures' abilities to anticipate and combat them.

The Article focuses on 12 landmark nuisance cases in Part I, beginning in 1610 and decided as recently as 2018. These cases illustrate the doctrine's protean nature in light of changing technological and scientific changes that swept through Anglo-American life in the nineteenth and twentieth centuries, and still do so. Part II draws some lessons from this case law. The Article concludes that although nuisance defendants may be able to derail some cases on a variety of procedural and substantive grounds, if courts reach the merits of plaintiffs' claims, the history of nuisance law suggests plaintiffs' prospects of success are not trivial, especially in jury trials.

I. LANDMARK PUBLIC NUISANCE CASES AND THE ENVIRONMENT

Originally a common law crime, the Crown exclusively prosecuted public nuisance claims, typically for interferences with public access to watercourses or roadways.²⁶ Eventually, common law courts allowed citizens to bring public nuisance claims to address public concerns, including environmental issues like

25. See *infra* Section I.L. Regulatory measures like pollution control statutes or local zoning ordinances do not provide injured landowners with compensation for their injuries, so there is no conceptual reason why regulatory measures cannot coexist with common law remedies like nuisance.

26. See WILLIAM L. PROSSER & W. PAGE KEETON, PROSSER & KEETON ON THE LAW OF TORTS 617–18 (W. Page Keeton et al. eds., 5th ed. 1984) (discussing the earliest English nuisance cases, which “involved purprestures, which were encroachments upon the royal domain or the public highway . . . [t]here was enough of a superficial resemblance between the blocking of a private right of way and the blocking of a public highway to keep men contented with calling the latter a nuisance,” thereby birthing the doctrine of public nuisance); see also ZECHARIAH CHAFEE, JR. & EDWARD D. RE, EQUITY: CASES AND MATERIALS 794–95 (4th ed. 1958) (discussing sixteenth-century writs that, while not directed toward wrongs on private land, showed that medieval courts were aware of the desirability of specific relief against nuisances. The first reported case appears to be *Osburne v. Barter*, Ch. Cas. in Ch. 176 (1583), involving a defendant’s new mill which interfered with the watercourse used by the plaintiff. By 1650, equitable relief could be had “[w]here an action upon the case for a Nusans [sic] and damages only are to be recovered, the party may have help here to remove or restore the thing itself.”); see also Daniel R. Coquillette, *Mosses From an Old Manse: Another Look at Some Historic Property Cases About the Environment*, 65 CORNELL L. REV. 761, 775 (1979); Richard O. Faulk & John S. Gray, *Public Nuisance at the Crossroads: Policing the Intersection Between Statutory Primacy and Common Law*, 15 CHAP. L. REV. 495, 502 (2012).

breathing clean air.²⁷ This evolution epitomized the adaptability of nuisance law, as the case law confirms.

Plaintiffs can bring either private or public nuisance claims, but the two causes of action are not mutually exclusive.²⁸ Although private nuisance inquiries concern a nontrespassory invasion of another's interest in the use and enjoyment of land,²⁹ a public nuisance claim focuses on the existence of an unreasonable interference with a right common to the public.³⁰ Thus, an activity could be simultaneously a public and private nuisance. Public nuisance offers the prospect of damages to private plaintiffs only if they suffer special injury different from that suffered by the general public.³¹

A. *Aldred v. Benton*

The first landmark case was a private nuisance case,³² a 1611 dispute involving a London pigsty owned by Thomas Benton. A neighboring landowner, William Aldred, sued to enjoin Benton's business, claiming that the odors emanating from the pigsty made the air surrounding his residence unbreathable and blocked natural light.³³ Benton responded that his pigsty was "necessary for the sustenance of man" and maintained that Aldred "ought not to have such a delicate nose."³⁴ These defenses—involving the utility of the defendant's conduct and an allegedly

27. See PROSSER & KEETON, *supra* note 26, at 629–30, 651–52 (discussing unreasonable interference in industrial pollution also well as general public nuisance category for uses adversely affecting the environment, and therefore the "use and enjoyment of private property." Public nuisance involves a "continuing course of conduct that results in physical harm or economic loss to so many persons as to become a matter of serious concern."); *infra* Section I.B (discussing the *St. Helens Smelting* case).

28. RESTATEMENT (SECOND) OF TORTS § 821A (AM. LAW INST. 1979).

29. *Id.* § 821D.

30. *Id.* § 821B.

31. *Id.* § 821C ("In order to maintain a proceeding to enjoin to abate a public nuisance, one must (a) have the right to recover damages . . . , or (b) have authority as a public official or public agency to represent the state or a political subdivision in the matter, or (c) have standing to sue as a representative of the general public, as a citizen in a citizen's action or as a member of a class in a class action."). Thus, according to the Restatement, special injury may not be necessary if plaintiffs seek purely injunctive relief and otherwise establish standing to sue. See Barry R. Furrow, *Governing Science: Public Risks and Private Remedies*, 131 U. PA. L. REV. 1403, 1440 (1983). A lack of special injury was recently fatal to the Hopi Tribe's effort to enjoin artificial snowmaking with reclaimed wastewater at Arizona's Snowbowl Resort, located on national forest land that is a sacred site to the tribe. See *infra* notes 97–103 and accompanying text (discussing the *Hopi Tribe* case).

32. Public and private nuisance share a common heritage. See Donald G. Gifford, *Public Nuisance as a Mass Products Liability Tort*, 71 U. CIN. L. REV. 741, 791–92 (2003) ("To suggest . . . that public nuisance and private nuisance have little in common and are unrelated is to ignore more than eight hundred years of intertwined history. The confusion between the two results not from occasional recent misunderstandings by courts or law students, but from a shared heritage—an understanding of which can assist us in the current task of elucidating the appropriate parameters of public nuisance in the contemporary context.").

33. *Aldred v. Benton* (1611) 77 Eng. Rep. 816, 9 Co. Rep. 57 b.

34. *Id.* at 816–17.

overly sensitive plaintiff—would be raised repeatedly in ensuing nuisance cases over the years.³⁵

Sir Christopher Wray, Chief Justice of the King’s Bench, rejected Benton’s defenses, ruling that Aldred’s injury involved a matter of necessity: his access to light and his ability to breathe “wholesome air.”³⁶ The court announced that, as expressed in the old Latin maxim of *sic utere tuo ut alienum non laedus*, neighbors must use their property so as not to interfere with each other.³⁷ Benton violated this “golden” rule by producing odors that deprived Aldred’s right to enjoy his home. Even without evident physical damage to the residence itself, the court granted Aldred an injunction against the operation of the pigsty.³⁸ The court also awarded damages for the injury sustained by Aldred for the loss of “wholesome air [and] light,” although not for “prospect” (view), for that was “a matter only of delight, and not of necessity.”³⁹ Benton’s utility defense was unavailing because his use interfered with essential domestic uses like “wholesome air and light.” No balancing was apparently warranted given the interference with these traditional uses.

The *sic utere tuo* maxim would become a staple of nuisance law,⁴⁰ as courts relied on it to enable landowners to restrain land uses that interfered with traditional

35. Professor Coquillette maintained that Benton’s defense was the first time a defendant raised utility as a defense. Coquillette, *supra* note 26, at 775. The utility defense was central to the result in *Boomer v. Atlantic Cement*. See *infra* Section I.H.

36. *Aldred*, 77 Eng. Rep. at 820–21 (announcing that the pigsty “for stopping . . . of the wholesome air as of light, an action lies, and damages shall be recovered for them, for both are necessary And the building of a lime-kiln is good and profitable; but it if be built so near a house, that when it burns the smoke thereof enters into the house, so that none can dwell there, an action lies for it.”).

37. *Id.* at 821 (“Use your own property in such a way that you do not injure others”).

38. *Camfield v. United States*, 167 U.S. 518, 523 (1897) (in a case involving a rancher’s creative and unlawful fencing of private land that enclosed federal public lands, the Supreme Court considered the fencing to be analogous to a public nuisance, observing that there was “no right to maintain a structure . . . which, by reason of disgusting smells, loud or unusual noises, thick smoke, noxious vapors, the jarring of machinery, or the unwarrantable collection of flies, renders the occupancy of adjoining property dangerous, intolerable, or even uncomfortable to its tenants . . .”).

39. *Aldred*, 77 Eng. Rep. at 821.

40. See *Camfield*, 167 U.S. at 522–23 (“There is no doubt of the general proposition that a man may do what he will with his own, but this right is subordinate to another, which finds expression in the familiar maxim, ‘*Sic utere tuo ut alienum non laedas*.’ His right to erect what he pleases upon his own land will not justify him in maintaining a nuisance, or in carrying on a business or trade that is offensive to his neighbors. Ever since *Aldred’s Case*, it has been the settled law, both of this country and of England, that a man has no right to maintain a structure upon his own land, which, by reason of disgusting smells, loud or unusual noises, thick smoke, noxious vapors, the jarring of machinery, or the unwarrantable collection of flies, renders the occupancy of adjoining property dangerous, intolerable, or even uncomfortable to its tenants. No person maintaining such a nuisance can shelter himself behind the sanctity of private property.”) (citations omitted).

domestic and agrarian practices.⁴¹ According to Blackstone, even lawful activities could be enjoined as nuisances.⁴² But the *Aldred* court rejected nuisance claims based on aesthetics, although it seemed to sanction actions brought by tenants as well as landowners.⁴³

Aldred made clear that physical damage to land was not a prerequisite to obtaining relief; odors and loss of light due to air pollution were sufficient. The decision also rejected Benton's claims of social utility: no balancing of utility versus interference was apparently appropriate when the interference was to essential domestic uses. The nuisance law that existed before the nineteenth century was grounded on notions of protecting the quiet enjoyment of landowners and providing stability to the largely agrarian society that characterized both England and the United States.⁴⁴

B. St. Helen's Smelting Co. v. Tipping

The antidevelopmental bias of nuisance doctrine remained evident in mid-nineteenth century law. Farmers and homeowners often invoked nuisance doctrine against widespread injuries produced by new technologies like blast furnaces, railroad operations, textile mills, and other manufacturing enterprises.⁴⁵ For example, in *St. Helen's Smelting Co. v. Tipping*, the owner of a 1300-acre country manor in Lancashire in northwestern England successfully claimed that a copper smelter a mile-and-a-half away produced large quantities of noxious vapors

41. See HORWITZ, *supra* note 22, at 74 (“While other areas of the law were changing to accommodate the growth of American industry, the law of nuisances for the longest time appeared on its face to maintain the pristine purity of a preindustrial mentality.”).

42. Emphasizing the importance of the suitability of the use to the location, Blackstone declared that “if one does any other act, in itself lawful, which yet being done in that place necessarily tends to the damage of another’s property, it is a nuisance: it is incumbent on him to find some other place to do that acts, where it will be less offensive.” WILLIAM BLACKSTONE, 3 COMMENTARIES ON THE LAWS OF ENGLAND 217 (4th ed., 1771).

43. It is not clear from the case report whether *Aldred* was an owner or lessee, but the court seemed to recognize any possessory interest as sufficient to support a nuisance plaintiff, suggesting that “anything done to the hurt or annoyance of the lands, tenements, or hereditaments of another,” would suffice. *Aldred*, 77 Eng. Rep. at 216; see also Coquilllette, *supra* note 26, at 775 (“[A] person with any possessory interest in land inherited the ‘natural rights’ of seisin protected by the historic assize of nuisance.”). However, “depriving one of a mere matter of pleasure . . . [that] abridges nothing really convenient or necessary, is no injury to the sufferer, and is therefore not an actionable nuisance.” *Aldred*, 77 Eng. Rep. at 217.

44. See *Reinhardt v. Menstasti* (1885) 42, Ch. D. 685 (involving an oven placed on the other side of the wall from a wine cellar); *Commonwealth v. Perry*, 29 N.E. 656, 657 (Mass. 1885) (gigantic piggery in the Boston suburbs that smelled like “the natural odor of five hundred [pigs]”); CHAFEE & RE, *supra* note 26, at 795–96 (“Nuisance actions are one of the oldest forms of town planning and social control over land use. Before 1750 they were usually aimed at mismanagement of time-honored occupations.”).

45. See *Furrow*, *supra* note 31, at 1439 (“[N]uisance cases in both England and America arose during transitional stages between older community arrangements and emerging industries. The industrial revolution spawned nuisance litigation by farmers and homeowners on the troubled frontier of new technologies against textile mills, blast furnaces, hydraulic mines, and cement plants.”).

adversely affecting his trees, hedges, and plants, and therefore constituted a nuisance.⁴⁶

The smelter owner maintained that there was no nuisance because the area surrounding the smelter was devoted largely to manufacturing,⁴⁷ invoking what would become another staple of nuisance defendants: the suitability of the use to the location.⁴⁸ But the House of Lords disagreed, affirming a jury's injunction against the smelter after deciding that the smelter could not have been located in a "fit place," in light of the physical damage inflicted on neighboring properties.⁴⁹ The court concluded that the physical injuries to the neighboring trees and vegetation negated the smelter's societal benefit.⁵⁰ Although the decision announced that nuisance cases should be "looked at from a reasonable point of view," weighing all factors and all circumstances,⁵¹ what mattered was the physical harm caused by the defendant; the physical damage caused by the smelter seemed to impose a kind of

46. (1865) 11 Eng. Rep. 1483, 1483, 1487. The decision did not distinguish between public and private nuisance, which was typical of the nineteenth-century case law. Public nuisance was originally a crime, becoming a tort for which damages could be awarded only when a plaintiff could show "special damage" beyond that suffered by other affected members of the public. *See, e.g.,* *Rose v. Miles* (1815) 105 Eng. Rep. 773, 4 M&S 101 (recognizing a private claimant's right to sue in public nuisance as a result of incurring special damage). In the twentieth century, courts began to draw a distinction between public and private nuisance, allowing public nuisance plaintiffs to recover for personal injuries as well as damage to land. *See, e.g.,* *Thomas v. National Union of Mineworkers*, 1 WLR 20 (Eng. 1986) (deciding that threats of the defendant were actionable under nuisance where they interfered with a plaintiff's right to use public roads and work); *Attorney-General v. PYA Quarries Ltd.*, 2 QB 169 (Eng. 1957) (ruling that, despite the difficulty in defining the difference between a public and private nuisance, a public nuisance was a use that materially affected the reasonable comfort or convenience); *Lyons v. Gulliver*, 83 LJ ch. 281 (Eng. 1914) (deciding that an obstruction created by people often lining up for a theater show in front of the plaintiff's property was an actionable private nuisance).

47. *St. Helens Smelting*, 11 Eng. Rep. at 1485 ("It cannot be asserted as an abstract proposition of law that any act by which a man sends over his neighbour's land that which is noxious and hurtful is actionable, but the jury must be told to take into account the condition of the other property in the neighborhood, the locality, and the other circumstances which show the reasonable employment of the property, and even the employment of it in a particular manner in that particular locality.").

48. *See* RESTATEMENT (SECOND) OF TORTS § 831 (AM. LAW INST. 1979) ("An intentional invasion of another's interest in the use and enjoyment of land is unreasonable if the harm is significant, and (a) the particular use or enjoyment interfered with is well suited to the character of the locality; and (b) the actor's conduct is unsuited to the character of that locality.").

49. *St. Helens Smelting*, 11 Eng. Rep. at 1487. The court also rejected the smelter's proffered defenses of prescription and "coming to the nuisance." *Id.* at 1485.

50. *Id.* at 1487. The case suggested there was strict liability for tangible, physical damage, regardless of the defendant's costs or its social utility. *See* John P. McLaren, *Nuisance Law and the Industrial Revolution—Some Lessons from Social History*, 3 OXFORD J. LEGAL STUD. 155, 157–58 (1983) (distinguishing cases with tangible damage, for which liability "automatically followed, and those which [involved] inconvenience in which evident circumstantial factors had to be considered.").

51. *St. Helens Smelting*, 11 Eng. Rep. at 1484.

strict liability on the defendant.⁵² The case illustrated the potential of public nuisance to have a significant effect on environmental quality, in this instance producing a widespread improvement in air quality.⁵³

C. *Woodruff v. North Bloomfield Gravel Mining Co.*

A landmark nineteenth-century California case exemplified the potential effect of nuisance to restrain private land uses that adversely affected navigation and water quality. Gold mining companies in the Yuba River Basin blasted the west

52. The court seemed to restrict balancing of the equities to nonphysical damage involving “personal discomfort” or a loss of amenities. *Id.* at 1486. Nuisance law has often been invoked against odors, dust, and vibrations. *See* Lin, *supra* note 1, at 1082–83 (“Litigants have asserted public nuisance claims successfully in response to various environmental problems, including dust, smoke, noise, odors, and hazardous chemical releases. At the root of these varying factual circumstances is the notion of public harm: the public nuisance doctrine addresses general harm resulting from the conduct of others. Recent litigation seeking to apply public nuisance to lead paint, handgun violence, and climate change underscores the malleability of the doctrine.”). Whereas nuisance law imposes a kind of fault-based liability, requiring a substantial and unreasonable interference with the use and enjoyment of neighboring land or with public rights, trespass law protects against more tangible unpermitted physical invasions, supplying a kind of strict liability remedy. *See infra* Section I.G and accompanying text (discussing the blending of nuisance and trespass law in *Martin v. Reynolds Metals*).

53. The antidevelopmental origins of nuisance law, however, ran headlong into the Industrial Revolution of the late eighteenth and nineteenth centuries. Over time, many courts interpreted nuisance law to evolve from a rigid, antidevelopmental doctrine reflected in the *St. Helens Tipping* decision that threatened emerging industries into a more flexible rule that weighed the advantages of the new developments. *See generally* HORWITZ, *supra* note 22, at 74–78; Kurtz, *supra* note 23, at 670; Lewin, *supra* note 23, at 781. An early example was the 1839 decision of *Lexington & Ohio Rail Road Co. v. Applegate*, 38 Ky. (8 Dana) 289, 306 (Ky. 1839), involving trains running through downtown Louisville, which produced loud noise and steam. The Kentucky Supreme Court, invoking reasonable use and utilitarian balancing, explained that “[t]he law is made for the times, and will be made or modified by them. The expanded and still expanding genius of the common law should adapt it here, as elsewhere, to the improved and improving conditions of our country.” This court clearly would not allow old antidevelopmental interpretations of nuisance law to hamper industrial growth, a harbinger of the future. Professor Horwitz considered this decision to be one of the few pre-Civil War cases to openly admit the need to “adapt the law of nuisance to the demands of economic development,” contrasting the rigidity of nuisance to other doctrines more amenable to change, as the law of nuisance long continued to reflect the deepest eighteenth-century notions of the absolute prerogatives of private property. “The abundance of undeveloped land was surely a major factor in postponing the profoundly antidevelopmental effect of the law of nuisance on the course of industrialization.” HORWITZ, *supra* note 22, at 75.

To the same effect as the Kentucky decision was *Versailles Borough v. McKeesport Coal & Coke*, 83 PITTSBURGH LEGAL J. 379 (1935), where Judge Michael Mussmano of Pennsylvania’s Allegheny County Court colorfully decided that coal jobs would not be sacrificed for air quality, declaring that there was “not enough smoke in Pittsburgh,” for smoke represented “the fires of prosperity;” he consequently rejected nuisance claims concerning air pollution and flaming “gob piles” because “we cannot give Mediterranean skies to the plaintiffs, when by doing so, we may send the worker and bread-winners of the community involved to the Black Sea of destitution.”

slopes of the Sierra Nevada Mountains in pursuit of gold, discharging massive amounts of sediment into the Yuba River, tributary to the Feather and Sacramento Rivers, damaging both navigation and water quality and flooding towns.⁵⁴ Residents from central California towns, joined by the state, sought to enjoin the mining companies' blasting, claiming an unreasonable interference with the public's right to navigate on the river and the private use and enjoyment of affected adjacent properties.⁵⁵

The reviewing federal court agreed with the plaintiffs, concluding that the mining practices constituted both a private and a public nuisance due to, among other things, the "fouling" of the river, making it "unfit for ordinary domestic purposes."⁵⁶ The court reached this conclusion despite the fact that the companies held mining rights under federal law because the court concluded that federal authorization did not extend to mining practices that injured neighboring lands.⁵⁷ The court noted that the California Supreme Court had never ruled that local mining customs permitted injury to other lands, and in fact the state court had held a number of times that miners could not use their properties in a manner that "injure[d]

54. *Woodruff v. North Bloomfield Gravel Mining Co.*, 18 F. 753, 756 (C.C.D. Cal. 1884).

55. The landowners claimed that the mining operations caused river overflows, often covering the riverbanks on their lands with water and debris. For example, the town of Marysville, located at the confluence of the Yuba and Feather Rivers, suffered years of devastating flooding. The people of the town started building levees in 1868 and found they had to increase the height each year to keep up with the increased mining discharges. The levees were no match for the debris, however, and in 1875 Marysville experienced its first major flood. The court declared that "[t]his was doubtless owing in great part to the filling up of the channels and elevation of the beds of the rivers . . ." *Id.* at 765.

56. *Id.* at 809. The court also cited impairment to navigation, injury to agricultural lands, and flooding of nearby towns. *Id.* at 809–10. According to the court, the damage was considerable:

The lands thus already buried and destroyed are over 15,000 acres, or 25 square miles; or, taking the average width, a tract from the foot-hills to Marysville, twelve miles long along the river by two miles wide. The filling in the river bed is generally 25 feet or more, and, at its immediate junction with Feather River at Marysville, is about 20 feet deep,—some witnesses make it deeper,—where it forms a bar of nearly that depth across Feather River. The depth of the filling is increasing year by year, and raising the bed of the river within the levees higher and higher above the surrounding country outside the levees.

Id. at 761.

57. *Id.* at 773, 802. The mining rights were federally recognized under the 1872 Mining Act, which required compliance with state law. *See* 30 U.S.C. § 22 (1971); *Dodge v. Wilkinson*, 664 P.2d 157, 160 (Alaska 1983) ("State law is applicable to location of mining claims and claim disputes involving public land only to extent that state law is not inconsistent with federal law."). Recently, both the California Supreme Court and the Ninth Circuit have upheld state bans on suction dredge mining in rivers despite the miners' federal mining rights. *Bohmker v. Oregon*, 903 F.3d 1029 (9th Cir. 2018); *People v. Rinehart*, 377 P.3d 818 (Cal. 2016).

another.”⁵⁸ The federal court emphasized that the mining continuously imperiled nearby lands⁵⁹ and discounted the public value of the mining, since it was “merely for the convenience of another . . . in pursuit of his or their private business,” which did not outweigh the damage inflicted, and which justified injunctive relief.⁶⁰

Like *Aldred* and *St. Helens Tipping*, the balancing the *Woodruff* court invoked favored “ordinary domestic purposes.”⁶¹ Protection of these traditional uses

58. *Woodruff*, 18 F. at 802–03 (citing *Jennison v. Kirk*, 98 U.S. 453, 461 (1878); *Richardson v. Kerr*, 34 Cal. 63, 74 (1867); *Hill v. Smith*, 27 Cal. 476, 482 (1865)) (“This notion (that the rules of the common law as to water rights have been modified in California) is without substantial foundation. The reasons which constitute the groundwork of the common law upon this subject remain undisturbed. The conditions to which we are to apply them are changed, and not the rules themselves. The maxim, *sic utere tuo ut alienum non laedas*, upon which they are grounded, has lost none of its governing force; on the contrary, it remains now, and in the mining regions of this state, as operative a test of the lawful use of waters as at any time in the past, or in any other country.’ And in *Richardson v. Kier*, 34 Cal. at 74, the court said: ‘He is bound to so use his ditch as not to injure his neighbor’s land, irrespective of the question as to which has the older right or title, * * * and if, through any fault or neglect of his in not properly managing and keeping in repair, the water does overflow or break through the banks of the ditch and injure the lands of others, either by washing away the soil or covering the soil with sand, the law holds him responsible;’ and these are but examples of many others too numerous to mention, and too familiar in this state to require citation. The Supreme Court of the United States recognizes the principle of the maxim also in *Jennison v. Kirk*, 98 U.S. at 461. Said the Court: ‘The position of the testator’s ditch prevented this working, and thus deprived him of this value of the water and practically destroyed his mining claim. No system of law with which we are acquainted tolerates the use of one’s property in this way so as to destroy the property of another.’”).

59. Following the court’s ruling, the mining companies continued to pollute, causing *Woodruff* to bring contempt actions in 1886 and in 1891. *Woodruff v. N. Bloomfield Gravel Mining Co.*, 27 F. 795, 797 (C.C.D. Cal. 1886) (holding that wastewater discharges resulting from a mine tunneling project violated an injunction restraining defendants from discharging refuse matter into the Yuba River). See generally Kaitlin N. Vigars, *Buried Beneath the Legislation It Gave Rise To: The Significance of Woodruff v. North Bloomfield Gravel Mining Co.*, 43 B.C. ENVTL. AFF. L. REV. 235 (2016).

60. *Woodruff*, 18 F. at 812. The court also rejected the mining company’s claim that it held a prescriptive right to continue its operations, ruling that prescription cannot legitimize a public nuisance, and recognized that members of the public could enforce a public nuisance if they suffered “peculiar injury.” *Id.* at 787–88. On the Restatement’s endorsement of the special injury requirement, see *supra* note 13.

61. *Woodruff*, 18 F. at 809. Perhaps not coincidentally, protection of domestic uses is the highest priority of both Western and Eastern water law. See 1 WATER AND WATER RIGHTS, §§ 2.05(a), (c), 9.03(a)(3), 15.02(b) (Amy K. Kelley ed., 3d ed. 2009).

Professor Fraley has maintained that the so-called balancing employed in traditional nuisance doctrine cases actually imposed strict liability, in the form of an absolute right to damages whenever sufficient injury was shown. Jill Fraley, *The Uncompensated Takings of Nuisance Law*, 62 VILL. L. REV. 651, 656 (2017) (quoting *Madison v. Ducktown Sulphur, Copper & Iron*, 83 S.W. 658, 664 (Tenn. 1904)) (“A judgment for damages in this class of cases is matter of absolute right, where injury is shown . . .”). She also noted the 1942 version of *American Jurisprudence* stated that in deciding whether a use was a nuisance, “it is of no consequence that the business is a useful or necessary one, or that it contributes to the wealth and prosperity of the community.” Fraley, *supra*, at 656 (quoting 39 AM. JUR.

also revealed the potential of public nuisance to improve environmental quality, in this case, water quality. By protecting the public's right to navigate in the Yuba Basin, the injunction stopped mining operations producing widespread sediment pollution damage to the affected waterways.⁶²

D. Missouri v. Illinois

In 1900, the State of Missouri filed an original jurisdiction suit in the Supreme Court against the State of Illinois in what became the Supreme Court's first interstate pollution case, charging that the City of Chicago's discharge of sewage into the Desplaines River, a tributary of the Mississippi River, was a public nuisance.⁶³ Chicago had reversed the course of the Chicago River so that it would no longer pollute Lake Michigan but instead would eventually flow into the Desplaines River and ultimately into the Mississippi River, less than 50 miles upriver from St. Louis.⁶⁴ Missouri claimed that the reversed flow poisoned the river,

NUISANCES § 45, at 327 (1942)). Fraley explained that until the mid-twentieth century "reasonableness" was not actually balancing the gravity of the plaintiff's harm versus the utility of the defendant's conduct (as later adopted by RESTATEMENT (SECOND) OF TORTS § 821B) (AM. LAW INST. 1979)), but instead amounted to exceptions from strict liability for 1) injunctions; as opposed to damages; 2) preliminary injunctions, as opposed to permanent injunctions; 3) public necessity involving "the basic sustaining industry of the community;" 4) *de minimis* injuries; and 5) laches. Fraley, *supra*, at 661–69 (supplying considerable documentation from the case law).

62. Another case to the same effect as *Woodruff* in the same year was the California Supreme Court's decision in *People v. Gold Run Ditch & Mining Co.*, 4 P. 1152, 1153 (Cal. 1884) (affirming an injunction against hydraulic gold mining pollution in the Sacramento River, with "between four and five thousand cubic yards of solid material from its said mine, to-wit, of bowlders, cobbles, gravel, and sand, making a yearly discharge of at least six hundred thousand cubic yards . . ."). The state court's reasoning in *Gold Run Ditch* was similar to that of the federal court in *Woodruff*: the State had a duty to protect the public, and that a right to continue a public nuisance could not be acquired by prescription or legalized by a lapse in time. *Id.* at 1159.

The blasting operations associated with Gold Rush-era mining produced adverse environmental effects similar to those of mountaintop mining operations of the twenty-first century. On mountaintop mining, see *What is Mountaintop Mining?*, EARTHJUSTICE, <https://earthjustice.org/features/campaigns/what-is-mountaintop-removal-mining> (last visited Apr. 9, 2019) ("Coal companies first raze an entire mountainside, ripping trees from the ground and clearing brush with huge tractors. This debris is then set ablaze as deep holes are dug for explosives. An explosive is poured into these holes and mountaintops are literally blown apart. Huge machines called draglines—some the size of an entire city block, able to scoop up to 100 tons in a single load—push rock and dirt into nearby streams and valleys, forever burying waterways. Coal companies use explosives to blast as much as 800 to 1,000 feet off the tops of mountains in order to reach thin coal seams buried deep below.").

63. See *Missouri v. Illinois (Missouri II)*, 200 U.S. 496, 497 (1906).

64. The American Society of Civil Engineers still lauds the project as a "Claim to Fame" on its website, explaining that it was "[c]ompleted in 1900, the reversal of the Chicago River [was] a major civil engineering innovation, requir[ing] imaginative planning and ingenious construction. The result was a multi-purpose project that significantly benefited the development of America's heartland." *Reversal of the Chicago River*, AM. SOC'Y CIV.

allegedly causing a rise in typhoid fever in St. Louis, and sought an injunction.⁶⁵ Illinois claimed that the Court should dismiss the suit because Missouri lacked both affected property rights and standing to represent the small number of affected landowners in the state along the Mississippi River, but the Court refused to dismiss the case in 1901.⁶⁶

After a special master heard from 350 witnesses, amassed over 1,000 exhibits, and compiled a record in excess of 13,000 pages, a 1906 opinion by Justice Holmes for a unanimous Court rejected the nuisance claim on causation grounds.⁶⁷ Holmes cited conflicting expert witness testimony about the effect of the discharged sewage over 350 miles downstream, observing that no case had ever held “so remote a source” liable for infection and disease discovered so far away.⁶⁸ According to Holmes, the claim of nuisance was problematic because it was not of “the simple kind,” was undetectable “by the unassisted senses,” and produced “no visible increase of filth, no new smell;” thus, in order to prevail against this “inference of the unseen,” Missouri would have to marshal the “most ingenious experiments and . . . interpretation [of] the most subtle speculations, of modern science.”⁶⁹

Missouri claimed a 77% increase in typhoid deaths since the river’s reversal, but the Court noted that the State failed to show that typhoid bacteria could survive in the river long enough to reach St. Louis.⁷⁰ Holmes also emphasized that Illinois’ experts claimed that the poor quality of Missouri’s water was due to sewage discharge practices in that state as well.⁷¹ Although the Court’s opinion cited the

ENGINEERS, <https://www.asce.org/project/reversal-of-the-chicago-river/> (last visited Apr. 2, 2019). Elihu Root, the Secretary of War with jurisdiction over navigation through supervision of the Army Corps of Engineers, apparently agreed, as he refused to stop the project absent a showing of adverse effects on navigation or public health. See Robert V. Percival, *The Frictions of Federalism: The Rise and Fall of the Federal Common Law of Interstate Nuisance* 6 (Univ. of Md. Sch. of Law Pub. Law & Legal Theory Paper No. 2003-02, 2003), <https://ssrn.com/abstract=452922>.

65. *Missouri II*, 200 U.S. at 523.

66. See *Missouri v. Illinois (Missouri I)*, 180 U.S. 208, 217–18, 249 (1901) (opinion by Justice Shiras, rejecting Illinois’ demurrer). According to a recent analysis, the case was the first in which the Supreme Court recognized that a state’s sovereign interest could become a judicially cognizable claim. Comment, *The Sovereign Self-Preservation Doctrine in Environmental Law*, 133 HARV. L. REV. 621, 622 (2019). However, the Court refused Missouri’s claim for a preliminary injunction and signaled that the State would face a high bar on the merits, showing “a real and immediate danger” by “determinate and satisfactory” evidence. *Missouri I*, 180 U.S. at 248.

67. *Missouri II*, 200 U.S. at 526.

68. *Id.* at 523.

69. *Id.* at 518–22.

70. *Id.* at 523.

71. *Id.* at 525–26. A similar result occurred in *New York v. New Jersey*, 256 U.S. 296, 309 (1921), in which New York sought to enjoin a New Jersey sewage disposal project that would discharge into New York Bay. Citing the high burden of proof established in *Missouri II*, which the Court equated to a standard of “clear and convincing” proof, a unanimous Court determined that New York failed to present sufficient evidence to warrant an injunction. *Id.* The Court relied on the fact that the New Jersey project was designed with “the best obtainable sanitary engineers, chemists, and bacteriologists,” and observed that, like

lack of scientific connection between the increased sewage and typhoid deaths, the decision was also likely influenced by Illinois' claims that Chicago spent over \$40 million on the project, while Missouri took no legal action during its seven years of construction, suggesting that it was guilty of laches.⁷²

Missouri v. Illinois thus ratified large-scale environmental disruption and legitimized Chicago's brazen engineering feat. The Court did infer that more evidence of causation might yield a different result, however, and that nuisance law could evolve in response to scientific advances.⁷³ Notably, in 1907, only a year after the Supreme Court's decision, expert testimony to Congress saw a clear link between increased typhoid in St. Louis and the sewage the reversed river sent in its direction.⁷⁴ And, ironically, Missouri would later join Illinois in arguing for maintenance of the reversed river flows against other states worried about declining Great Lakes water levels.⁷⁵

Missouri in the Chicago River case, New York had unclean hands, as New York City and other New York municipalities discharged untreated sewage into the bay. *Id.* at 301, 309–10; see Percival, *supra* note 64, at 42–44.

A decade later, New Jersey successfully invoked Supreme Court original jurisdiction to enjoin New York City's ocean dumping of sewage sludge and garbage. *New Jersey v. City of New York*, 283 U.S. 473 (1931). The Court's unanimous decision described the garbage that washed up on the beaches as "unsightly and noxious, constitut[ing] a means to public health and tend[ing] to reduce property values Floating garbage makes bathing impracticable, frequently tears and damages fish pound nets and injuriously affect the business of fishing." *Id.* at 478. Eventually, the Court ordered the City to stop the ocean dumping by 1934 and awarded New Jersey damages to compensate for the costs of beach cleanups required after the City missed an earlier 1933 deadline. *New Jersey v. City of New York*, 290 U.S. 237, 239–40 (1933). See also Percival, *supra* note 64, at 48–50.

72. See Percival, *supra* note 64, at 9.

73. Holmes' mention of "the most ingenious experiments" required that the threatened damage be "of a serious magnitude" and be "clearly and fully proved" but implied that better evidence from Missouri could have led the Court to a different result. *Missouri II*, 200 U.S. at 518, 521. Holmes observed that had the case been brought a half century earlier, "it almost necessarily would have failed," but even accepting "the now prevailing scientific explanation of typhoid fever;" he thought there was insufficient proof that typhoid bacteria could survive the 25-day journey to St. Louis. *Id.* at 522–23.

74. See Hearing on Pollution of Rivers by Chicago Sewage, U.S. House of Rep., 59th Cong. 2d Sess. 106, 108 (1907) (testimony of William Thompson Sedgwick, professor at Massachusetts Institute of Technology, concluding that the reversed river "undoubtedly ha[d] the effect of increasing typhoid fever in St. Louis); see also *id.* at 117 ("I believe that beyond all reasonable doubt the principal factor of the annual increase of typhoid-fever mortality of the city of St. Louis since January 1, 1900, has been due to the pollution of the water supply of the city of St. Louis by the unpurified sewage of the sanitary district of Chicago.").

75. *Wisconsin v. Illinois*, 278 U.S. 367, 399 (1929) (affirming a special master's recommendation that called for a series of cutbacks in Chicago's diversions of Lake Michigan water). In addition to Missouri, Illinois was supported by other Lower Mississippi Basin states, including Kentucky, Tennessee, Arkansas, Mississippi, and Louisiana against Wisconsin, Michigan, and New York, which objected to Chicago's increased diversions. *Id.* at 399–401. The case dragged on for years, prompting several Court opinions, eventually

E. Georgia v. Tennessee Copper Co.

Just a year after the Court's decision in *Missouri v. Illinois*, the Supreme Court reached an apparently contrary conclusion in another interstate nuisance case, due largely to the Court's emphasis on the role of the state as a sovereign plaintiff. In *Georgia v. Tennessee Copper Co.*, the Court reaffirmed some of the reasoning of *Missouri v. Illinois*, explaining that caution was necessary when a state seeks "relief from injuries analogous to torts."⁷⁶ However, in another opinion by Justice Holmes, the Court decided that unlike Missouri, Georgia had alleged facts warranting injunctive relief.⁷⁷ Georgia challenged the operations of two Tennessee copper companies, whose use of open-pit roasting discharged noxious gases that migrated into Georgia, producing ongoing and "wholesale destruction of forests, orchards, and crops," and imminently threatening more irreparable harm in the state.⁷⁸ This air pollution damage to Georgia's trees and vegetation, reminiscent of the pollution in *St. Helens Smelting*,⁷⁹ was apparently clearer to the Court than the health effects due to water pollution in St. Louis.

Justice Holmes once again wrote for the Court, and he placed considerable weight on the special sovereign status of Georgia.⁸⁰ He declared that:

It is a fair and reasonable demand on the part of a sovereign that the air over its territory should not be polluted on a great scale by sulphurous acid gas, that the forests on its mountains . . . should not be further destroyed or threatened by the act of persons beyond its

ordering Illinois to "take all necessary steps" to fund sewage treatment that would enable reduced diversions. *Wisconsin v. Illinois*, 289 U.S. 395, 406 (1933); see Percival, *supra* note 64, at 13–15.

Today, due in part to climate change induced high precipitation levels, Great Lakes water levels are surging to record levels. See John Flesher, *Great Lakes Water Levels Surge, Some Record Highs Predicted*, AP NEWS (May 7, 2019), <https://www.apnews.com/2af073fe3a634f68b80bdfb419e53a33> (citing a Corps of Engineers' study that predicted record water levels in 2019 for Lakes Superior and Erie and near-record levels for the other Great Lakes, continuing a five-year trend, and raising concerns about flooding and erosion).

76. *Georgia v. Tennessee Copper Co.*, 206 U.S. 230, 236 (1907).

77. *Id.* at 236–39. Georgia filed suit in 1903 but initially settled the case in 1904 when the copper companies agreed to change management practices, eliminating so-called roast piles that produced enormous amounts of smoke and sulfur emissions and increasing the height of their smokestacks. *Id.* at 239. When the damage to Georgia lands continued, as documented in a federal Forestry Bureau report, which found that the new taller smokestacks merely spread the pollution over a broader area, the State returned to court in 1905. See Percival, *supra* note 64, at 21–22.

78. *Tennessee Copper Co.*, 206 U.S. at 236. The Court's opinion followed a special master's report which included 1,500 witnesses and 2,000 affidavits on the nature of the harm caused by air pollution. Percival, *supra* note 64, at 24.

79. See *supra* notes 46–53 and accompanying text.

80. *Tennessee Copper Co.*, 206 U.S. at 237 ("The case has been argued largely as if it were one between two private parties; but it is not . . . This is a suit by a state for an injury to it in its capacity of quasi-sovereign. In that capacity the State has an interest independent of and behind the titles of its citizens, in all the earth and air within its domain. It has the last word as to whether its mountains shall be stripped of their forests and its inhabitants shall breathe pure air."). The decision thus adumbrated the Court's decision a century later in *Massachusetts v. EPA*, 549 U.S. 497 (2007). See *infra* note 87.

control, that the crops and orchards on its hills should not be endangered from the same source.⁸¹

Despite the company's efforts to curb the noxious discharges, a unanimous Court issued an injunction.⁸² Justice Holmes pointed out that the copper companies attempted to stop the trouble they caused by abandoning old methods of roasting ore in open heaps and building tall chimneys for the gases instead.⁸³ Unfortunately, the new tall stacks caused the poisonous gases to travel even greater distances than before and spread air pollution deeper into Georgia.⁸⁴ The Court consequently decided that Georgia had waited a reasonable time for the company to remedy the injuries.⁸⁵ So to stop the fumes, which continued to cause a nuisance to Georgia land, the Court granted the State an injunction.⁸⁶

The Court's willingness to grant Georgia injunctive relief contrasted with its reluctance to grant Missouri's public nuisance claim the year before. Holmes was clearly influenced by the State of Georgia's sovereign status. This deference to state sovereignty would prove determinative a century later when the Court upheld the State of Massachusetts' standing to challenge the Environmental Protection Agency's failure to regulate greenhouse gases under the Clean Air Act.⁸⁷ The 1907 decision was hardly the end of the matter, however, as the Court's decision left the

81. *Tennessee Copper Co.*, 206 U.S. at 238.

82. *Id.* at 239.

83. *Id.*

84. *Id.* The situation resembled the "tall stacks" approach to air pollution once endorsed by the federal Clean Air Act. See U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-11-473, AIR QUALITY: INFORMATION ON TALL SMOKESTACKS AND THEIR CONTRIBUTION TO INTERSTATE TRANSPORT OF AIR POLLUTION (2011) (explaining that the original Clean Air Act encouraged power plants to install tall stacks in the early 1970s, but the 1977 amendments discouraged use of dispersion techniques like tall stacks). See Nat. Res. Def. Council, Inc. v. Thomas, 838 F.2d 1224, 1257 (D.C. Cir. 1988) (explaining that EPA's attempt to establish a "plume impaction credit" for tall stacks on mountainsides was not consistent with the Clean Air Act).

85. The State had waited about two years, as Georgia originally filed a suit in the Supreme Court in 1904, but agreed to dismiss it that year because Tennessee Copper abandoned its old open heap ore burning and began building the tall stacks. *Tennessee Copper Co.*, 206 U.S. at 239.

86. *Id.*

87. The Supreme Court's *Massachusetts v. EPA* decision quoted from *Georgia v. Tennessee Copper Co.*:

The case has been argued largely as if it were one between two private parties; but it is not. The very elements that would be relied upon in a suit between fellow-citizens as a ground for equitable relief are wanting here. The State owns very little of the territory alleged to be affected, and the damage to it capable of estimate in money, possibly, at least, is small. This is a suit by a State for an injury to it in its capacity of quasi-sovereign. In that capacity the State has an interest independent of and behind the titles of its citizens, in all the earth and air within its domain. It has the last word as to whether its mountains shall be stripped of their forests and its inhabitants shall breathe pure air.

Massachusetts v. EPA, 549 U.S. 497, 518–19 (2007), quoting *Tennessee Copper Co.*, 206 U.S. at 237.

State with the option of not enforcing the injunction if the companies curbed their emissions. One of the companies, Ducktown Copper, failed to do so and was eventually enjoined by the Court in 1915.⁸⁸ The other, Tennessee Copper, agreed to a victims' compensation fund that for three years paid damages to affected landowners,⁸⁹ an innovative remedy that signaled a middle ground between injunctive relief and no relief.

F. Columbia River Fishermen's Protective Union v. City of St. Helens

Another river pollution case illustrated that courts could uphold the ability of private parties to maintain a public nuisance claim if they suffered a clear and distinct injury materially different than that of the general public. In 1938, Oregon commercial fishermen filed suit against the City of St. Helens, a board manufacturing plant, and a pulp mill over their discharges of pollutants into the Columbia and Willamette rivers.⁹⁰ The fishermen alleged the City's waste system and the plant operations deposited large quantities of chemicals directly into the rivers, including "sulphate and sulphite, sewage and waste products and waste matter such as minute fibers of pulp" that killed fish and rotted their salmon fishing nets.⁹¹ The fishermen argued they suffered significant injury due to the defendants' pollution, which inflicted damage on them that was different from that visited upon the public because the poor water quality destroyed their livelihoods.⁹² The lower court sustained the defendants' demurrer, however, ruling the harm caused to the fishermen was no different in kind than the harm felt by the public at large; therefore, they could not maintain the public nuisance suit.⁹³

The Oregon Supreme Court disagreed and granted the fishermen standing to seek relief against the polluters.⁹⁴ The court distinguished the fishermen's injury from that of the public as a whole, finding "a vital distinction between the rights of plaintiffs, who are accustomed to fishing in the river and have a license so to do, and the rights of other citizens of the state, who never fish in the river and do not intend to."⁹⁵ The court's opinion expressed concern over the potential destruction of the salmon industry, referring to the commercial fishing rights the plaintiffs sought to

88. *Georgia v. Tennessee Copper Co.*, 237 U.S. 474, 477–78 (1915).

89. *See Percival, supra* note 64, at 30 (discussing the fund which the company established that paid \$16,500 a year for three years). During World War I, the State of Georgia relaxed emission controls to aid the war effort, and later the state legislature extended the relaxation twice, in 1922 and 1925. The case was finally closed in 1938 when Tennessee Copper agreed to pay over 20 years of the State's attorney fees. *Id.* at 38–39.

90. *Columbia River Fishermen's Protective Union v. City of St. Helens*, 87 P.2d 195, 196 (Or. 1939).

91. *Id.* at 196–97.

92. *Id.* at 197.

93. *Id.* ("It is stated in the plaintiffs' brief that the lower court sustained the demurrer on the grounds that the complaint shows these plaintiffs have suffered no special and peculiar injury differing in kind from that suffered by the public, and therefore they cannot maintain this suit.").

94. *Id.* at 199.

95. *Id.* at 197.

protect as “of the greatest moment,” and stressing that the defendants’ inflicted harm on that right was not trivial.⁹⁶

The special injury inquiry continues to be a central issue in public nuisance litigation, however, special injury is usually used as a defense by private defendants. A recent example from 2018 was the Arizona Supreme Court’s denial of relief to the Hopi Tribe after it filed a nuisance suit against the City of Flagstaff and a private ski resort for using wastewater to create artificial snow on the San Francisco Peaks, a sacred site for the Hopi for millennia.⁹⁷ The Tribe alleged that it would suffer special injury because the “[n]atural resources that the Hopi collect, as well as shrines, sacred areas, and springs on the Peaks will come into contact with the blown reclaimed wastewater,” which would gravely disturb the Tribe’s use of the area for spiritual and religious ceremonies.⁹⁸ The Tribe sought injunctive relief from the wastewater-snow operation or, in the alternative, damages.⁹⁹ The trial court granted the resort’s motion to dismiss, and the Tribe appealed.¹⁰⁰ The state court of appeals reversed, deciding that the Tribe had shown a special injury adequate to proceed to summary judgment because, even though the harm concerned public land, that land held special importance to tribal members.¹⁰¹ But the state supreme court did not agree, declaring “as a matter of law, that environmental damage to public land with religious, cultural, or emotional significance to the plaintiff is not special injury for public nuisance purposes.”¹⁰² Consequently, the court denied both injunctive relief and damages, reasoning the Tribe lacked a property interest and deciding that tribal members’ more frequent use of the area was not different in kind from the interest of the general public sufficient to create special injury.¹⁰³ The special injury requirement continues to make it difficult for private parties to maintain successful public nuisance claims.¹⁰⁴

96. *Id.* at 199. In *Union Oil v. Oppen*, 501 F.2d 558 (9th Cir. 1974), the court ruled that oil companies had a duty to commercial fishermen to conduct their offshore drilling and production in a reasonably prudent manner to avoid negligent damage to fisheries.

97. *Hopi Tribe v. Ariz. Snowbowl Resort Ltd. P’ship*, 430 P.3d 362, 364 (Ariz. 2018).

98. *Id.*

99. *Id.* at 371.

100. *Id.* at 364.

101. *Id.*

102. *Id.*

103. *Id.* at 369–71.

104. *See, e.g., Connecticut v. Am. Elec. Power Co.*, 582 F.3d 309, 368 (2d Cir. 2009) (holding that the special injury requirement was met by nonprofit land trusts whose land would be significantly harmed, beyond the harm done to the general public, recognizing that “a line must be drawn between the many who suffer from a public nuisance and those who may properly bring an action”); *New Mexico v. Gen. Elec. Co.*, 335 F. Supp. 2d 1185, 1239 (D.N.M. 2004) (citing RESTATEMENT (SECOND) OF TORTS § 821C (AM. LAW INST. 1939)) (ruling that the equitable relief is limited without proof of a discrete, “special injury,” which requires a showing of “particular harm, over and above that caused to the public at large or to other members of the public exercising the same public right,” including physical harm and pecuniary loss of a different kind of harm from that suffered by the general public,” possibly resulting from the pollution of public waters); *Johnson v. Bryco Arms*, 304 F. Supp.

G. Martin v. Reynolds Metals

Unlike nuisance, trespass law protects against tangible unpermitted physical invasions, supplying a kind of strict liability remedy, whereas contemporary nuisance now requires fault in the form of a finding of unreasonable interference.¹⁰⁵ And unlike nuisance, which affords defendants the defense of the reasonableness of their actions, balancing is unavailable to trespass defendants. Thus, trespass, which also usually offers a longer statute of limitations, is much more attractive to plaintiffs, so if a polluting activity can be characterized as a trespass, plaintiffs will seek to do so.

The pioneering case blending trespass and nuisance liability was *Martin v. Reynolds Metals*, a decision by the Oregon Supreme Court concerning fluoride emissions from an aluminum plant in suburban Portland, Oregon.¹⁰⁶ Paul Martin, an orchard and livestock owner, alleged that the fluoride gas pollution from a nearby aluminum plant damaged his livestock and his farm, even though it was invisible and odorless.¹⁰⁷ Reynolds defended on the ground that invisible, odorless particulates were insufficient to incur liability.¹⁰⁸

The Oregon Supreme Court affirmed a trial court's judgment for the landowner, ruling that the fluoride emissions were a trespassory invasion, similar to other small invasions like those caused by gun discharges.¹⁰⁹ The decision suggested that advances in science should precipitate changes in legal doctrine, memorably stating that "E=mc² has taught us that mass and energy are equivalents and that our concept of 'things' must be reframed," and that advances in science should affect the scope of trespass law.¹¹⁰ The Oregon court's decision recalled the Holmesian

2d 383, 392 (D.N.Y. 2004) (the existence of individualized special injury is the deciding factor in determining whether compensation is available, stating that "[w]hen the injury claimed to be peculiar is of the same kind suffered by all who are affected, when it is common to the entire community, or . . . becomes so general and widespread as to affect a whole community, the injury is not peculiar and the action cannot be maintained").

105. Professor Fraley has shown that the reasonableness balancing as part of the prima facie case of nuisance was an outgrowth of the first Restatement's definition of reasonableness and its influence on courts in the 1950s and 1960s, in effect requiring balancing both as to whether there was in fact a nuisance, and then whether injunctive relief was appropriate. *See* Fraley, *supra* note 61, at 671–77 (citing RESTATEMENT (FIRST) OF TORTS 223–24 (AM. LAW INST. 1939) and ensuing case law). Prosser's treatise also contributed in expanding the role of reasonableness to balance the gravity of the harm sustained by plaintiffs against the utility of the defendants' conduct. *See id.* at 672–73 (citing WILLIAM L. PROSSER, HANDBOOK ON THE LAW OF TORTS, § 72 at 405 (2d ed. 1955)).

106. 342 P.2d 790 (Or. 1959). The story of air pollution from aluminum plants in the Northwest, which included a number of cases, is told by WILLIAM H. RODGERS, JR., CORPORATE COUNTRY: A STATE SHAPED TO SUIT TECHNOLOGY (1973).

107. *Martin*, 342 P.2d at 790–91.

108. *Id.*

109. *Id.* at 792, 794 (citing *Munro v. Williams*, 109 A. 129 (Conn. 1920) (pellets from an air gun fell onto neighboring land; *DiGirolamo v. Philadelphia Gun Club*, 89 A.2d 357 (Pa. 1952) (shot from shotguns that fell onto neighboring land)).

110. *Id.* at 793–94 ("In fact, the now famous equation E=mc² has taught us that mass and energy are equivalents and that our concept of 'things' must be reframed. If these

statement in *Missouri v. Illinois* that evolving scientific information could result in shifting standards of liability.¹¹¹

Several other jurisdictions have followed the Oregon Supreme Court's lead, although they often imposed a threshold of significant actual damage that is not required in typical trespass cases.¹¹² And the Federal District Court of Oregon soon added an innovative approach to gathering scientific information necessary to determine available technology to abate fluoride emissions from another aluminum plant that damaged another nearby orchard.¹¹³ According to a recent analysis, the court empowered the plaintiffs to conduct a worldwide study (at the defendants' expense) of best available technologies to reduce fluorine emissions,¹¹⁴ in many respects foreshadowing the approach of the federal pollution statutes, which imposed controls on industrial polluters based on best available technology.¹¹⁵

observations on science in relation to the law of trespass should appear theoretical and unreal in the abstract, they become very practical and real to the possessor of land when the unseen force cracks the foundation of his house. The force is just as real if it is chemical in nature and must be awakened by the intervention of another agency before it does harm.”)

111. See *supra* notes 69, 73 and accompanying text.

112. See, e.g., *Rushing v. Hooper-McDonald, Inc.*, 300 So. 2d 94, 97 (Ala. 1974) (“This court holds that it is not necessary that the asphalt or foreign matter be thrown or dumped directly and immediately upon the plaintiff’s land but that it is sufficient if the act is done so that it will to a substantial certainty result in the entry of the asphalt or foreign matter onto the real property that the plaintiff possesses.”); *McDowell v. State*, 957 P.2d 965, 969 (Alaska 1998) (agreeing with other jurisdictions that “negligent contamination of real property is an injury to land in the nature of trespass”); *Elton v. Annheuser-Busch*, 50 Cal. App. 4th 1301, 1306 (1996) (“a trespassory invasion may take the form of . . . invisible particulates of fluorine compounds”); *Md. Heights Leasing, Inc. v. Mallinckrodt, Inc.*, 706 S.W.2d 218, 226 (Mo. 1985) (“[W]e conclude that radioactive emissions may constitute trespass. The ‘physical invasion’ alleged by appellants, broadly construed, permits the inference that radioactive material has been deposited on appellants’ property.”); *Sciscoe v. Enbridge Gathering (North Texas), L.P.*, 519 S.W.3d 171, 185 (Tex. App. 2015) (“[A] trespass claim under Texas law may be premised upon the entry onto property of airborne particulates . . .”). See generally Larry D. Scheafer, Annotation, *Recovery in Trespass for Injury to Land Caused by Airborne Pollutants*, 2 A.L.R. 4th 1054 (1980).

113. *Renken v. Harvey Aluminum*, 226 F. Supp. 169 (D. Or. 1963).

114. See DOUG KYSAR & CONNOR DWYER REYNOLDS, OF COASE & CHERRIES: RISK REGULATION AMONG NEIGHBORS IN WASCO COUNTY, OREGON (forthcoming).

115. See, e.g., Clean Air Act, 42 U.S.C. § 7411(g)(4)(B) (1990) (Revisions are not available until “as a result of such technology or process, the new source standard of performance in effect under this section for such category no longer reflects the greatest degree of emission limitation achievable through application of the best technological system of continuous emission reduction which (taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impact and energy requirements) has been adequately demonstrated.”); see also Clean Water Act, 33 U.S.C. § 1314(b)(2)(B) (“Factors relating to the assessment of best available technology shall take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, the cost of achieving such effluent reduction, non-water quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate.”) (emphasis added).

H. Boomer v. Atlantic Cement Co.

In another landmark nuisance case, New York's highest court considered the extent to which private litigation should resolve public issues.¹¹⁶ In *Boomer v. Atlantic Cement Co.*, a divided New York Court of Appeals significantly altered the relief available to the neighboring landowners whose properties were damaged by the blasting and air pollution from a large, Albany-area cement plant.¹¹⁷ A jury found that the plant's air polluting operations constituted a nuisance because the plaintiffs suffered substantial damage but denied injunctive relief, instead awarding temporary damages.¹¹⁸ An appeals court affirmed,¹¹⁹ and landowners appealed to the New York Court of Appeals.

Boomer has become a celebrated case, featured in many property and environmental law casebooks, because despite New York's "long-established rule of granting an injunction where a nuisance results in substantial continuing damage,"¹²⁰ the Court of Appeals agreed with the lower courts that injunctive relief was inappropriate given the perceived economic disparity between the adverse effects of the injunction versus the effects of continuing the operation.¹²¹ The majority justified this departure from the longstanding injunction rule by emphasizing the large economic investment in the plant, and the fact it employed more than 300 people.¹²² Although the neighbors suffered substantial damages, the court decided that closing the plant was too drastic a remedy¹²³ and, as a result, awarded the plaintiffs permanent damages, instead of the temporary damages the trial court awarded.¹²⁴

Much of the majority's opinion detailed what it viewed as the limited role of courts in solving public problems like air pollution.¹²⁵ The court therefore fashioned its relief tailored to the parties before it, rather than attempt what it described as "a problem presently far from solution."¹²⁶ The majority decided that

116. *Boomer v. Atlantic Cement Co.*, 257 N.E.2d 870, 871 (N.Y. 1970).

117. *Id.*

118. *Id.*

119. *Id.* at 872.

120. *See id.* at 876 (Jasen, J., dissenting).

121. *Id.* at 872.

122. *Id.* at 873 n.* ("Respondent's investment in the plant is in excess of \$45,000,000. There are over 300 people employed there.")

123. *Id.* at 873 ("This result at Special Term [the trial court] and at the Appellate Division is a departure from a rule that has become settled; but to follow the rule literally in these cases would be to close down the plant at once. This court is fully agreed to avoid that immediately drastic remedy; the difference in view is how best to avoid it.")

124. *Id.* at 875.

125. *Id.* at 871–73 ("The nuisance complained of by these plaintiffs may have other public or private consequences, but these particular parties are the only ones who have sought remedies and the judgment proposed will fully redress them. The limitation of relief granted is a limitation only within the four corners of these actions and does not foreclose public health or other public agencies from seeking proper relief in a proper court.")

126. *Id.* at 871 ("Effective control of air pollution is a problem presently far from solution even with the full public and financial powers of government. In large measure adequate technical procedures are yet to be developed and some that appear possible may be economically impracticable.")

an injunction against the plant's continued operation would go "greatly beyond the rights and interests" before it.¹²⁷ The court cited the fact that all cement-making operations produced polluting byproducts, explaining that the rate of research to eliminate these emissions should not rest solely on the defendant plant's shoulders but instead required a nationwide solution.¹²⁸ The majority's approach of favoring damages over injunctive relief was consistent with the Restatement's near simultaneous approval of damages as a remedy, even where the utility of a defendant's conduct outweighed the gravity of the plaintiff's harm.¹²⁹

A dissent saw "grave dangers" in the majority's decision, which it thought amounted to "licensing a continuing wrong."¹³⁰ The majority justified granting permanent damages instead of injunctive relief by citing nuisance cases from other states,¹³¹ but the dissent thought they were distinguishable because those cases involved widespread public benefit provided by the nuisances.¹³² The dissent

127. *Id.* ("A court performs its essential function when it decides the rights of parties before it. Its decision of private controversies may sometimes greatly affect public issues. Large questions of law are often resolved by the manner in which private litigation is decided. But this is normally an incident to the court's main function to settle controversy. It is a rare exercise of judicial power to use a decision in private litigation as a purposeful mechanism to achieve direct public objectives greatly beyond the rights and interests before the court.").

128. *Id.* at 873 ("Moreover, techniques to eliminate dust and other annoying by-products of cement making are unlikely to be developed by any research the defendant can undertake within any short period, but will depend on the total resources of the cement industry nationwide and throughout the world. The problem is universal wherever cement is made. For obvious reasons the rate of the research is beyond control of defendant.").

129. RESTATEMENT (SECOND) OF TORTS § 826(b) (AM. LAW INST. 1979) (authorizing damages where "the harm caused by the conduct is serious and the financial burden of compensating for this and similar harm to other would not make the continuation of the conduct not feasible."); see Lewin, *supra* note 23, at 779–85.

130. *Boomer*, 257 N.E.2d at 876 (Jasen, J., dissenting) ("I see grave dangers in overruling our long-established rule of granting an injunction where a nuisance results in substantial continuing damage. In permitting the injunction to become inoperative upon the payment of permanent damages, the majority is, in effect, licensing a continuing wrong. It is the same as saying to the cement company, you may continue to do harm to your neighbors so long as you pay a fee for it. Furthermore, once such permanent damages are assessed and paid, the incentive to alleviate the wrong would be eliminated, thereby continuing air pollution of an area without abatement.").

131. *Id.* at 874. The court referenced *Northern Indiana Public Serv. Co. v. Vesey*, 200 N.E. 620 (Ind. 1936), where plaintiff recovered only permanent damages when a northern Indiana company's gas plant's release of gases, odors, ammonia, and smoke damaged its greenhouse operation; *City of Amarillo v. Ware*, 40 S.W.2d 57 (Tex. 1931), where the plaintiff recovered permanent depreciation of property value affected by recurrent sewage overflows; and *Pappenheim v. Metropolitan El. Ry. Co.*, 28 N.E. 518 (N.Y. 1891), one of several "elevated railway cases" where the court found that the railways constituted a nuisance to adjacent landowners, but approved permanent damages in lieu of enjoining the operations.

132. *Boomer*, 257 N.E.2d at 871, 876. The cases the majority cited, *supra* note 131, involved a public service company that provided gas to a large community, a city sewage system operated for public benefit, and a railway system built and authorized under New York statute, respectively. The dissent maintained that these cases were not analogous to the

maintained that Atlantic Cement had created “a continuing air pollution nuisance primarily for its own private interest,” and the option of paying permanent damages instead of an injunction amounted to an unlawful use of inverse condemnation.¹³³

The dissent instead recommended avoiding immediately shutting down the plant by postponing the effects of the injunction for 18 months, thereby giving the company time to find new technologies to stop the discharge of harmful particles and abate the nuisance.¹³⁴ This remedy would have been more responsive to the urgency of worsening air quality by giving the plant time to reduce its pollution.¹³⁵ According to the dissent, it was especially important for Atlantic Cement to implement better dust-control devices because the landowners who sued lived in the area before the plant; they did not “come to the nuisance,”¹³⁶ and the majority’s award of permanent damages eliminated any incentive for the plant to improve its operations in the future.¹³⁷

defendant’s plant in *Boomer* because the plant was operated solely for private, commercial interest of its owners.

133. *Id.* (“This kind of inverse condemnation may not be invoked by a private person or corporation for private gain or advantage. Inverse condemnation should only be permitted when the public is primarily served in the taking or impairment of property. The promotion of the interests of the polluting cement company has, in my opinion, no public use or benefit.”); Fraley, *supra* note 61, at 677–80 (examining the effect of nuisance balancing to work constitutional takings of plaintiffs’ property rights).

134. *Boomer*, 257 N.E.2d at 877 (Jasen, J., dissenting). Compare the approach in the *Rencken v. Harvey Aluminum* case, discussed *supra* notes 113–14 and accompanying text. The dissent’s approach soon became a part of statutes like the Clean Air and Water Acts, which directed the EPA Administrator to study regulated industries to ascertain best available technology (or some similar standard) that must be included in pollution permits for plants like the Atlantic Cement plant at issue in *Boomer*. See 42 U.S.C. § 7411(a)(1) (1990) (requiring new stationary sources of air pollution to meet emission standards reflecting the “best system of emission reduction which (taking into account the cost) . . . has been adequately demonstrated”); 33 U.S.C. § 1316(a)(1) (2019) (requiring new sources of water pollution to meet standards reflecting the “greatest degree of effluent reduction . . . achievable through application of best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants”).

135. *Boomer*, 257 N.E.2d at 877 (Jasen, J., dissenting) (“It is not my intention to cause the removal of the cement plant from the Albany area, but to recognize the urgency of the problem stemming from this stationary source of air pollution, and to allow the company a specified period of time to develop a means to alleviate this nuisance.”).

136. The dissent emphasized that although this defense is generally available to defendants in nuisance claims, it was not applicable in *Boomer*, since plaintiffs lived there before the plant began operations. *Id.* (“Moreover, I believe it is incumbent upon the defendant to develop such devices, since the cement company, at the time the plant commenced production (1962), was well aware of the plaintiffs’ presence in the area, as well as the probable consequences of its contemplated operation. Yet, it still chose to build and operate the plant at this site.”); see also RESTATEMENT (SECOND) OF TORTS § 840C (AM. LAW INST. 1979) (“In an action for a nuisance the plaintiff’s assumption of risk is a defense to the same extent as in other tort actions.”).

137. *Boomer*, 257 N.E.2d at 876. Once paying permanent damages, the plant could relax standards knowing the court foreclosed future litigation on the issue of past damages from the plaintiffs. *Id.*

The *Boomer* case has prompted numerous comments over the years.¹³⁸ Professor Farber thought the opinion's balancing of the equities analysis was "cursory," contrasting the majority's seemingly quick decision to ignore third-party interests favorable to the plaintiff (the negative effects of the plant's air pollution on the community) with its willingness to emphasize third-party interest favoring the defendant (the number of people employed at the plant).¹³⁹ Professor Dobris, on the other hand, thought the majority got it right, explaining that critics of the case "were unwilling to face the fact that there has to be tolerance for some pollution as a matter of resource allocation and economic efficiency. Simply put, we do not drive around in cars that are exquisitely safe but cost a million dollars."¹⁴⁰

138. See Daniel A. Farber, *The Story of Boomer: Pollution and the Common Law*, 32 ECOLOGY L.Q. 113, 113 (2005) ("Boomer v. Atlantic Cement Co. has become an established part of the legal canon. It looms large, not just in environmental law, but also in property, remedies, and torts. Its lasting fame is reflected in a law review symposium on the case some twenty years after the decision."); see also Robert Abrams & Val Washington, *The Misunderstood Law Of Public Nuisance: A Comparison With Private Nuisance 20 Years After Boomer*, 54 ALB. L. REV. 359, 360 (1990) ("[B]y failing to confine explicitly the application of its decision to private nuisance, the *Boomer* court may have further befogged the law"); Louise A. Halper, *Nuisance, Courts, and Markets In The New York Court Of Appeals, 1850-1915*, 54 ALB. L. REV. 301, 302 (1990) ("[The *Boomer* court] assumed the power to resolve conflicts among competing land uses, fashioning a remedy that allowed courts to impose liability to remedy injuries to and from property, which simultaneously retaining the language of property rules in order to address the causation of those injuries"); Jeff L. Lewin, *Boomer and The American Law of Nuisance: Past, Present, and Future*, 54 ALB. L. REV. 189, 221 (1990) ("[T]he prominence of the *Boomer* decision . . . reflects its paradigmatic quality as a contemporary illustration of the dilemma faced by the courts in modern land use conflicts . . . discussing the various elements that a court might consider in determining both the entitlements and the appropriate remedy in a nuisance dispute between a major industrial polluter and residential plaintiffs"); Joel C. Dobris, *Symposium on Nuisance Law: Twenty Years after Boomer v. Atlantic Cement Co.*, 54 ALB. L. REV. 171 (1990) (containing Joel C. Dobris, *Boomer 20 Years Later: An Introduction with Some Footnotes About "Theory,"* 54 ALB. L. REV. 171, 173 (1990) (characterizing the *Boomer* case as a "paradigm for the modern land use dilemma").

139. *Boomer*, 257 N.E.2d at 873–74. Professor Farber noted that "[t]he damage award was not generous. The trial judge awarded the plaintiffs a total of \$535 per month in damages for past losses, but suggested that the parties settle the case for the amount of the permanent loss of market value, which he calculated as \$185,000 for all the plaintiffs combined." Farber, *supra* note 138, at 120.

140. Dobris, *supra* note 138, at 184. *Boomer* was greeted with enthusiasm among many legal scholars, especially those advancing a law and economics perspective. See, e.g., Ezra M. Holczer, *Boomer Revisited: Using Experimental and Partial Injunctions in Private Nuisance Actions*, 64 DEF. COUNSEL J. 99 (1997); A. Mitchell Polinsky, *Resolving Nuisance Disputes: The Simple Economics of Injunctive and Damages Remedies*, 32 STAN. L. REV. 1075, 1077 (1980); Edward Rabin, *Nuisance Law: Rethinking Fundamental Assumptions*, 63 VA. L. REV. 1299, 1300 n.4 (1977); see also RICHARD B. STEWART & JAMES E. KRIER, ENVIRONMENTAL LAW AND POLICY 243–44 (2d ed. 1978) (discussing the debate between limiting relief to damages versus adopting various forms of injunctive relief).

Dobris also maintained, consistent with the majority, that nuisance is not a fit vehicle to resolve pollution issues.¹⁴¹ *Boomer*'s popularity in the literature may be due to the circumscribed role it prescribed for judicial injunctions, or for its acceptance of permanent damages as a remedy preferred over temporary damages. But the result did nothing to improve the environment damaged by the cement plant's emissions, and the award of permanent damages meant that the plant had no incentive to reduce emissions or vibrations.¹⁴²

I. Village of Wilsonville v. SCA Services, Inc.

Although hazardous waste liability now has become largely a matter of federal statutory law,¹⁴³ nuisance doctrine has played a role in hazardous waste cases. A leading case was *Village of Wilsonville v. SCA Services*, in which an Illinois town, the county, a group of citizens, and the federal government¹⁴⁴ charged that a landfill filled with hazardous waste amounted to a public nuisance due to dust, odors, and air and water pollution.¹⁴⁵ SCA defended on the ground that any judicial declaration of a public nuisance would amount to a "sudden change" in state law, depriving the company of its property without due process.¹⁴⁶ The company cited to the fact that it had permits from the state environmental agency,¹⁴⁷ and state officials testified that the site did not present a hazard from an engineering or geological perspective.¹⁴⁸ The plaintiffs, on the other hand, alleged that impending subsidence would soon release harmful chemicals, and therefore should be enjoined as

141. Dobris based his opinion on "notions of civil procedure and the inherent limitations of the nuisance cause of action." He claimed that "civil proceduralists are split" as to whether a judge should decide only the narrow questions before the court or "actively reach out." Dobris, *supra* note 138, at 185. In Dobris's opinion, the majority's opinion resulted in a middle ground between the "modern flexibility" of remedy and the dated notion of the judge as a "passive observer and referee." *Id.* at 185. A court that did not share the *Boomer* court's limited view of judicial responsibility was *Rencken v. Harvey Aluminum*, discussed *supra* notes 113–14 and accompanying text.

142. The same year of the New York Court of Appeals' decision in *Boomer*, Congress enacted the Clean Air Act, which potentially subjected the Atlantic Cement plant to regulation. However, the statute was focused mostly on new emissions of pollutants, which were subject to federal control under section 111 of the Act, 42 U.S.C. § 7411. Existing plants were subject to more indirect regulation, through state implementation plans authorized by section 110 of the statute, *id.* § 7410, not through federal emission controls.

143. See generally CRAIG N. JOHNSTON ET AL., LEGAL PROTECTION OF THE ENVIRONMENT ch. 5, § I.B (4th ed. 2018).

144. See *Village of Wilsonville v. SCA Serv., Inc.*, 396 N.E.2d 552, 554 (Ill. App. 1979) (discussing the various plaintiffs in the case).

145. See *id.* at 557.

146. The state's supreme court rejected this claim, stating that:
the principles of law applied in this case are neither new, unreasonable, nor unpredictable. Manifestly, a party cannot expect to operate a site in the manner and in the location the defendant has chosen and expect to be immune from liability for creating a public nuisance. Defendant's argument has no merit in this case.

Village of Wilsonville v. SCA Serv., Inc., 426 N.E.2d 824, 841 (Ill. 1981).

147. *Id.* at 828.

148. *Id.*

anticipatory nuisance.¹⁴⁹ But the State's expert maintained that any subsidence could be repaired through engineering techniques.¹⁵⁰

The case was thus basically about an anticipated nuisance that had yet to produce damages. Nuisance law traditionally did not recognize such anticipatory claims.¹⁵¹ After losing in the trial court, SCA Services emphasized this general rule on appeal, citing a prior decision where the same court refused to enjoin the operation of a studio featuring nude models over the plaintiffs' fears of potential prostitution.¹⁵² Even that decision, however, acknowledged that enjoining nuisances in advance of demonstrated harm is sometimes necessary where, as in this case, "there can be no doubt but that it is highly probable that the chemical-waste-disposal site will bring about substantial injury."¹⁵³ The state supreme court declared that the magnitude of adverse consequences could justify an injunction even if that was not a probable result.¹⁵⁴ The court explained that SCA Services did not "seriously dispute the severe damage likely to result if substantial amounts of hazardous substances escaped from the landfill or if the explosions, fires or emissions feared by plaintiffs occurred."¹⁵⁵ In short, an injunction could be based on a risk assessment if the magnitude of the adverse consequences were sufficiently ominous.¹⁵⁶

149. *Village of Wilsonville*, 396 N.E.2d at 555 ("All plaintiffs sought an injunction on the common law theory of nuisance and the County of Macoupin and the Attorney General also sought to abate violations of the Environmental Protection Act.").

150. *See Village of Wilsonville*, 426 N.E.2d at 829–30.

151. *See* George P. Smith II, *Re-Validating The Doctrine Of Anticipatory Nuisance*, 29 VT. L. REV. 687, 691 (2005) (citing *Earl of Ripon v. Hobart*, 40 Eng. Rep. 65, 68 (1834)) (courts of the day chose to focus on actual harm and the uncertainty of future harm in deferring to what were likely perceived as greater economic interests, instead of weighing the "magnitude of the evil against the chances of its occurrence"); *see also* RESTATEMENT (SECOND) OF TORTS § 936 (1979) (AM. LAW INST. 1979) ("(1) The appropriateness of the remedy of injunction against a tort depends upon a comparative appraisal of all of the factors in the case, including the following primary factors: (a) the nature of the interest to be protected, (b) the relative adequacy to the plaintiff of injunction and of other remedies, (c) any unreasonable delay by the plaintiff in bringing suit, (d) any related misconduct on the part of the plaintiff, (e) the relative hardship likely to result to defendant if an injunction is granted and to plaintiff if it is denied, (f) the interests of third persons and of the public, and (g) the practicability of framing and enforcing the order or judgment.").

152. *Village of Wilsonville*, 396 N.E.2d at 562 ("Defendant refers us to our recent decisions in *People ex rel. Difanis v. Futia*, 373 N.E.2d 530, Ill. App. (1978), a case concerning a request to enjoin the operation of a theater and studio featuring nude female models.").

153. *Village of Wilsonville*, 426 N.E.2d at 836–37.

154. *Village of Wilsonville*, 396 N.E.2d at 562 ("While the foregoing is the general rule we do not deem it necessary here that the evidence clearly show that the harm envisioned by plaintiffs' witnesses will 'necessarily result' in order for the danger presented by the existence and operation of the landfill to be a basis for the injunction.").

155. *Id.*

156. *Id.* at 562–63 (citing *Barrett v. Mt. Greenwood Cemetery Association*, 42 N.E. 891 (Ill. 1896); *Springer v. Walters*, 28 N.E. 761 (Ill. 1891); *Union Drainage District No. 6 v. Manteno Limestone Co.*, 93 N.E.2d 500 (Ill. App. 1950); *Lowe v. Prospect Hill Cemetery Association*, 78 N.W. 488 (Neb. 1899)) ("*Springer and Union Drainage District No. 6* speak

Affirming the trial court's decision to enjoin the operation, the appellate court noted that "[b]ecause the danger of escape of the hazardous substances was not of certain proof and prospective as to actual infliction of injury but of a nature that would likely be catastrophic if it did occur," injunctive relief was warranted under the "threatened tort" theory approved by the Second Restatement of Torts.¹⁵⁷ The trial court ordered the company to exhume all the materials from the site and reclaim the land.¹⁵⁸ Although the Illinois Supreme Court agreed with the company's allegation that dust and odor alone were generally an insufficient ground for an injunction, it announced that because of "other evidence indicating that the air, water, and earth in and around the site will become contaminated," the court upheld the trial court's injunction.¹⁵⁹ The state supreme court concluded that the evidence showed that it was "highly probable" that the toxic material at the site would escape through explosions, migration, subsidence, or groundwater contamination and declared that "[a] court does not have to wait for [the harm] to happen before it can enjoin" an activity.¹⁶⁰ The court thus upheld an anticipatory injunction of the landfill's operations based on the neighbors' reasonable fears concerning the widespread future negative effects of the landfill.¹⁶¹ This willingness to base a public nuisance injunction on reasonable public fears and scientific predictions contrasted with the U.S. Supreme Court's reluctance to extrapolate from Missouri's claims against the effects of Illinois sewage pollution three-quarters of a century earlier.¹⁶²

of the requirement of certainty of proof that the damage would be substantial rather than insubstantial. Here, there is little dispute that the damages would be very substantial if the fears of the plaintiffs materialize. Both opinions, however, also emphasize that, as here, the damage feared would take place only in the distant future and that this was a reason why an injunction was inappropriate. *Barrett and Lowe*, on the other hand, approve of injunctive relief, even though the damage to be prevented was projected in the distant future, after buried bodies decomposed and the spread of bacteria was caused by seeping groundwaters.").

157. *Village of Wilsonville*, 396 N.E.2d at 563–64 ("In speaking of the propriety of the remedy of injunction to prevent torts, including nuisances, RESTATEMENT (SECOND) OF TORTS § 933 (AM. LAW INST. 1979), comment on subsection (1) (1977) states in part: "The expression 'threatened tort,' as used in Subsection (1) of this Section, contemplates, as a condition for the grant of an injunction, a threat of sufficient seriousness and imminence to justify coercive relief. The seriousness and imminence of the threat are in a sense independent of each other, since a serious harm may be only remotely likely to materialize and a trivial harm may be quite imminent. Yet the two elements must be considered together in the decision of any given case. The more serious the impending harm, the less justification there is for taking the chances that are involved in pronouncing the harm too remote.").

158. *Id.* at 567.

159. *Village of Wilsonville v. SCA Serv., Inc.*, 426 N.E.2d 824, 833–34, 839 (Ill. 1981) (quoting *Village of Euclid v. Ambler Realty Co.*, 272 U.S. 365, 388 (1926)) ("Therefore, we conclude that in fashioning relief in this case the trial court did balance relative hardship to be caused to the plaintiffs and defendant, and did fashion reasonable relief when it ordered the exhumation of all material from the site and the reclamation of the surrounding area. The instant site is akin to Mr. Justice Sutherland's observation that 'Nuisance may be merely a right thing in a wrong place like a pig in the parlor instead of the barnyard.'"), quoted in 2 J. DOOLEY, MODERN TORT LITIGATION § 31.15, at 225 (1977).

160. *Village of Wilsonville*, 426 N.E.2d at 837.

161. *Id.*

162. See *supra* notes 67–72 and accompanying text.

The *Wilsonville* case was extended recently in an Illinois case involving silica sand mining, a key ingredient in hydraulic fracturing producing oil and natural gas.¹⁶³ Employing *Wilsonville*'s "highly probable" standard, the court ruled that evidence assembled by neighboring landowners, concerning noise, lights, dust, and traffic from a mine approved by a local government for round-the-clock operations, amounted to a public nuisance.¹⁶⁴ The same court earlier enjoined construction of a hog farm as a prospective nuisance based on extensive evidence of potential harms to the health, safety, and welfare of nearby residents as well as diminished property values.¹⁶⁵

Anticipatory nuisances remain disfavored, as courts generally impose a high burden of proof, often requiring a likelihood or high probability of damage.¹⁶⁶ Some courts refuse to enjoin a use unless and until it causes severe damage, apparently on the assumption that those injured can be compensated after they are

163. Whipple v. Village of North Utica, 79 N.E.3d 667, 671 (Ill. App. 2017).

164. *Id.* at 680.

165. Nickels v. Burnett, 798 N.E.2d 817, 826 (Ill. 2003) (granting an injunction based on extensive evidence of damage to human health and property value, as well as substantially certainty for injury to occur).

166. See, e.g., McQuade v. Tucson Tiller Apartments, Ltd., 543 P.2d 150, 153 (Ariz. App. 1975) ("[I]n order to enjoin an anticipated nuisance, the nuisance must be highly probable."); State *ex rel.* Village of Los Ranchos de Albuquerque v. City of Albuquerque, 889 P.2d 185, 200–01 (N.M. 1994) ("[T]he anticipated nuisance must be proven so as to make any argument that it is not a nuisance highly improbable . . . it would be a poor public policy to permit a municipality to go forward with a project costing millions of dollars that obviously presented a great likelihood of causing a public nuisance . . . [however], 'due authorization' [precludes] any 'inevitable' nuisance . . ."); Cherokee Hills Util. Dist. v. Stanley, 1989 Tenn. App. LEXIS 429, at *19 (June 9, 1989) ("[A]n anticipatory nuisance will only be enjoined when [it is shown that] the injury is *imminent* and certain to occur . . .") (emphasis added); Duff v. Morgantown Energy Assoc., 421 S.E.2d 253, 258 (W.Va. 1992) (explaining that a prospective nuisance is enjoined only if "the danger [is] imminent, . . . [and] established by conclusive evidence . . . if the matter complained of [is] not a *per se* nuisance, an injunction will not be granted"); see also George P. Smith II, *Re-Validating the Doctrine of Anticipatory Nuisance: Emerging Trends in Environmental Law*, 29 VT. L. REV. 687, 697 (2005) (referring to the judicial reluctance to enjoin anticipatory nuisances as the "despotism" of the concept. Courts are consequently "hesitant" to enjoin a proposed action unless the plaintiff meets a "very high burden of proof," reflecting a judicial reluctance to interfere with landowners "doing with their land as they please or deem reasonable.").

injured.¹⁶⁷ That sentiment undermines the capability of the nuisance doctrine to prevent less probable but potentially catastrophic damages.¹⁶⁸

J. City of Milwaukee v. Illinois

Having redirected Chicago's sewage from Lake Michigan to the Mississippi River Basin,¹⁶⁹ Illinois attempted to improve Lake Michigan water quality by challenging Milwaukee's and other Wisconsin municipalities' discharges of raw sewage into the lake. Like the earlier river reversal case, the State filed an original jurisdiction case in the Supreme Court.¹⁷⁰ However, in 1972, a unanimous Supreme Court declined original jurisdiction and sent the case to federal district court,¹⁷¹ although Justice Douglas' opinion for the Court did declare that "when we deal with air or water in their ambient or interstate aspects, there is a federal common law."¹⁷² But Douglas presciently observed that new federal laws and regulations might one day preempt the field of federal water pollution law.¹⁷³

The case proceeded in the district court, which found that the sewage discharges constituted a federal common law nuisance, and the Seventh Circuit affirmed, ruling that the federal Clean Water Act did not preempt the State's common law claim.¹⁷⁴ In 1981, the Supreme Court reversed, 6–3, determining that the federal statute's "comprehensive permit scheme" preempted federal common

167. See, e.g., *Marshall v. Consumers' Power Co.*, 237 N.W.2d 266, 283 (Mich. App. 1975) ("[W]e will not enjoin an injury which is merely anticipated nor interfere where an apprehended nuisance is doubtful, contingent, conjectural or problematical. A bare possibility of nuisance or a mere fear or apprehension that injury will result is not enough."). The *Marshall* court was willing to extend the anticipatory nuisance doctrine only to situations where the nuisance is a "natural or inevitable consequence." *Id.*; see also STUART M. SPEISER ET AL., 7 AMERICAN LAW OF TORTS §§ 20:1, 20:18 (updated Mar. 2019) ("When the injury has not yet occurred, a nuisance is anticipatory, and a party claiming that an anticipatory nuisance exists must show that the occurrence of injury or harm is more than conjectural" and "[d]amages may not be awarded for an anticipated nuisance, but a threatened or anticipated nuisance can be enjoined under the proper circumstances . . .").

168. See Andrew H. Sharp, Comment, *An Ounce of Prevention: Rehabilitating the Anticipatory Nuisance Doctrine*, 15 B.C. ENVTL. AFF. L. REV. 627, 642, 649 (1988) (arguing that the public should be entitled to protection from both nearly certain effects of a proposed activity as well as less certain but potentially catastrophic effects of a proposed activity, and suggesting that anticipatory nuisance should be available "in the environmental [context], such [as] catastrophic damage causing widespread impairment of health, permanent damage to natural resources, and latent damages which may or may not be detectable in later years").

169. See *supra* notes 63–64 and accompanying text.

170. *Illinois v. City of Milwaukee*, 406 U.S. 91, 93 (1972).

171. The Court decided that since the defendants were sub-state units of the State of Wisconsin, its jurisdiction was governed by 28 U.S.C. § 1251(b)(3), which gave the Court discretionary jurisdiction over cases brought by states against the citizens of another state, which the Court interpreted to include sub-state units. *Illinois*, 406 U.S. at 93–98, 108.

172. *Id.* at 103 (apparently correcting dicta in *Ohio v. Wyandotte Chemical Corp.*, 401 U.S. 493, 498 n.3 (1971), which had suggested that federal common law nuisance did not survive *Erie Railroad Co. v. Tompkins*, 304 U.S. 64, 78 (1938)).

173. *Id.* at 107.

174. *State of Illinois v. City of Milwaukee*, 599 F.2d 151, 157–65 (7th Cir. 1978). The State of Michigan joined Illinois in the suit.

law claims, despite two savings clauses in the Act.¹⁷⁵ The opinion discounted statutory intent, emphasized separation of powers, and questioned judicial competence to participate in the technicalities of water pollution control.¹⁷⁶ Although the majority recognized that preempting state police powers required a “clear and manifest” intent on the part of Congress, no such requirement exists for when federal statutory law supersedes federal common law.¹⁷⁷ As a result, the Court concluded that the statute had “occupied the field through a comprehensive regulatory program supervised by an expert agency,” preventing courts from applying “often vague and indeterminate nuisance concepts and maxims of equity jurisprudence.”¹⁷⁸ A three-member dissent complained that the majority erred in disregarding the express intent of Congress, as expressed in the savings clauses, relevant legislative history, and the structure of the statute.¹⁷⁹

Two months after its *Illinois* decision, the Court proceeded to rule that neither the Clean Water Act nor the Marine Protection, Research, and Sanctuaries Act provided a damages remedy to citizens injured by unauthorized discharges, and that those statutes preempted federal common law damages claims.¹⁸⁰ However, six years later, in a 5–4 decision, the Court reopened the common law door a bit by

175. *City of Milwaukee v. Illinois and Michigan*, 451 U.S. 304, 313–22 (1981). In § 505(e) of the Act, Congress declared that nothing “in this section” would limit other remedies concerning water pollution, specifically mentioning common law remedies, 33 U.S.C. § 1365(e); in § 510, Congress stated that nothing in the Act would preclude a state from enforcing standards stricter than those imposed by the Act, § 1370. Justice Rehnquist interpreted the former provision to not mean that the statute as a whole could not supplant federal common law; he ruled that the latter provision did not suggest that states could call upon federal courts to employ federal common law to establish stricter standards than imposed by the Clean Water Act. *Illinois*, 451 U.S. at 327–32.

176. *Id.* at 343–45 (Blackmun, J., dissenting) (discounting legislative history), 315 (emphasizing separation of powers), 325 (questioning judicial competence and quoting the district court’s concession that the expert testimony was “over the heads of all of us”).

177. *Id.* at 305, 316–17 (discussing the ontological differences between cases in which the federal power “pre-empts state law,” which presents concerns over infringement of the traditional state police power, and cases in which the question is “whether federal statutory or federal common law governs.” In such a case, evidence of a “clear and manifest” purpose is not required.); *see infra* notes 188–89 and accompanying text.

178. *Id.* at 317.

179. *Id.* at 332, 339–48 (Blackmun, J., dissenting). Justice Marshall and Stevens joined Justice Blackmun’s dissent. The Senate Report on the Clean Water Act stated that the savings clause in §505(e) “would specifically preserve any rights or remedies under any other law. Thus, if damages could be shown, other remedies would remain available. Compliance with requirements under this Act would not be a defense to a common law cause of action for pollution damages.” S. Rep. No. 92-414, at 81 (1971).

180. *Middlesex Cty. Sewage Dist. v. Nat’l Sea Clammers Ass’n*, 453 U.S. 1, 4–5 (1981) (concerning the dumping of sewage sludge in New York Harbor and offshore). Justice Stevens (joined by Justice Blackmun) concurred in the result but not the reasoning of the majority. *Id.* at 22 (Stevens, J., concurring).

suggesting that the Clean Water Act's savings clauses preserved state common law actions, so long as the state nuisance law was the law of the source state.¹⁸¹

K. *American Electric Power v. Connecticut*

The nature of the preemption the Court recognized in *Milwaukee II* and its progeny was clarified in a suit brought by eight states and New York City, joined by three nonprofit land trusts, against the five largest carbon emitters in the U.S. responsible for 25% of domestic electric-power sector emissions and 2.5% of carbon emissions worldwide.¹⁸² The plaintiffs alleged that the carbon emitters substantially and unreasonably interfered with public rights; therefore, they constituted federal interstate common law nuisances.¹⁸³ The district court dismissed the case as a nonjusticiable political question, but the Second Circuit reversed, deciding that the suit was not barred by the political question doctrine and upholding the plaintiffs' standing.¹⁸⁴ The court also concluded that the plaintiffs had stated a claim under federal common law of nuisance, and that the emissions were federal common law nuisances because there was no displacement of federal common law until the Environmental Protection Agency promulgated rules regulating greenhouse gas emissions.¹⁸⁵

The Supreme Court split, 4–4, as to whether the plaintiffs had standing, thus affirming the Second Circuit.¹⁸⁶ But a unanimous Court reversed on the merits.

181. *Int'l Paper Co. v. Oullette*, 479 U.S. 481, 498–500 (1987) (foreclosing a suit based on Vermont nuisance law by landowners residing on the Vermont side of Lake Champlain against a pulp and paper company discharging water pollutants on the New York side of the lake, on the ground that allowing the receiving state's law to govern would undermine the predictability and efficiency of the Clean Water Act, which assigns pollution control to the source state). The concurrence authored by Justice Brennan (joined by Justices Marshall and Blackmun) argued that the landowners should be able to invoke the nuisance law of either state. *Id.* at 500 (Brennan, J., concurrence in part). A separate concurrence filed by Justice Stevens (joined by Justice Blackmun) complained that the majority wrote an advisory opinion, since the issue of which state law applied was not properly before the Court, and there was some doubt as to whether there was any difference between Vermont and New York nuisance law. *Id.* at 508 (Stevens, J., concurrence in part).

182. *Am. Elec. Power v. Connecticut*, 564 U.S. 410, 418 (2011). In addition to Connecticut, the plaintiff states were California, Iowa, New Jersey, New York, Rhode Island, Vermont, and Wisconsin, but New Jersey and Wisconsin bowed out after changes in their governors.

183. *Id.*

184. According to the court:

City and private entities are not barred by their status from bringing a public nuisance cause of action . . . [t]he only qualification that the Supreme Court has placed upon a state bringing a nuisance action against another state was that 'the case should be of serious magnitude, clearly and fully proved.'

Connecticut v. Am. Elec. Power Co., 582 F.3d 309, 357, 369 (2d Cir. 2009) (quoting *Missouri v. Illinois*, 200 U.S. 496, 521 (1906)). The political question doctrine, as articulated by Justice Brennan in *Baker v. Carr*, 369 U.S. 186, 217 (1962), requires, among other things, judicial abstention when there has been "a textually demonstrable commitment of the issue to another branch of government."

185. *Am. Elec. Power*, 564 U.S. at 419.

186. *Id.* at 420.

Justice Ginsberg's opinion for the Court clarified that the displacement of federal common law was a lower bar than preemption of state law, which requires "a clear and manifest intent" of Congress.¹⁸⁷ Instead, displacement of federal common law requires only that Congress "speak[] directly" to the issue, a distinctly lower hurdle.¹⁸⁸ The upshot was, according to Justice Ginsberg, that the Clean Air Act itself displaced the federal common law, not the effective implementation of the statute, as the Second Circuit believed.¹⁸⁹

In its *American Electric Power* opinion, the Court clearly indicated a distaste for a judicial role filling in the interstices of federal statutes. This distaste is not based on a concern that a judicial role would conflict with achieving the goals of the environmental statutes, but instead on the Court's views of separation of powers and judicial competency. Perhaps it also reflects an antiregulatory bias.

The legacy of the *American Electric Power* decision includes the Ninth Circuit's rejection of a nuisance claim for damages from the energy industry for destroying an Alaska village by flooding caused by climate change, rejected on political question grounds.¹⁹⁰ And the Fifth Circuit let stand a lower court's dismissal of a public nuisance claim filed by Gulf Coast residents in Mississippi in the wake of Hurricane Katrina on political question grounds against numerous chemical, oil, and power companies.¹⁹¹ One federal court invoked the *American Electric Power* precedent to dismiss a climate change suit against fossil fuel companies by the cities of San Francisco and Oakland based on state common law,

187. *Id.* at 423–24.

188. *Id.* at 424.

189. *Id.*, *rev'g Am. Elec. Power Co.*, 582 F.3d at 378–81 (ruling that the Clean Air Act would not displace federal common law until the EPA had promulgated regulations of greenhouse gas emissions that spoke directly to plaintiffs' claims).

190. *Native Village of Kivalina v. ExxonMobil Corp.*, 696 F.3d 849, 854–56 (9th Cir. 2012), *aff'g* 663 F. Supp. 2d 863 (N.D. Cal. 2009). The U.S. Army Corps of Engineers and the Government Accountability Office estimated the damages to the village due to flooding at between \$100 million and \$400 million. U.S. GEN. ACCOUNTING OFFICE, GAO-04-142, REPORT TO CONGRESSIONAL COMMITTEES, ALASKA NATIVE VILLAGES: MOST ARE AFFECTED BY FLOODING AND EROSION, BUT FEW QUALIFY FOR FEDERAL ASSISTANCE, at 4* (Dec. 2003). The village occupied roughly 54 acres in 1953, but just half of that in 2007. Rachel M. Gregg, *Relocating the Village of Kivalina, Alaska Due to Coastal Erosion*, CLIMATE ADAPTATION KNOWLEDGE EXCHANGE (Dec. 18, 2010), <https://www.cakex.org/case-studies/relocating-village-kivalina-alaska-due-coastal-erosion> (last updated Dec. 20, 2019).

191. *Comer v. Murphy Oil USA, Inc.*, 718 F.3d 460, 465–66 (5th Cir. 2013), *aff'g* 839 F.Supp.2d 849 (S.D. Miss. 2012). The case was originally filed in 2005 and dismissed on justiciability, political question, and standing grounds. *Id.* at 465. However, the Fifth Circuit reversed because the material issues in the case were not exclusively committed by federal law to federal political branches, thereby resolving the justiciability and political question grounds, noting the rarity of standing and tort issues being dismissed as nonjusticiable under the political question doctrine. *Comer v. Murphy Oil USA, Inc.*, 585 F.3d 855, 874–75 (5th Cir. 2009). However, due to a procedural quirk, the en banc Fifth Circuit reinstated the district court opinion when that court lost its quorum. *Comer v. Murphy Oil USA*, 607 F.3d 1049, 1055 (5th Cir. 2010) (en banc). The plaintiffs unsuccessfully sought to distinguish the case from the Supreme Court's *American Electric Power* decision on the ground that they sought damages, not injunctive relief, and alleged violations of state nuisance law, not federal common law.

deciding that the case actually was one based on the displaced federal common law.¹⁹² The City of New York's climate change case against multinational oil and gas companies seeking damages from rising sea levels faltered on similar grounds.¹⁹³ But the Federal District Court of Maryland, in a meticulous opinion, sent the City of Baltimore's nuisance claim seeking to hold fossil-fuel companies accountable for climate-change costs back to state court.¹⁹⁴ Although the lower courts have yet to resolve the issue of the proper forum for nuisance claims in the climate-change context, there is little doubt the Supreme Court's *American Electric Power* decision has cast a long shadow over such claims.¹⁹⁵ Nonetheless, if the Supreme Court were

192. *City of Oakland v. BP L.L.C.*, 325 F. Supp. 3d 1017 (N.D. Cal. 2018). Although the plaintiffs alleged violations of state nuisance law, the defendant companies successfully removed the cases to federal court, which refused to remand the cases to state court on the ground that the claim against the companies did not actually sound in state common law but were "necessarily governed by federal common law" because

they depend on a global complex of geophysical cause and effect involving all nations of the planet (and the oceans and atmosphere). It necessarily involves the relationships between the United States and all other nations. It demands to be governed by as universal a rule of apportioning responsibility as is available . . . [P]laintiffs' claims, if any, are governed by federal common law.

Id. at 1021 (quoting from the court's earlier February 27, 2018 order). The court proceeded to rule that federal common law was displaced under the *American Electric Power* reasoning as well as for interfering with separation of powers and foreign policy. *Id.* at 1024–28. The cities have appealed the case to the Ninth Circuit.

But another federal court refused the defendant companies' request to remove a case brought by several other California counties and cities under state law to federal court, ruling that whether the claims are preempted was a matter for state courts to initially decide; plaintiffs have since appealed this refusal to remove to the Ninth Circuit. *County of San Mateo v. Chevron Corp.*, 294 F. Supp. 3d 934 (N.D. Cal. 2018) (appealed to the 9th Cir. Ct. App., Docket No: 18-15503, *County of Marin v. Chevron Corporation et al.*, filed Mar. 27, 2018). For more on these cases, see Albert C. Lin & Michael Burger, *State Nuisance Claims and Climate Change Adaptation*, 36 PACE ENVTL. L. REV. 49, 51–54 (2018). See also *id.* at 67–73 (considering several defenses for avoiding the merits of state nuisance law claims), 73–91 (discussing the substance of state nuisance law claims concerning lead paint, PCBs, and climate change).

193. *City of New York v. BP L.L.C.*, 325 F. Supp. 3d 466, 475–76 (S.D.N.Y. 2018) (ruling that the case sounded in the displaced of federal common law nuisance, and that claims against the foreign emissions of the companies were barred by a presumption against extraterritoriality and the need for judicial caution concerning foreign affairs).

194. *Mayor and City Council of Baltimore v. BP P.L.C.*, 388 F. Supp. 3d 538, 572–74 (D. Md. 2019), *as amended* (June 20, 2019) (rejecting the defendant's preemption claims and averring that the plaintiffs' choice to file in state court deserved respect).

195. There were no fewer than eight pending climate-change nuisance cases in various stages of litigation in 2018. See Michael Burger, *Update: Upcoming Hearings on Motions to Dismiss Climate Change Nuisance Cases in California and New York*, SABIN CTR. FOR CLIMATE CHANGE L. BLOG (May 23, 2018), <http://blogs.law.columbia.edu/climatechange/2018/05/23/update-upcoming-hearings-on-motions-to-dismiss-climate-change-nuisance-cases-in-california-and-new-york/>. A federal district court rejected congressional displacement in the context of public trust claims against damage to trust resources as a result of atmospheric pollution. *Juliana v. United States*, 217 F. Supp. 3d 1224, 1260 (D. Or. 2016)

(recognizing that “public trust claims are unique because they concern “inherent limits on sovereignty A defining feature . . . is that [public trust duties] cannot be legislated away. Because of the nature of public trust claims, a displacement analysis simply does not apply.”). See Michael C. Blumm & Mary Christina Wood, *No Ordinary Lawsuit: Climate Change, Due Process, and the Public Trust Doctrine*, 67 AM. U. L. REV. 1, 52 (2017); Gerald Torres, *No Ordinary Lawsuit: The Public Trust and the Duty to Confront Climate Disruption—Commentary on Blumm and Wood*, 67 AM. U. L. REV. F. 49, 54 (2018).

A recent climate change-related suit was filed by the Pacific Coast Federation of Fishermen’s Associations (“PCFFA”), the largest commercial fishing industry trade group on the West Coast, which sued in California state court, alleging that major actors in the fossil fuel industry warmed the planet and severely damaged the crabbing industry. *Compl. Pac. Coast Fed’n of Fishermen’s Ass’ns v. Chevron*, Case No. CGC-18-571285, Sup. Ct. of Cal. In and For the County of San Francisco (filed Nov. 14, 2018). The PCFFA alleged that in just the last three years, rising ocean temperature led to regular closures of the Dungeness crab fisheries, and that the defendant industries have known for nearly a half-century that unrestricted production and use of their fossil fuel products create greenhouse gas pollution that warms the planet, changes the climate, and disrupts the oceans. Despite this knowledge, the industries allegedly:

engaged in a coordinated, multi-front effort to conceal and deny their own knowledge of those threat[s], discredit the growing body of publicly available scientific evidence, and persistently create doubt in the minds of customers, consumers, regulators, the media, journalists, teachers, and the public about the reality and consequences of the impacts of their fossil fuel pollution. At the same time, Defendants have promoted and profited from a massive increase in the extraction and consumption of oil, coal, and natural gas, which has in turn caused an enormous, foreseeable, and avoidable increase in global greenhouse gas pollution and an accompanying increase in the concentration of greenhouse gases, particularly carbon dioxide (“CO₂”) and methane, in the atmosphere. Those disruptions of Earth’s otherwise balance, d carbon cycle have substantially contributed to a wide range of dire climate-related effects, including global warming, rising atmospheric and ocean temperatures, ocean acidification, melting polar ice caps and glaciers, more extreme and volatile weather, sea level rise, and marine heatwaves with concomitant harmful algal blooms. Families and businesses that depend on the health and productivity of the Dungeness crab fishery to earn their livings suffer the consequences.

Id. at 1–2, § 1, ¶ 2. A Center For Progressive Reform study featured the crabbers’ suit as one of its case studies of how climate victims are seeking justice through tort law, Thomas McGarity, Sidney Shapiro, Karen Sokol & David Flores, *Climate Justice: State Courts and the Fight for Equity*, CTR. FOR PROGRESSIVE REFORM (2019), <http://www.progressive-reform.org/ClimateJustice.cfm>. Like the argument of the commercial fishermen in the *Columbia River Fishermen’s Protective Union*, *supra* notes 90–96 and accompanying text, the crabbers argued they suffered an injury special to them, more significant than general harm to the public as a whole. They therefore claimed they suffered special injury because of the economic hardships caused by the prohibitions on their commercial crab harvests. Whether their claims will founder on federal displacement is unknown as of this writing. Other case studies featured in the CPR study included: 1) a suit by the City of Baltimore against 26 fossil-fuel companies alleging nuisance and trespass, and negligence, among other claims, which a federal court sent back to state court over the defendant companies’ objections; 2) a suit filed against dozens of fossil-fuel companies by a San Diego-area city

to conclude that federal jurisdiction did not extend to fills of isolated wetlands¹⁹⁶ or groundwater injectate that pollutes jurisdictional waters,¹⁹⁷ there would be no displacement of nuisance law, as applied to those actions.

L. McKiver v. Murphy-Brown

If most climate change-related nuisance suits seem unlikely to pass Supreme Court muster due to the Court's willingness to discount congressional intent in the savings clauses of the pollution control statutes, nuisance suits against

damaged by erosion and flooding due to sea level rise, alleging nuisance, trespass, and negligence, among other claims; and 3) a negligence suit filed by Houston-area residents flooded by Hurricane Harvey in 2017 and damaged by a resulting fire at chemical plant in the floodplain. McGarity, Shapiro, Sokol & Flores, *supra*.

The Baltimore suit was one of three filed in state courts in which there were unsuccessful efforts on the part of fossil-fuel companies to remove the cases to federal suit, the two others being filed by the State of Rhode Island and the City of Boulder, Colorado. The companies appealed to the Supreme Court, seeking a stay of the state court proceedings. See Jennifer Hijazi, *Baltimore: Big Oil 'Offers No Basis' for Emergency Sstay*, CLIMATEWIRE (Oct. 22, 2019), <https://www.eenews.net/climatewire/stories/1061340623>.

196. Federal jurisdiction over so-called isolated wetlands (those not immediately connected to navigable waterbodies) has been muddled since the Court's decision in *Solid Waste Agency of Northern Cook Cty. v. Army Corps of Engineers*, 531 U.S. 159, 162 (2001) (striking down the Corps' reliance on guidance that suggested federal jurisdiction extended to all waters used by migratory birds). Later, in *Rapanos v. United States*, 547 U.S. 715, 786–87 (2006), a Court majority struck down the federal regulation asserting jurisdiction over waters adjacent to tributaries on the reach of the Clean Water Act. A plurality (authored by Justice Scalia) would have required a surface water connection with a jurisdictional waterbody, but Justice Kennedy, who cast the deciding vote, determined that federal jurisdiction should extend to all wetlands with “significant nexus” to jurisdictional waters. The Obama Administration responded with a 2015 regulation largely implementing Justice Kennedy's significant nexus test, Clean Water Rule: Definition of “Water of the United States,” 80 Fed. Reg. 37054 (proposed June 29, 2015), which prompted numerous challenges, and questions over whether the challenges should proceed in federal district or circuit courts. The Supreme Court settled the question of the proper initial forum for such challenges in favor of district courts in *Nat'l Ass'n of Mfrs. v. Dept of Defense*, 138 S. Ct. 617, 623–24 (2018), and that litigation is proceeding with inconsistent results. For example, in mid-2019, there were 22 states in which the Obama rule was in effect and 28 in which it was not. Conversation with Professor Craig Johnston (July 9, 2019). Meanwhile, in February 2019, the Trump Administration proposed a rule to revoke the Obama Administration regulation and roll back federal jurisdiction, largely invoking the surface-water connection definition of Justice Scalia's opinion. Revised Definition of “Waters of the United States,” 84 Fed. Reg. 4154-01 (proposed Feb. 14, 2019). According to one analysis, the Trump rule could eliminate federal protection for half of the nation's wetlands. Ryan Richard, *Debunking the Trump Administrations New Water Rule*, CTR. AM. PROGRESS (Mar. 27, 2019, 9:01 AM), <https://www.americanprogress.org/issues/green/news/2019/03/27/467697/debunking-trump-administrations-new-water-rule/>.

197. In *Hawai'i Wildlife Fund v. County of Maui*, 886 F.3d 737 (9th Cir. 2018), *cert. granted in part*, 139 S. Ct. 1164 (2019), the Supreme Court agreed to review a Ninth Circuit decision that affirmed a district court decision that the county violated the Clean Water Act by discharging treated sewage without a permit into wells that polluted adjacent ocean waters a half-mile distant.

activities not subject to environmental regulation remain unaffected.¹⁹⁸ A prime example concerns a series of nuisance claims against the North Carolina hog farm industry, the initial case being a jury's award of over \$50 million in 2018 to neighboring landowners for compensatory and punitive damages for noxious odors, truck traffic, and loss of the use and enjoyment of their lands due to flies, pests, and other harms that effectively foreclosed many outdoor activities.¹⁹⁹ The award was subsequently reduced by a federal judge because of the state's cap on punitive damages,²⁰⁰ but several other decisions followed, awarding even greater damages against the hog farm owner, WH Group, Ltd., a Chinese company that purchased Smithfield Foods and its subsidiary, Murphy-Brown, LLC, in 2013.²⁰¹ In all, plaintiffs had filed at least 26 different nuisance suits by late 2018.²⁰²

Although Smithfield has been unable to prevail in jury trials, the company has mounted a number of defenses typical of nuisance defendants, and some not so typical. A longstanding defense, dating back to *Aldred*, is the utility of the operation.²⁰³ Smithfield and its allies in the livestock, grocery, and related industries,

198. See Jonathan Morris, Comment, "*One Ought Not Have So Delicate a Nose*": *CAFOs, Agricultural Nuisance, and the Rise of the Right to Farm*, 47 ENVTL. L. 261, 263, 286 (2017) (discussing the effects of recent right-to-farm amendments to state constitutions and the resulting uncertainty in state regulation of agriculture: "[t]he long-term effects of these amendments are unclear, and the breadth and relevance of these amendments will be decided by each state's judicial interpretation, leading to an uncertain future for the regulation of agriculture. If an agricultural facility is compliant with state and federal laws and is effectively insulated from nuisance liability, what reason does it have to consider the harm suffered by neighbors as a result of its operations?").

199. See R.J. Vogt, *NC Swine Stench Sufferers Win Landmark \$50M Jury Award*, LAW360 (Apr. 26, 2018), <https://www.law360.com/articles/1037960>. The case, *McKiver v. Murphy-Brown LLC*, No. 7:14-CV-180-BR 2018 WL 6606061, at *1 (E.D.N.C. Dec. 17, 2018) (rejecting Murphy-Brown's post-judgment motions to set aside the jury award under the state's Right to Farm Act, N.C. Gen. Stat. § 106-701 (amended in 2013)), has been appealed to the Fourth Circuit.

200. See Rachel Graf, *NC Swine Stench Sufferers' \$50M Punitive Damages Slashed*, LAW360 (May 7, 2018), <https://www.law360.com/articles/1041167/nc-swine-stench-sufferers-50m-punitive-damages-slashed> (explaining that the judge enforced the state's cap on punitive damages of three times compensatory damages, limiting the *McKiver* plaintiffs to \$225,000 apiece, or \$2.25 million in all).

201. H. Claire Brown, *North Carolina Jury Awards Neighbors \$473.5 Million in Smithfield Hog Waste Suit*, COUNTER (Aug. 3, 2018), <https://thecounter.org/north-carolina-jury-fines-smithfield-foods-nuisance-lawsuit-hog-farm-manure/>. The plaintiffs in the suits consistently emphasized that Smithfield Foods was sold for an estimated \$7 billion and generated a reported net income of \$105.3 million in 2014, the year the plaintiffs filed suit alleging that the company had the resources to clean up the nuisances. See Graf, *supra* note 200.

202. See Brown, *supra* note 201.

203. See *supra* notes 34–35 and accompanying text; see also John C. Nagle, *Moral Nuisances*, 50 EMORY L.J. 265, 272 (2001) (discussing RESTATEMENT (SECOND) TORTS §§ 827, 828 (AM. LAW INST. 1979)) ("The gravity of the harm is measured by its extent, its character, its suitability for the location, the social value of the plaintiff's use or enjoyment, and the ability of the plaintiff to avoid the harm. The utility of the harm is measured by its social value, its suitability for the location, and the ability of the defendant to prevent the harm.").

including the United States Chamber of Commerce,²⁰⁴ claimed that the value of the hog industry in the state outweighed any inconveniences they may cause to neighbors.²⁰⁵ Similarly, the company alleged that it had employed the best available technology to curb emissions,²⁰⁶ and that its operations were in locations suitable for hog farms.²⁰⁷ Smithfield supplemented these typical defenses with more unusual ones: (1) preventing the North Carolina legislature from enacting proposed changes to nuisance law during the pendency of the litigation and limiting damage awards to losses in land value and excluding “quality of life” injuries,²⁰⁸ and (2) benefiting when the presiding judge of the Fourth Circuit removed the trial judge of the first five trials.²⁰⁹ The new judge paid immediate dividends to Smithfield, ruling that the proof in the case before him did not warrant an award of punitive damages.²¹⁰

The initial success of the plaintiffs in the hog farm cases reflects the continuing value of the nuisance cause of action to landowners substantially and

204. Brief for North American Meat Institute, National Association of Manufacturers, Grocery Manufacturers Association, Chamber of Commerce of the United States of America, National Turkey Federation, and National Chicken Council as Amici Curiae Supporting Appellant at 1–4, *McKiver v. Murphy-Brown, LLC*, No. 7:14-CV-180-BR 2019 WL 1010752 (4th Cir., filed Mar. 6, 2019).

205. *See id.* at 4–5.

206. Corrected Opening Brief of Defendant-Appellant at 5–7, *McKiver v. Murphy-Brown LLC*, No. 7:14-CV-00180-BR 2019 WL 1010752 (4th Cir. filed Feb. 27, 2019).

207. *Id.* at 7.

208. *Id.* at 46–49 (explaining that the legislature, which had been expected to adopt § 478 of the Second Restatement of Torts, which would have expressly imposed vicarious liability for nuisances on landlords (like Smithfield), eventually decided not to incorporate these changes). After the lawsuit, state lawmakers responded in North Carolina’s 2017 and 2018 farm bills, which added new legal protections for the agricultural industry by restricting the ability of people living near farms to bring nuisance suits. Will Doran, *After Smithfield Lost Millions in Lawsuits, NC Changed a Law. Was It Constitutional?*, NEWS & OBSERVER (June 19, 2019, 6:21 PM), <https://www.newsobserver.com/news/politics-government/article/231726683.html>. North Carolina’s then governor, Roy Cooper, expressed concerns that the state’s updated nuisance laws could have detrimental effects in other parts of the state, pointing to the state’s use of nuisance laws to reduce pollution created by the Tennessee Valley Authority. *Id.* The 2018 farm bill, passed amid the Smithfield trials, disallowed nuisance lawsuits unless filed within a year of the establishment of the agriculture operation or within a year of “fundamental change.” Annie Blythe, *Think the Hog Farm Next Door Stinks? Lawmakers Limit Neighbors From Making a Big Stink in Court*, NEWS & OBSERVER (June 14, 2018, 7:22 PM), <https://www.newsobserver.com/news/politics-government/article/213046124.html>. However, a fundamental change does not include “changes in ownership, technology, product or size of the operation.” *Id.*

209. *See* Emery P. Dalesio, *Hog Nuisance Trials Get New Judge After 3 Industry Losses*, AP NEWS (Aug. 9, 2018), <https://apnews.com/4df29d932c374027acd05e56fe1af07f/Hog-nuisance-trials-get-new-judge-after-3-industry-losses>.

210. *See* Blythe, *supra* note 208.

unreasonably affected²¹¹ by traditional types of nuisances.²¹² However, owners of some of these nuisances, if they are economically powerful enough, can certainly work to obtain the same sort of preemption through the state legislature that the Supreme Court attributed to congressional displacement in the federal pollution control statutes.²¹³ The North Carolina legislature is hardly the only example of a legislature redefining nuisance law; in fact, all fifty states have enacted some form of right-to-farm laws shielding qualified farmers from nuisance lawsuits stemming from noise, odors, visual clutter, and dangerous structures.²¹⁴ But some courts have

211. See *Morris*, *supra* note 198, at 270–72 (discussing a series of nuisance cases involving hog farms, beginning with *Commonwealth v. Van Sickle*, 7 Pa. L.J. 82 (Pa. 1845), *State v. Payson*, 37 Me. 361 (1853), *City of Baltimore v. Sackett*, 107 A. 557 (Md. 1919), and *Smiths v. McConathy*, 11 Mo. 517 (1848)). *Van Sickle* involved a large hog farm within the city limits of Pennsylvania, in which the noxious odor and devaluing of nearby property was held to constitute a nuisance. *Id.* at 270–71. In *Payson*, the court extended the nuisance doctrine to the actual feed defendants were using for their hogs. *Id.* at 271. In *Sackett*, the defendants sought to establish a hog farm within the limits of Baltimore. 107 A. at 559–60. Plaintiffs sought an injunction, which the court ultimately denied in holding that “mere allegation” is not sufficient and that facts must be stated which can satisfy to the court that the allegation is “well founded.” *Id.* at 560. This case seems to contemplate and reinforce the idea that courts are generally unwilling to apply the anticipatory nuisance doctrine. In *McConathy*, the Mississippi Supreme Court held that there can be no private nuisance unless “it be attended to with some damage or inconvenience to the party injured.” 11 Mo. at 522. The Court also distinguished public nuisances, where an individual must show that they “suffered a special damage . . . over and above the injury which the community at large suffer.” *Id.* These cases demonstrate a long history of private nuisance claims based on hog farms, albeit usually being limited to success only in cases in which the plaintiffs can demonstrate sufficient proof that the nuisance was actually to their detriment. See also *Nagle*, *supra* note 203, at 272 (stating that especially in the case of moral nuisances, an invasion is “unreasonable if it causes significant harm and the defendant’s conduct is ‘contrary to common standards of decency’”) (quoting RESTATEMENT (SECOND) OF TORTS § 829(b) (AM. LAW INST. 1979)).

212. The same should be true of public officials alleging substantial and unreasonable interferences with public rights.

213. See *supra* Section I.K.

214. See Alexandra Lizano & Elizabeth Rumley, *States’ Right-To-Farm Statutes*, NAT. AGRIC. LAW CTR., <https://nationalaglawcenter.org/state-compilations/right-to-farm/> (last updated Jan. 23, 2019) (all 50 states); e.g., MO. CONST. art. I, § 35 (“[A]griculture . . . is the foundation and stabilizing force of Missouri’s economy. To protect this vital . . . economy, the right of farmers and ranchers to engage in farming and ranching practices shall be forever guaranteed in this state”); OR. REV. STAT. § 30-930 (2019); UTAH CODE ANN. § 76-6-112 (West 2012); WASH. REV. CODE ANN. §§ 7.48.300–320 (West 2020). In *Moon v. North Idaho Farmers Ass’n*, 96 P.3d 637, 640 (Idaho 2004), involving a state law that effectively extinguished liability for North Idaho grass farmers burning in compliance with its provisions, the Idaho Supreme Court decided that there was no unconstitutional taking of the right to maintain a nuisance because Idaho, unlike the Restatement, recognized that the right to maintain a nuisance was not the equivalent of an easement (the taking of which would require government compensation). *Id.* at 644. Many states have also passed what are commonly referred to as “ag-gag” laws, which seek to silence whistleblowers and undercover activists by punishing them criminally for recording footage of what goes on in animal agriculture. See *Ag-Gag Laws*, ANIMAL LEGAL DEF. FUND, <https://aldf.org/issue/ag-gag/> (last

ruled that legislative removal of the right of landowners to defend property rights was a taking, requiring payment of constitutional compensation.²¹⁵ If the reasoning of these cases were widely adopted, nuisance law would at least ensure that legislation authorizing actions that substantially and unreasonably affect neighboring landowners or public rights pay the full economic costs of their operations.²¹⁶

II. LESSONS FROM THE LANDMARKS

This review of landmark nuisance cases shows the doctrine has mirrored Holmes' felt necessities of the times,²¹⁷ originally protecting plaintiffs' traditional agrarian and domestic uses, later becoming sensitive to defendants' costs and the social utility of industrial activities.²¹⁸ As long as four hundred years ago, in *Aldred*, courts invoked the "golden rule" that one landowner should not damage the land of another.²¹⁹

That rule evolved in the nineteenth and twentieth centuries to become a rule of "no unreasonable interference."²²⁰ But reasonableness originally was a very narrow determination, emphasizing preservation of residential and domestic uses, not a free-wheeling balancing of the relative social and economic value of the conflicting uses.²²¹ So long as there were tangible, physical damages caused by a neighboring use, liability was nearly strict.²²² Thus, courts approved injunctions against copper smelting and gold mining blasting in the nineteenth and earlytwentieth century, as the defendant industries' claims of costs and overriding social utility were insufficient to override the physical damage they caused

visited Jun. 20, 2019). Currently, Montana, North Dakota, Iowa, Kansas, Missouri, Arkansas and North Carolina have passed ag-gag laws; however, the laws' validity is under challenge in Kansas, Iowa, and North Carolina. *See id.*

215. *See, e.g.,* *Marcas, L.L.C. v. Bd. Cty. Comm'rs of St. Mary's Cty.*, No. WGC-07-196, 2012 WL 13008755 at *4 (D. Md. Apr. 16 2012) (ruling that a local government's statutory damages cap is not immune from takings' claims when it damages real property); *Gacke v. Pork Xtra, L.L.C.*, 684 N.W.2d 168, 171 (Iowa 2004) (holding that a statute depriving property owners of a remedy for nuisance takings caused by animal feeding operations was unconstitutional); *Bormann v. Bd. of Supervisors*, 584 N.W.2d 309, 316 (Iowa 1998) (deciding that a county's designation of an "agricultural area" eliminating landowner rights to protect their lands through nuisance amounted to a taking of their property rights, requiring compensation under the state constitution's due process clause); *see also* Fraley, *supra* note 61, at 677–80 (discussing the effect of nuisance balancing on takings law).

216. *See, e.g.,* Alexander A. Reinert, *The Right to Farm: Hog-Tied and Nuisance-Bound*, 73 N.Y.U. L. REV. 1694, 1701–02 (1998); *see also* Comment, *Internalizing Externalities: Nuisance Law and Economic Efficiency*, 53 N.Y.U. L. REV. 219, 228–32 (1978).

217. *See* HOLMES, *supra* note 24.

218. *See supra* text following note 39, notes 41, 44, 56, 61 and accompanying text (protection of traditional uses); notes 53, 105, 121–24 and accompanying text (emphasizing defendants' costs and social utility balanced against a plaintiff's injury).

219. The doctrine eschewed aesthetic protection. *See supra* note 39 and accompanying text.

220. *See supra* notes 27, 61, 105 and accompanying text.

221. *See supra* note 61.

222. *See supra* text following note 39, notes 50, 52 and accompanying text.

neighboring lands, especially when the damage was to domestic and traditional agrarian uses.²²³

But distant downstream pollution was initially rejected by the Supreme Court on causation grounds, due to perceived insufficient scientific evidence.²²⁴ However, the Court quickly clarified that demonstrable physical damage produced by interstate air pollution was enjoined.²²⁵ One could imagine a similar judicial evolution concerning climate-change cases.

In the mid-twentieth century, the definition of reasonableness evolved to become the overriding criterion in nuisance doctrine according to the Restatements and many courts.²²⁶ The effect was to equip courts with broad authority to make decisions about alleged nuisances, both public and private, and their effects on neighbors and environmental quality under a vague “balancing of the equities” test that gave the judiciary license to declare nuisances or to decline to do so on their version of social utility grounds.²²⁷ Both social utility and costs to defendants, factors that earlier were relevant only as to whether a plaintiff could obtain an injunction or had to settle for damages, became central to whether a plaintiff could obtain any relief at all.²²⁸

Nuisance case law also embraced a number of defenses that made the doctrine friendlier to defendants and avoided having the courts stand in the way of the Industrial Revolution.²²⁹ These defenses included suitability to the location, temporal priority, best available technology, and standing in public nuisance cases.²³⁰ Injunctions came under criticism on social utility grounds,²³¹ and law-and-economics academics helped lead the charge for increased use of a damages remedy

223. See *supra* Sections I.B, I.C.

224. See *supra* notes 68–69 and accompanying text.

225. See *supra* notes 76–82 and accompanying text.

226. See RESTATEMENT (FIRST) OF TORTS § 822(d)(i) (AM. LAW INST. 1939); RESTATEMENT (SECOND) OF TORTS § 821A (AM. LAW INST. 1979); see also *supra* notes 61, 105.

227. See *supra* note 53 and accompanying text (discussing *Lexington & Ohio Rail Road Co. v. Applegate*, a rare pre-Civil War case that contemplated adaption of the nuisance doctrine to economic development); see also Section I.H and accompanying text (discussing the *Boomer* case).

228. See *supra* note 105 and accompanying text (citing Fraley, *supra* note 61, at 671–77).

229. See *supra* Section I.B. See generally HORWITZ, *supra* note 22, at 74–78; Kurtz, *supra* note 23, at 670; Lewin, *supra* note 23, at 781 (discussing the comparative hardship doctrine of nuisance law).

230. See *supra* notes 42, 47–49, 82–86, 126–28, 134–37, 93–104 and accompanying text (discussing location, temporal priority, best available technology, and special injury).

231. See *supra* notes 121–23, 129 and accompanying text; see also Peter D. Junger, *A Recipe for Bad Water: Welfare Economics and Nuisance Law Mixed Well*, 27 CASE W. RES. L. REV. 3, 270–71 (1976) (suggesting that in cases where the plaintiff can avoid the effects of pollution at reasonable cost but the defendant cannot “the optimal allocation will be reached by denying the injunction and leaving it to the plaintiff to avoid the pollution,” although damages may be in order).

rather than injunctive relief on efficiency grounds.²³² Some courts shied away from using nuisance doctrine to effectuate what they considered to be social policy beyond their institutional capacity,²³³ foreshadowing the Supreme Court's unwillingness to embrace nuisance remedies as complementary to statutory remedies.²³⁴

In the late twentieth and early twenty-first centuries, the Supreme Court decided that nuisance law was no longer fit to play a role in curbing interstate pollution, including climate change.²³⁵ The Court was able to do so by overlooking clear congressional intent to preserve common law remedies along with the statutory remedies it erected.²³⁶ Nuisance remains a vibrant doctrine when it is not displaced, as evidenced by *McKiver* and related hog-farm litigation.²³⁷ So it might also yet play a role in environmental litigation, as the Supreme Court has yet to rule that source-state nuisance law has been displaced,²³⁸ and deregulatory decisions involving resources like wetlands and groundwater may rekindle nuisance law in the pollution area.²³⁹ Lower courts have, however, ruled that state common law nuisance causes regarding greenhouse gas emissions sound in federal common law, regardless of plaintiffs' pleadings of violations of state common law.²⁴⁰ If those decisions withstand appeals,²⁴¹ the role of nuisance in environmental cases will center on localized disputes over mostly unregulated activities. However, *McKiver* and related cases illustrate that nuisance law can be successfully invoked against large animal feedlot operations.²⁴²

Large, well-financed defendants may be able to successfully defeat nuisance claims by invoking the balancing of economic equities, now at the heart of determining what a reasonable use is, at least in some courts.²⁴³ By emphasizing the

232. See *supra* notes 125–37 and accompanying text (discussing remedies in the *Boomer* decision); see also RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 620–21 (7th ed. 2007).

233. See *supra* notes 125–26, 141 and accompanying text; see also *Boomer v. Atl. Cement Co.*, 257 N.E.2d 870, 871 (N.Y. 1970) (“A court performs its essential function when it decides the rights of parties before it It is a rare exercise of judicial power to use a decision in private litigation as a purposeful mechanism to achieve direct public objectives greatly beyond the rights and interests before the court.”).

234. See *supra* notes 169–90 and accompanying text (discussing *Milwaukee v. Illinois* and *American Electric Power v. Connecticut*).

235. See *supra* Sections I.J, I.K.

236. See *supra* notes 175, 179 and accompanying text (discussing the savings clauses in the Clean Water Act).

237. See *supra* Section I.L.

238. See *supra* note 181 and accompanying text (discussing *International Paper Co. v. Oullette*).

239. See *supra* notes 196–98 and accompanying text.

240. See *supra* notes 182–94 and accompanying text (discussing *American Electric Power* and other cases in which the plaintiffs tried to file state nuisance claims addressing interstate pollution where the courts found federal common law the proper cause of action, and therefore statutorily displaced).

241. See *supra* notes 192–95 and accompanying text.

242. See *supra* notes 198–210 and accompanying text.

243. See *supra* notes 61, 105 and accompanying text.

social utility of their operations as well as their spillover economic effects, defendants in these states have the capability to win the balancing, even if, as in *Boomer*, they must pay damages.²⁴⁴ Sovereign plaintiffs may fare better in this balancing, as their involvement may encourage reluctant courts to reach the merits of nuisance claims.²⁴⁵ But sovereigns often exercise prosecutorial discretion to not proceed against large-scale in-state operations,²⁴⁶ and out-of-state polluters are seemingly shielded by the Supreme Court's displacement decision, at least from downstream state laws.²⁴⁷ The long history of bias against anticipatory nuisances makes nuisance appear to be a poor fit in cases calling for risk assessment, but there are emerging exceptions.²⁴⁸

On the other hand, expanded use of trespass to combat many traditional nuisances could signal a path for nuisance plaintiffs in the future,²⁴⁹ effectively reducing the defenses that alleged nuisances have so often successfully invoked.²⁵⁰ Many alleged nuisances can be characterized as trespasses, and several courts have blended trespass and nuisance law.²⁵¹ Juries have shown a willingness to award punitive damages in nuisance cases,²⁵² although state legislative preemption of nuisance liability is now commonplace.²⁵³ Only a few courts have been willing to conclude that legislation eliminating nuisance causes of action worked a

244. See *supra* notes 116–24 and accompanying text (discussing *Boomer*).

245. *Boomer v. Atl. Cement Co.*, 257 N.E.2d 870, 872 (N.Y. 1970) (discussing an award of damages despite a marked disparity in economic effects to the defendant and the community compared to the benefit to plaintiffs).

246. For example, in the *Columbia River Fishermen's Protective Union* case, *supra* notes 90–96 and accompanying text, neither the City of St. Helens nor the State of Oregon sought to enjoin the water pollution.

247. *Am. Elec. Power Co. v. Connecticut*, 564 U.S. 410, 424 (2011), discussed *supra* section I.K (Clean Air Act displaced federal common law, relying on *City of Milwaukee v. Illinois*, 406 U.S. 91 (1981)).

248. See *supra* notes 144–69 and accompanying text (discussing the *Village of Wilsonville v. SCA Services, Inc.* and the anticipatory nuisance doctrine).

249. A recent Pennsylvania case substantially expanded trespass law in that state by determining that a fracking operator could trespass by draining oil and gas embedded in shale under a neighbor's lands through the fracking operation. *Briggs v. Southwestern Energy Prod. Co.*, 184 A.3d 153, 163 (Pa. Super. Ct. 2018) (“[H]ydraulic fracturing may constitute an actionable trespass where subsurface fractures . . . cross boundary lines and extend into the subsurface estate of an adjoining property for which the operator does not have a mineral license”), *vacated*, 224 A.2d 334 (Pa. 2020). An expansive trespass law could displace nuisance balancing, which many consider to be loaded in favor of defendants.

250. See *supra* notes 105–15 and accompanying text (discussing *Martin v. Reynolds Metals Co.* and its potential role in conflating the trespass and traditional nuisance doctrines).

251. See *supra* note 112; see also Jill M. Fraley, *Liability for Unintentional Nuisances: How the Restatement of Torts Almost Negligently Killed the Right to Exclude in Property Law*, 121 W.VA. L. REV. 419, 421–22, 447–48 (2018) (discussing the relationship between trespass, nuisance, and pollution); Anthony Z. Roisman & Alexander Wolff, *Trespass by Pollution: Remedy by Mandatory Injunction*, 21 FORDHAM ENVTL. L. REV. 157, 161 (2010).

252. See *supra* Section I.L (discussing punitive damages for nuisance granted against North Carolina hog farms).

253. See *supra* note 214 and accompanying text.

constitutional taking of plaintiffs' property rights, requiring payment of just compensation,²⁵⁴ but the issue is far from settled. Without a compensation requirement, legislatures can eliminate neighboring property rights without cost.

CONCLUSION

The long history of nuisance law reflects its protean nature, reflecting the Holmesian "felt necessities."²⁵⁵ The doctrine was sufficiently robust to enjoin nineteenth century gold mining and copper smelter pollution cases that resulted in demonstrable physical injury.²⁵⁶ But what had been a largely antidevelopmental doctrine aimed at protecting traditional and domestic land uses in a static agrarian society evolved during the Industrial Revolution to accommodate the substantial economic and technological changes at work in nineteenth and early twentieth century America.²⁵⁷ Later, in the mid-twentieth century, the Restatements encouraged state courts to further revise nuisance doctrine to include balancing the costs imposed on defendants as part of the prima facie case of whether there was a nuisance at all, not just whether an injunction served the public interest.²⁵⁸

This shift in nuisance doctrine, where it occurred, combined with the proliferation of nuisance defenses,²⁵⁹ made nuisance less threatening to defendants. And the Supreme Court's willingness to narrowly interpret the savings clauses in statutes like the Clean Air and Water Acts allowed the Court to overlook apparent congressional intent and sanction displacement of both federal common law nuisance and receiving state common law,²⁶⁰ making successful interstate nuisance claims unlikely. These decisions have nearly eliminated nuisance from interstate pollution control, although the Court has yet to discard the source state's nuisance law.²⁶¹ But if the Court were to narrowly construe federal environmental legislation to not reach resources like isolated wetlands or groundwater, congressional displacement would no longer foreclose nuisance remedies. Thus, an antiregulatory Court could ironically revive nuisance as a relevant environmental doctrine. Such a revival would be entirely consistent with congressional intent,²⁶² however shocking a result it would seem to the architects of modern environmental law.²⁶³

254. See *supra* note 215 and accompanying text (discussing cases where legislation eliminating a nuisance cause of action results in a compensable taking).

255. See HOLMES, *supra* note 24.

256. See *supra* Sections I.C, I.E (discussing *Woodruff v. North Bloomfield Gravel Mining Co.* and *Georgia v. Tennessee Copper Co.*).

257. See HORWITZ, *supra* note 22, at 76–77.

258. See Fraley, *supra* note 61, at 654–55.

259. See *supra* notes 12–17, 34–35, 53, 200, 203–10 and accompanying text.

260. See *supra* notes 187–96 and accompanying text.

261. See *supra* note 181 and accompanying text. Some lower courts have, however, and appeals from those decisions are pending. See *supra* note 192 and accompanying text.

262. See *supra* notes 175–76 and accompanying text.

263. The architects aimed to have the new legislative regime to supersede the inefficient and overly discretionary common law (although they clearly did not think the statutes would "displace" common law causes of action). On the origins of modern environmental law, see RICHARD J. LAZARUS, *THE MAKING OF ENVIRONMENTAL LAW* 47

McKiver and related hog farm cases display nuisance's continued viability concerning local land use controversies that do not implicate federal displacement or state preemption.²⁶⁴ Nuisance remedies could evolve in the future if more courts adopt a blending of trespass and nuisance doctrines, as in *Martin v. Reynold Metals*.²⁶⁵ By eliminating defenses centered around reasonableness balancing from the prima facie nuisance case, this evolution would work to restore early nuisance doctrine's unwillingness to allow the defendant's alleged economic value and social utility to outweigh physical damage to neighboring lands, especially to domestic and residential uses.²⁶⁶ A reduced role for balancing would return nuisance doctrine to its roots²⁶⁷ as well as making it more relevant to the twenty-first century and its climatic challenges.

On the other hand, as the costs of greenhouse gas emissions become more apparent, reasonableness balancing could lead reviewing courts interpreting local nuisance law to conclude that large fossil-fuel emitters are in fact public nuisances.²⁶⁸ Nuisance liability might be more likely in suits brought by sovereign governments,²⁶⁹ although the private plaintiffs should be able to pass the standing hurdle for public nuisance.²⁷⁰ More threatening to nuisance claimants are decisions like the district court in the *City of Oakland* case, which concluded that nuisance cases concerning atmospheric pollution sound in federal common law regardless of how they were pled,²⁷¹ sending plaintiffs to the displaced federal common law. Such

(2004) (discussing the Arlie House conference of 1969); see also THOMAS P. ALDER, FROM LAW AND THE ENVIRONMENT TO ENVIRONMENTAL LAW: A FOUNDER'S RECOLLECTIONS (2019), https://www.eli.org/sites/default/files/docs/founders_report.pdf (discussing events prior to the Arlie House conference as well as the conference itself).

264. See *supra* Section I.L.

265. See *supra* Section I.G (discussing *Martin*).

266. See *supra* Sections I.B, I.C, I.E (discussing *St. Helens Smelting Co. v. Tipping, Woodruff v. North Bloomfield Gravel Mining Co.*, and *Georgia v. Tennessee Copper Co.*).

267. See Fraley, *supra* note 61, at 654–55 (discussing the limited balancing in nuisance doctrine prior to the mid-twentieth century).

268. These courts could be state courts reviewing state nuisance law claims, or federal courts doing the same under diversity jurisdiction. Interstate pollution claims would be possible under *International Paper Co. v. Oullette*, 479 U.S. 481 (1987), where the Court apparently recognized the receiving state's common law as saved by the Clean Water Act. See *supra* note 181 and accompanying text (discussing the Court's *Oullette* decision).

269. The Supreme Court's decision in *Massachusetts v. EPA*, 549 U.S. 497 (2007), indicated relaxed standing requirements for sovereign governments, citing *Georgia v. Tennessee Copper*, 206 U.S. 230 (1907). See *supra* note 87 and accompanying text.

270. Although it was a public trust case, the plaintiffs in *Juliana v. United States*, 217 F. Supp. 3d 1224, 1242–48 (D. Or. 2016), *rev'd on standing grounds*, 947 F.3d 1159 (9th Cir. 2020), demonstrated injury sufficiently different from the general public to satisfy the special injury requirement required by nuisance cases like the *Columbia River Fishermen's Protective Ass'n* case, discussed *supra* notes 94–96 and accompanying text. See Blumm & Wood, *supra* note 195, at 34–37.

271. See *supra* note 192 and accompanying text (discussing *City of Oakland v. BP P.L.C.*, 325 F. Supp. 3d 1017 (N.D. Cal. 2018)).

a result would create a Catch-22 scenario and fly in the face of Congress' apparent intent to preserve common law remedies.²⁷²

If atmospheric nuisance cases reach the merits, the history of nuisance law recounted in this Article suggests that the doctrine is fully capable of evolving to provide the injured with a remedy. There is no doctrinal reason why the social utility and scientific uncertainty issues that served defendants well in the late nineteenth and twentieth century could not turn the reasonableness balancing in favor of plaintiffs challenging atmospheric pollution. If so, the doctrine which evolved from one protective of a stable agrarian society in the pre-modern era to accommodate industrialization could, in the twenty-first century, evolve again to meet the greatest environmental threat of contemporary America.

272. See *supra* note 175 and accompanying text (discussing the savings clauses in the Clean Water Act, which are substantially similar to those contained in the Clean Air Act).