

SUMMERS V. EARTH ISLAND INSTITUTE REJECTS
PROBABILISTIC STANDING, BUT A “REALISTIC THREAT” OF
HARM IS A BETTER STANDING TEST

BY
BRADFORD MANK*

In Summers v. Earth Island Institute, the Supreme Court recently rejected the proposed test for organizational standing in Justice Breyer’s dissenting opinion based upon the statistical probability that some of an organization’s members will likely be harmed in the near future by a defendant’s allegedly illegal actions. Implicitly, however, the Court had previously recognized some form of probabilistic standing in Friends of the Earth v. Laidlaw, which found standing where plaintiffs avoided recreational activities because of “reasonable concerns” about future health injuries from pollution; Summers did not overrule Laidlaw. There is an inherent tension between the Summers and Laidlaw decisions. This Article applies the Summers and Laidlaw frameworks to the facts in Natural Resources Defense Council v. Environmental Protection Agency (NRDC II), where the D.C. Circuit found standing because the government’s exemption from regulation of certain uses of methyl bromide, an ozone-destroying chemical, would cause two to four lifetime skin cancer cases among NRDC’s members. Both Summers and Laidlaw produce questionable results when applied to NRDC II’s facts.

The “realistic threat” test in Justice Breyer’s dissenting opinion in Summers offers a better approach to standing than either Summers’s unrealistic demand that plaintiffs precisely predict the future or Laidlaw’s focus on whether a plaintiff avoided recreational activities rather than whether the defendant’s activities caused actual harm. There was a more realistic threat of harm in Summers than Laidlaw, but

* James Helmer, Jr. Professor of Law, University of Cincinnati College of Law, P.O. Box 210040, University of Cincinnati, Cincinnati, Ohio 45221-0040, Telephone (513) 556-0094, Fax (513) 556-1236, e-mail: brad.mank@uc.edu. I thank Robin Craig and Michael Solimine for their comments. All errors or omissions are my responsibility. This article is one of a series of explorations of possible extensions of modern standing doctrines. The other pieces are 1) *Should States Have Greater Standing Rights Than Ordinary Citizens?*: Massachusetts v. EPA’s *New Standing Test for States*, 49 WM. & MARY L. REV. 1701 (2008); 2) *Standing and Future Generations: Does Massachusetts v. EPA Open Standing for the Unborn?*, 34 COLUM. J. ENVTL. L. 1 (2009); and 3) *Standing and Statistical Persons: A Risk-Based Approach to Standing*, 36 ECOLOGY L.Q. 665 (2009).

the Court found standing in the latter case and not the former case. The Court's current approach to standing for organizational plaintiffs and probabilistic risks is seriously flawed and the realistic threat test offers a more rational approach to assess which injuries are sufficiently serious for standing in Article III federal courts. Furthermore, a realistic threat test for standing is more consistent with congressional intent in enacting several citizen suit statutes that are involved in the vast majority of cases in which constitutional standing is at issue. The Court should abandon both the Summers and Laidlaw approaches to standing and instead adopt Justice Breyer's proposed realistic threat test to achieve more equitable and uniform standing determinations.

I.	INTRODUCTION	91
II.	STANDING DOCTRINE	95
	A. <i>Constitutional Standing</i>	95
	B. <i>Relaxed Standing in Procedural Cases</i>	97
	C. <i>Imminent Risks in Nonprocedural Cases</i>	99
III.	LIDLAW	100
	A. <i>Majority Decision</i>	100
	B. <i>Justice Scalia's Dissenting Opinion</i>	103
IV.	SUMMERS	103
	A. <i>Justice Scalia's Majority Opinion</i>	104
	B. <i>Justice Kennedy's Concurring Opinion</i>	106
	C. <i>Justice Breyer's Dissenting Opinion</i>	107
	D. <i>Analysis</i>	110
V.	EASY CASES	111
	A. <i>Lower Court Decisions Relying on Laidlaw to Recognize Probabilistic Standing</i>	111
	B. <i>Cases Similar to Summers</i>	114
	1. <i>Public Citizen I</i>	116
	2. <i>Public Citizen II</i>	119
	3. <i>Comparing Summers with Public Citizen</i>	121
	C. <i>Environmental Versus Nonenvironmental Injuries</i>	121
VI.	A HARD CASE: <i>NATURAL RESOURCES DEFENSE COUNCIL V. EPA</i>	123
	A. <i>Natural Resources Defense Council v. EPA, I and II</i>	123
	1. <i>NRDC I</i>	124
	2. <i>NRDC II</i>	125
	B. <i>Covington v. Jefferson County</i>	127
	1. <i>Majority Opinion</i>	128
	2. <i>Judge Gould's Concurring Opinion</i>	129
	C. <i>Applying Laidlaw and Summers to NRDC II</i>	132
VII.	THE SUPREME COURT SHOULD OVERRULE <i>SUMMERS</i> AND ADOPT JUSTICE BREYER'S REALISTIC THREAT TEST	134
VIII.	CONCLUSION	137

I. INTRODUCTION

To file suit in Article III federal courts, a plaintiff must demonstrate “standing” by establishing that the defendant’s actions have caused an actual or imminent injury, and not merely a speculative or hypothetical injury that might occur someday.¹ In the Supreme Court’s 2009 decision in *Summers v. Earth Island Institute*,² Justice Antonin Scalia’s majority opinion rejected the concept of organizational standing based upon the statistical probability³ that some of an organization’s members will likely be harmed in the near future by a defendant’s allegedly illegal actions.⁴ By contrast, Justice Stephen Breyer’s dissenting opinion proposed a “realistic threat” test for determining when an injury is sufficient for standing that would consider whether it is probable that at least one member of an organization will be harmed in the near future by a defendant’s actions.⁵ Justice Scalia argued that the “dissent would have us replace the requirement of imminent harm, which it acknowledges our cases establish, with the requirement of a *realistic* threat that reoccurrence of the challenged activity would cause [the plaintiff] harm in the reasonably near future.”⁶ The Court held that the plaintiff organizations failed to establish that they would suffer an “imminent” injury sufficient for standing because they could not prove where and when their specific members would be harmed in the future by the government’s allegedly illegal policy of selling fire-damaged timber without public notice and comment.⁷

Although Justice Scalia’s decision in *Summers* might appear to close the door to organizational standing based upon a statistical probability of harm, the Court’s earlier decision in *Friends of the Earth, Inc. v. Laidlaw Environmental Services (TOC), Inc. (Laidlaw)*⁸ implicitly accepted

¹ Lujan v. Defenders of Wildlife, 504 U.S. 555, 560–61 (1992); see *infra* Part II.

² 129 S. Ct. 1142 (2009).

³ Arguably, there are different types of statistical probability at issue in different standing cases. First, in *Summers*, the probability of harm depended in part on the voluntary actions of the plaintiff organization’s members in visiting various national parks and forests that could be affected by the Forest Service’s policies and it was possible that no member would be affected. See *infra* Part IV. Second, in “toxic tort” cases involving harmful chemicals, science can predict that some people will suffer adverse health impacts from the release of certain chemicals, but cannot predict which individuals will be harmed by those chemicals in the future, and the affected individuals may have little voluntary control in avoiding the harms. See *infra* Part VI. Courts may implicitly consider these issues in making standing decisions, but their standing decisions have not systematically distinguished among different types of statistical probability. This Article will refer to all of these cases as involving statistical probability, but in a future case these arguably different types of statistical probability might affect the standing analysis.

⁴ 129 S. Ct. at 1150–51. Justice Scalia’s majority opinion was joined by Chief Justice Roberts and Justices Kennedy, Thomas, and Alito. *Id.* at 1146. Justice Breyer’s dissenting opinion was joined by Justices Stevens, Souter, and Ginsburg. *Id.*

⁵ *Id.* at 1158 (Breyer, J., dissenting).

⁶ *Id.* at 1152–53 (majority opinion) (internal quotation marks omitted) (alteration in original) (citation omitted).

⁷ *Id.* at 1150–51.

⁸ 528 U.S. 167 (2000).

probabilistic standing in some circumstances.⁹ Despite the plaintiffs' failure to prove that the defendant's mercury discharges caused harm to the environment or human health, the *Laidlaw* decision concluded that the plaintiffs' affidavits demonstrating that they had avoided recreational use of a river because of their "reasonable concerns" about the mercury's impact on their health was sufficient for standing.¹⁰ Justice Scalia's dissenting opinion in that case argued that plaintiffs usually should have to demonstrate injury both to the environment and themselves to have standing.¹¹ Implicitly, *Laidlaw*'s reasonable concerns test is based upon an estimate of the statistical probability of future harm.¹²

The *Summers* decision's blanket rejection of probabilistic standing is in considerable tension with *Laidlaw*'s reasonable concerns test, which *Summers* did not question.¹³ In fact, the plaintiffs in *Summers* had far stronger evidence that they would be harmed by the defendant's actions than the plaintiffs in *Laidlaw*.¹⁴ It is not clear that the plaintiffs in *Laidlaw* could meet the realistic threat test proposed by Justice Breyer in his dissenting opinion in *Summers*.¹⁵ If the Supreme Court's current standing jurisprudence would find no standing in *Summers*, but standing in the far weaker *Laidlaw* decision, then there is a problem with the Court's standing jurisprudence.¹⁶

In the short term, courts are likely to distinguish *Summers* and *Laidlaw*.¹⁷ The *Laidlaw* decision involved plaintiffs who avoided recreational activities in a river because of the defendant's illegal discharge of a toxic pollutant into the river.¹⁸ In cases factually similar to *Laidlaw*, courts are likely to rely on *Laidlaw* and ignore any doubts about the severity of the harm.¹⁹ On the other hand, in most cases in which all of the alleged government harm will occur in the future, *Summers* precludes probabilistic standing.²⁰

There remain some difficult cases in which it is not obvious whether *Summers* or *Laidlaw* should control. For example, if the government allows the release of ozone-destroying chemicals (ODCs) that are likely to cause damage to the Earth's ozone layer, and that damage will allow more dangerous ultraviolet (UV) light that will cause skin cancer in the future, does *Summers*'s rejection of probabilistic standing preclude standing or does *Laidlaw*'s reasonable concerns test apply?²¹ In its 2006 decision *Natural*

⁹ See *infra* Part III.A.

¹⁰ 528 U.S. at 184–89.

¹¹ *Id.* at 198–99 (Scalia, J., dissenting); *infra* Part III.

¹² *Infra* Part III.

¹³ See *infra* Parts VI.C, VII.

¹⁴ See *infra* Part VI.C.

¹⁵ See *infra* Parts VI.C, VII.

¹⁶ See *infra* Parts VI.C, VII.

¹⁷ *Infra* Part V.

¹⁸ *Infra* Part III.A.

¹⁹ See *infra* Part V.

²⁰ *Infra* Part V.

²¹ See *infra* Part VI.

Resources Defense Council v. Environmental Protection Agency (NRDC II),²² the United States Court of Appeals for the District of Columbia Circuit held that the Natural Resources Defense Council (NRDC) had standing because two to four of their approximately 500,000 members would likely get skin cancer from the government’s exemptions for methyl bromide, a chemical that destroys ozone.²³ The *NRDC II* decision is the best example of a court granting standing to an organization based upon the statistical probability that some of its members will be harmed in the future.²⁴ After *Summers*, the Supreme Court might reject standing in a case similar to *NRDC II* because it is impossible to prove which specific members of NRDC will contract skin cancer because of increased UV radiation.²⁵ On the other hand, the statistical evidence predicting future harm was more impressive in *NRDC II* than in *Laidlaw*, where the Court found that the plaintiffs had standing because of their reasonable concerns about mercury pollution, even without proof of actual harm to anyone.²⁶ If neither the *Summers* nor the *Laidlaw* decision would recognize standing in the *NRDC II* decision, then it is time for the Court to revise its standing test to determine when there is a realistic threat of harm.²⁷

In *Summers*, Justice Scalia declared, “Standing, we have said, is not an ingenious academic exercise in the conceivable ... [but] requires ... a factual showing of perceptible harm.”²⁸ The tension between the reasoning in *Summers* and *Laidlaw* is an invitation for ingenious pleading.²⁹ For example, a clever lawyer might fit the facts in *NRDC II* within the *Laidlaw* rubric by having some plaintiffs file affidavits stating that they avoid sunbathing, swimming, or other recreational activities because of their reasonable concerns about avoiding skin cancer, even though the essential issue in the case is about future harm to unknown plaintiffs.³⁰

The realistic threat test in Justice Breyer’s dissenting opinion in *Summers* offers a better approach to standing than either *Summers*’s unrealistic demand that plaintiffs precisely predict the future or *Laidlaw*’s focus on whether a plaintiff avoided recreational activities rather than whether the defendant’s activities caused actual harm.³¹ There was a more realistic threat of harm in *Summers* than *Laidlaw*, yet the Court found standing in the latter case but not the former case.³² The Court’s current approach to standing for organizational plaintiffs and probabilistic risks is

²² 464 F.3d 1 (D.C. Cir. 2006).

²³ *Id.* at 7, 11; *infra* Part VI.A.

²⁴ *Infra* Part VI.A.

²⁵ See *Summers*, 129 S. Ct. 1142, 1151–53 (2009) (rejecting standing based on statistical probability that some members of plaintiff organization will be harmed in the future); *infra* Part V.C.

²⁶ See *Laidlaw*, 528 U.S. 167, 184–85 (2000); *infra* Parts III.A, VI.C.

²⁷ *Infra* Parts VI.C, VII.

²⁸ *Summers*, 129 S. Ct. at 1152 (internal quotation marks omitted) (alteration in original) (quoting *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 566 (1992)).

²⁹ See *infra* Part VI.C.

³⁰ See *infra* Part VI.C.

³¹ See *infra* Part VII.

³² See *infra* Parts V.C, VI.C.

seriously flawed and the realistic threat test offers a more rational approach to assess which injuries are sufficiently serious for standing in Article III federal courts.³³

Furthermore, a realistic threat test for standing is more consistent with congressional intent in enacting several citizen suit statutes that are involved in the vast majority of cases in which constitutional standing is at issue.³⁴ Some citizen suit statutes, especially in the area of environmental law, allow “any person” to sue if the government underenforces the law.³⁵ Although congressional intent is not completely binding on the courts in cases involving constitutional standing, Justice Anthony Kennedy and Justice Breyer have each explained that courts should give significant import to Congress’s definition of what is a “concrete injury” for standing purposes.³⁶

Part II summarizes standing doctrine. Part III explains *Laidlaw*. Part IV explicates *Summers*. Part V addresses the easy cases where *Summers* and

³³ See *infra* Part VII.

³⁴ *Summers*, *Laidlaw*, and *NRDC II* all involved citizen suits. See *infra* Parts III, IV, VI. All of the significant cases in *infra* Part V.B also involved citizen suits.

³⁵ See, e.g., Federal Election Campaign Act of 1971 § 309, 2 U.S.C. § 437g(a)(8)(A) (2006); Toxic Substances Control Act § 20, 15 U.S.C. § 2619(a) (2006); Endangered Species Act of 1973 § 11, 16 U.S.C. § 1540(g) (2006); Surface Mining Control and Reclamation Act of 1977 § 520, 30 U.S.C. § 1270(a) (2006); Federal Water Pollution Control Act § 505, 33 U.S.C. § 1365(a) (2006); Safe Drinking Water Act § 1449, 42 U.S.C. § 300j-8 (2006); Resource Conservation and Recovery Act of 1976 § 7002, 42 U.S.C. § 6972(a) (2006); Clean Air Act § 304, 42 U.S.C. § 7604(a) (2006); see also Heather Elliott, *The Functions of Standing*, 61 STAN. L. REV. 459, 493 & n.160 (2008); Bradford Mank, *Standing and Statistical Persons: A Risk-Based Approach to Standing*, 36 ECOLOGY L.Q. 665, 681–82 n.81 (2009) [hereinafter Mank, *Standing and Statistical Persons*]. Justice Breyer’s approach to standing is rooted in a “public law” conception of standing that seeks to prevent the Executive Branch from ignoring congressional directives in statutes addressing matters of public concern, including public health and the environment, by allowing liberal use of citizen suits to enforce the law. Elliott, *supra*, at 484 (arguing that public rights statutes that give many citizens the right to clean environment or safe products allow citizens to have standing to sue because each citizen has a concrete and particularized injury); Cass Sunstein, *Standing and the Privatization of Public Law*, 88 COLUM. L. REV. 1432, 1471 (1988) (arguing that courts may allow suits challenging executive compliance with the law). See generally Abram Chayes, *The Role of the Judge in Public Law Litigation*, 89 HARV. L. REV. 1281 (1976) (discussing public rights statutes that give each citizen the right to clean environment or safe products). By contrast, Justice Scalia used separation of powers concerns about protecting the discretion of the Executive Branch to limit the scope of judicial authority in *Lujan*, 504 U.S. 555, 559–78 (1992), which arguably is grounded in a private law or common law view of the judiciary that limits courts to adjudicating disputes involving concrete injuries that would be largely if not entirely recognizable to common law English judges. But see *id.* at 602 (Blackmun, J., dissenting) (arguing that the “principal effect” of Justice Scalia’s majority opinion’s restrictive approach to standing was “to transfer power into the hands of the Executive at the expense—not of the Courts—but of Congress, from which that power originates and emanates”); Elliott, *supra*, at 496 (arguing courts should not use standing doctrine as “a backdoor way to limit Congress’s legislative power”); Gene R. Nichol, Foreword, *The Impossibility of Lujan’s Project*, 11 DUKE ENVTL. L. & POL’Y F. 193, 196 (2001) (“*Lujan*, in full flower, would strike at congressionally authorized standing and the claimed ‘overjudicialization’ of the operation of American government.”); Richard J. Pierce, Jr., *Lujan v. Defenders of Wildlife: Standing as a Judicially Imposed Limit on Legislative Power*, 42 DUKE L.J. 1170, 1170–71 (1993) (criticizing *Lujan* as “an insupportable judicial contraction of the legislative power to make judicially enforceable policy decisions”).

³⁶ See *infra* Part IV.B.

Laidlaw can be neatly distinguished. Part VI examines the *NRDC II* decision in light of *Summers* and *Laidlaw*. Part VII argues that the Court should overrule *Summers* and instead adopt Justice Breyer’s realistic threat test in his dissenting opinion.

II. STANDING DOCTRINE

A. Constitutional Standing

Although the Constitution does not explicitly require that a plaintiff have standing to file suit in federal courts, since 1944 the Supreme Court has inferred from the Constitution’s Article III limitation of judicial decisions to “cases” and to “controversies” that federal courts must utilize standing requirements to guarantee that the plaintiff has a genuine interest and stake in a case.³⁷ Litigants in federal Article III courts must meet certain standing requirements to bring a suit.³⁸ The federal courts have jurisdiction over a case only if at least one plaintiff can prove that he or she has standing for each form of relief sought.³⁹ The standing doctrine resolves whether a party to a lawsuit is a proper party to sue and does not decide whether the

³⁷ Article III of the U.S. Constitution indicates,

The judicial Power shall extend to all Cases, in Law and Equity, arising under this Constitution, the Laws of the United States, and Treaties made, or which shall be made, under their Authority;—to all Cases affecting Ambassadors, other public Ministers and Consuls;—to all Cases of admiralty and maritime Jurisdiction;—to Controversies to which the United States shall be a Party;—to Controversies between two or more States;—between a State and Citizens of another State;—between Citizens of different States;—between Citizens of the same State claiming Lands under Grants of different States, and between a State, or the Citizens thereof, and foreign States, Citizens or Subjects.

U.S. CONST. art. III, § 2; *Stark v. Wickard*, 321 U.S. 288, 310 (1944) (stating explicitly the Article III standing requirement in a Supreme Court case for the first time); *see DaimlerChrysler Corp. v. Cuno*, 547 U.S. 332, 339–43 (2006) (explaining why the Supreme Court infers that Article III’s case and controversy requirement necessitates standing limitations); *Elk Grove Unified Sch. Dist. v. Newdow*, 542 U.S. 1, 11 (2004) (“Article III standing . . . enforces the Constitution’s case-or-controversy requirement . . .”); *see also* Bradford Mank, *Should States Have Greater Standing Rights Than Ordinary Citizens?: Massachusetts v. EPA’s New Standing Test for States*, 49 WM. & MARY L. REV. 1701, 1709–10 (2008) [hereinafter Mank, *States Standing*]; Mank, *Standing and Statistical Persons*, *supra* note 35, at 673–74; Ryan Guilds, Comment, *A Jurisprudence of Doubt: Generalized Grievances as a Limitation to Federal Court Access*, 74 N.C. L. REV. 1863, 1867, 1871–75 (1996). *But see* Cass R. Sunstein, *What’s Standing After Lujan? Of Citizen Suits, “Injuries,” and Article III*, 91 MICH. L. REV. 163, 168–79, 208 (1992) (arguing framers of the Constitution did not intend that Article III would require standing).

³⁸ Mank, *States Standing*, *supra* note 37, at 1709–10; Michael E. Solimine, *Recalibrating Justiciability in Ohio Courts*, 51 CLEV. ST. L. REV. 531, 533 (2004).

³⁹ *DaimlerChrysler*, 547 U.S. at 351–53; *Laidlaw*, 528 U.S. 167, 185 (2000) (“[A] plaintiff must demonstrate standing separately for each form of relief sought.”); Mank, *Standing and Statistical Persons*, *supra* note 35, at 673. Standing is one factor in determining whether a suit is legitimately justiciable in court. Jeremy Gaston, Note, *Standing on Its Head: The Problem of Future Claimants in Mass Tort Class Actions*, 77 TEX. L. REV. 215, 219 (1998) (“Standing is one aspect of the doctrine of justiciability Other aspects of justiciability include the doctrines of ripeness, mootness, advisory opinions, and political questions.”).

asserted claim is appropriate.⁴⁰ A federal court must dismiss a case without deciding the merits if the plaintiff fails to meet the constitutional standing test.⁴¹

Standing requirements are related to broader constitutional principles. The standing doctrine prohibits unconstitutional advisory opinions.⁴² Furthermore, standing requirements support separation of powers principles defining the division of powers between the judiciary and political branches of government so that the “Federal Judiciary respects the proper—and properly limited—role of the courts in a democratic society.”⁴³

For standing in an Article III court, the Supreme Court, in its 1992 decision *Lujan v. Defenders of Wildlife*,⁴⁴ required a plaintiff to show that 1) she has “suffered an injury-in-fact,”⁴⁵ which is a) “concrete and particularized”⁴⁶ and b) “actual or imminent, not conjectural or hypothetical”;⁴⁷ 2) “there must be a causal connection between the injury and the conduct complained of—the injury has to be fairly . . . trace[able] to the challenged action of the defendant, and not . . . th[e] result [of] the independent action of some third party not before the court”;⁴⁸ and 3) “it must be likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision.”⁴⁹ A plaintiff has the burden of establishing all three prongs of the standing test.⁵⁰

In its 1975 decision *Warth v. Seldin*,⁵¹ the Court first explicitly recognized that “an association may have standing solely as the

⁴⁰ Gaston, *supra* note 39, at 221.

⁴¹ See *DaimlerChrysler*, 547 U.S. at 340–42; *Laidlaw*, 528 U.S. at 180 (“[W]e have an obligation to assure ourselves that [petitioner] had Article III standing at the outset of the litigation.”); Mank, *States Standing*, *supra* note 37, at 1710; Mank, *Standing and Statistical Persons*, *supra* note 35, at 673.

⁴² Mank, *Standing and Statistical Persons*, *supra* note 35, at 680; Jonathan Remy Nash, *Standing and the Precautionary Principle*, 108 COLUM. L. REV. 494, 506 (2008); see *DaimlerChrysler*, 547 U.S. at 340; Fed. Election Comm’n v. Akins, 524 U.S. 11, 23–24 (1998).

⁴³ *DaimlerChrysler*, 547 U.S. at 341 (internal quotation marks omitted) (quoting *Allen v. Wright*, 468 U.S. 737, 750 (1984)); Nash, *supra* note 42, at 506; Antonin Scalia, *The Doctrine of Standing as an Essential Element of the Separation of Powers*, 17 SUFFOLK U. L. REV. 881, 881, 896 (1983).

⁴⁴ 504 U.S. 555 (1992).

⁴⁵ *Id.* at 560 (internal quotation marks omitted) (quoting *Allen*, 468 U.S. at 771).

⁴⁶ *Id.*

⁴⁷ *Id.* (internal quotation marks omitted) (quoting *Whitmore v. Arkansas*, 495 U.S. 149, 155 (1990)).

⁴⁸ *Id.* (internal quotation marks omitted) (alteration in original) (quoting *Simon v. E. Ky. Welfare Rights Org.*, 426 U.S. 26, 41–42 (1976)).

⁴⁹ *Id.* at 560–61 (internal quotation marks omitted) (quoting *Simon*, 426 U.S. at 38, 43); Bradford C. Mank, *Standing and Global Warming: Is Injury to All Injury to None?*, 35 ENVTL. L. 1, 23–24 (2005) [hereinafter Mank, *Global Warming*].

⁵⁰ *DaimlerChrysler*, 547 U.S. 332, 342 (2006) (stating that parties asserting federal jurisdiction must “carry the burden of establishing their standing under Article III”); *Lujan*, 504 U.S. 555, 561 (1992) (stating also that parties asserting federal jurisdiction must carry the burden of establishing standing under Article III); Mank, *Standing and Statistical Persons*, *supra* note 35, at 673–74.

⁵¹ 422 U.S. 490 (1975).

representative of its members,” despite “the absence of injury to itself.”⁵² The Court warned, however, that “the possibility of such representational standing . . . does not eliminate or attenuate the constitutional requirement of a case or controversy.”⁵³ The court stated that the association must allege that at least one of its members is “suffering immediate or threatened injury as a result of the challenged action of the sort that would make out a justiciable case had the members themselves brought suit.”⁵⁴

B. Relaxed Standing in Procedural Cases

In cases involving procedural violations, such as the failure of the government to prepare an environmental impact statement pursuant to the National Environmental Policy Act (NEPA),⁵⁵ courts relax the imminence and redressability portions of the standing test.⁵⁶ Implicitly, courts in cases involving procedural violations are more willing to consider probabilistic injuries for standing, although courts in such cases do not always explicitly acknowledge the probabilistic nature of the injury.⁵⁷ In footnote seven of *Lujan*, Justice Scalia stated that plaintiffs who may suffer a concrete injury resulting from a procedural error by the government are entitled to a more relaxed application of redressability and immediacy standing requirements because remedying the procedural violation by, for example, providing for additional comment, may not change the substantive decision by the government.⁵⁸ Justice Scalia offered the example of a plaintiff who lives near a proposed dam who seeks an environmental assessment under NEPA to study its potential environmental impacts as the prototypical example of a procedural injury.⁵⁹ He stated,

There is this much truth to the assertion that “procedural rights” are special: The person who has been accorded a procedural right to protect his concrete

⁵² *Id.* at 511; see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 677–78; Christopher J. Roche, Note, *A Litigation Association Model to Aggregate Mass Tort Claims for Adjudication*, 91 VA. L. REV. 1463, 1493 (2005).

⁵³ *Warth*, 422 U.S. at 511; see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 678; Roche, *supra* note 52, at 1493.

⁵⁴ *Warth*, 422 U.S. at 511; see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 678; Roche, *supra* note 52, at 1493.

⁵⁵ National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321–4347 (2006).

⁵⁶ See *Lujan*, 504 U.S. 555, 572 n.7 (1992); Kimberly N. Brown, *Justiciable Generalized Grievances*, 68 MD. L. REV. 221, 257–64 (2008) (discussing the Court’s leniency in deciding standing in cases involving procedural violations). A plaintiff must still have alleged that the proposed government action would have some possibility of causing him a concrete harm. Justice Scalia explained that a person who lives next to a proposed dam site can sue regarding the government’s alleged failure to prepare an environmental impact statement, but not someone who lives in a distant state. *Lujan*, 504 U.S. at 572 n.7; Mank, *States Standing*, *supra* note 37, at 1717. The Supreme Court has never clearly explained to what extent the immediacy or redressability portions of the standing test are relaxed in procedural rights cases. *Id.* at 1718–20.

⁵⁷ Mank, *Standing and Statistical Persons*, *supra* note 35, at 668, 707.

⁵⁸ *Lujan*, 504 U.S. at 572 n.7.

⁵⁹ *Id.*; Mank, *Global Warming*, *supra* note 49, at 35–36; Mank, *States Standing*, *supra* note 37, at 1716.

interests can assert that right without meeting all the normal standards for redressability and immediacy. Thus, under our case law, one living adjacent to the site for proposed construction of a federally licensed dam has standing to challenge the licensing agency's failure to prepare an environmental impact statement, even though he cannot establish with any certainty that the statement will cause the license to be withheld or altered, and even though the dam will not be completed for many years.⁶⁰

Justice Scalia limited footnote seven standing to plaintiffs who would suffer concrete injuries resulting from the government's procedural error.⁶¹ Under footnote seven, a plaintiff living near a proposed dam has a potential concrete injury that poses a risk significant enough to provide standing, but "persons who live (and propose to live) at the other end of the country from the dam" do not have "concrete interests affected" and do not have standing to challenge a procedural violation.⁶²

The relaxation of the imminence requirement for procedural plaintiffs implicitly allows some type of probabilistic standing in procedural cases.⁶³ Footnote seven in the *Lujan* decision implies that a procedural rights plaintiff may obtain standing for a threatened risk, such as a dam that might be built in the future. In the dam example, there is only a serious possibility and not a guarantee that the government will build a dam, yet the *Lujan* Court recognized that standing was appropriate for the plaintiffs who are most realistically likely to suffer an injury if the dam is built.⁶⁴

While a plaintiff usually must demonstrate that it is "likely" that an injury will be redressed by a favorable decision,⁶⁵ plaintiffs asserting that the government has violated a procedural requirement are entitled to a remedy requiring the government to follow the procedural requirements even if it is uncertain that, for example, a judicial order requiring the government to conduct an environmental impact statement under NEPA will lead the government to change its substantive decision to build a dam.⁶⁶ In *Massachusetts v. Environmental Protection Agency* (*Massachusetts v. EPA*),⁶⁷ the Court explicitly adopted a probabilistic approach to whether a remedy is sufficient for a plaintiff alleging a procedural violation by stating

⁶⁰ *Lujan*, 504 U.S. at 572 n.7; see *Cantrell v. Long Beach*, 241 F.3d 674, 682 (9th Cir. 2001) (discussing relaxed standing requirements for procedural injuries); Mank, *Global Warming*, *supra* note 49, at 35–36 & n.240; Blake R. Bertagna, Comment, "Standing" Up for the Environment: The Ability of Plaintiffs to Establish Legal Standing to Redress Injuries Caused by Global Warming, 2006 B.Y.U. L. REV. 415, 457 (2006).

⁶¹ *Lujan*, 504 U.S. at 572 n.7.

⁶² *Id.* at 572 n.7, 573 n.8 ("[W]e do *not* hold that an individual cannot enforce procedural rights; he assuredly can, so long as the procedures in question are designed to protect some threatened concrete interest of his that is the ultimate basis of his standing."); William W. Buzbee, *Standing and the Statutory Universe*, 11 DUKE ENVTL. L. & POL'Y F. 247, 257 (2001); Mank, *States Standing*, *supra* note 37, at 1716.

⁶³ See Mank, *Standing and Statistical Persons*, *supra* note 35, at 722, 748.

⁶⁴ See *Lujan*, 504 U.S. at 572 n.7.

⁶⁵ *Id.* at 560–61.

⁶⁶ *Id.* at 572 n.7; Mank, *Global Warming*, *supra* note 49, at 35–36 & n.240.

⁶⁷ 549 U.S. 497 (2007).

that procedural rights litigants only needed to demonstrate “some possibility” that their requested remedy would redress a procedural injury: “When a litigant is vested with a procedural right, that litigant has standing if there is *some possibility* that the requested relief will prompt the injury-causing party to reconsider the decision that allegedly harmed the litigant.”⁶⁸ In *Massachusetts v. EPA*, the Court rejected the argument by the United States Environmental Protection Agency (EPA) that the petitioners had to prove that U.S. courts could remedy the global problem of climate change, and instead determined that the petitioners satisfied the redressability portion of the standing test because a court order requiring EPA to regulate emissions from new vehicles could “*slow or reduce*” global climate change.⁶⁹ The *Massachusetts v. EPA* decision’s use of the “some possibility” test appears to be applicable to all procedural plaintiffs,⁷⁰ but the Court’s specific standing analysis in the case may be limited to state plaintiffs.⁷¹

C. Imminent Risks in Nonprocedural Cases

Even in ordinary, nonprocedural standing cases, the Court has suggested that a plaintiff may obtain standing for a threatened risk. Prior to its *Lujan* decision, in *Babbitt v. United Farm Workers National Union*,⁷² the Court stated, “[O]ne does not have to await the consummation of threatened injury to obtain preventive relief. If the injury is certainly impending that is enough.”⁷³ The *Lujan* Court’s recognition of standing for an imminent injury appears to be similar to *Babbitt*’s approach to impending injuries.⁷⁴ The imminent injury test, however, does not clearly explain how probable a risk to a plaintiff must be or how soon it must occur for the litigant to have

⁶⁸ *Id.* at 518 (emphasis added); see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 674.

⁶⁹ *Massachusetts v. EPA*, 549 U.S. at 525; see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 675.

⁷⁰ *Massachusetts v. EPA*, 549 U.S. at 517–18; Mank, *States Standing*, *supra* note 37, at 1727 (arguing the “some possibility” standard in *Massachusetts v. EPA* applies to all procedural plaintiffs).

⁷¹ See *Massachusetts v. EPA*, 549 U.S. at 518–20; Mank, *Standing and Statistical Persons*, *supra* note 35, at 695–96 (discussing uncertainties about whether standing analysis in *Massachusetts v. EPA* applies only to states or to all plaintiffs); Dawn M. Kurz, Note, *The Return of the Lorax: Massachusetts v. EPA*, 127 *S. Ct.* 1438 (2007), *Can States “Speak” for the Trees?*, 87 NEB. L. REV. 1055, 1076–80 (2009).

⁷² 442 U.S. 289 (1979).

⁷³ *Id.* at 298 (internal quotation marks omitted) (quoting *Pennsylvania v. West Virginia*, 262 U.S. 553, 593 (1923)); see also *Valley Forge Christian Coll. v. Ams. United for Separation of Church & State, Inc.*, 454 U.S. 464, 472 (1982) (reasoning that a threatened injury may satisfy standing requirement); *Gladstone, Realtors v. Vill. of Bellwood*, 441 U.S. 91, 99 (1979); *Friends of the Earth, Inc. v. Gaston Copper Recycling Corp. (Gaston Copper)*, 204 F.3d 149, 160 (4th Cir. 2000) (en banc) (“The Supreme Court has consistently recognized that threatened rather than actual injury can satisfy Article III standing requirements.”).

⁷⁴ See *Lujan*, 504 U.S. 555, 560–61 (1992); see also *Ecological Rights Found. v. Pac. Lumber Co.*, 230 F.3d 1141, 1151 (9th Cir. 2000) (interpreting “imminent” standing test to include an increased risk of harm).

standing.⁷⁵ For example, the Ninth Circuit has interpreted the imminent standing test to include an increased risk of harm,⁷⁶ but that approach is arguably contrary to Justice Scalia's subsequent *Summers* decision.⁷⁷

III. LAIDLAW

A. Majority Decision

In *Laidlaw*, the Court stated that a threatened injury that alters a plaintiff's recreational activities may be enough for standing if the plaintiff has reasonable concerns about the risk.⁷⁸ *Laidlaw's* reasonable concerns test implicitly incorporates a probabilistic analysis because reasonableness is a relative term depending upon the probabilities of real life. The Court recognized standing even though the plaintiffs could not show that the defendant's activities had or would harm human health or the environment.⁷⁹ The plaintiffs argued that they had standing to sue a defendant that discharged mercury into a river because they avoided swimming or fishing in a river due to their fear of possible harms from the mercury, although they could not prove that the concentrations of mercury were likely to harm them or the environment.⁸⁰

The *Laidlaw* decision did not require the plaintiffs to prove that the environment had suffered an actual injury or was likely to suffer an injury in the future, but instead focused on whether the plaintiffs had reasonable grounds to change their recreational activities.⁸¹ The Court stated that in environmental cases "[t]he relevant showing for purposes of Article III standing . . . is not injury to the environment but injury to the plaintiff."⁸² The

⁷⁵ Bradford Mank, *Standing and Future Generations: Does Massachusetts v. EPA Open Standing for Generations to Come?*, 34 COLUM. J. ENVTL. L. 1, 39 (2009) [hereinafter Mank, *Future Generations*]; Mank, *Standing and Statistical Persons*, *supra* note 35, at 685.

⁷⁶ *Ecological Rights Found.*, 230 F.3d at 1151 (interpreting "imminent" standing test to include an increased risk of harm).

⁷⁷ See *infra* Part IV.A.

⁷⁸ *Laidlaw*, 528 U.S. 167, 181–83 (2000).

⁷⁹ *Id.*; see also Mank, *Future Generations*, *supra* note 75, at 40–41; Mank, *Standing and Statistical Persons*, *supra* note 35, at 685–87. One scholar has argued that the district court erred in concluding that *Laidlaw's* mercury releases posed no risk to the plaintiffs or the environment and that the releases in fact did pose a serious risk. Robin Kundis Craig, *Removing "The Cloak of a Standing Inquiry": Pollution Regulation, Public Health, and Private Risk in the Injury-in-Fact Analysis*, 29 CARDOZO L. REV. 149, 181–82 (2007). Even if Professor Craig's factual analysis is correct, the *Laidlaw* Court did not have access to her understanding of the scientific issues related to the toxicity of mercury. The Supreme Court in *Laidlaw* accepted the district court's conclusion that the mercury posed no proven risk to the plaintiffs or the environment, and the Court's standing discussion assumed that the plaintiffs could not prove actual harm from the mercury. *Laidlaw*, 528 U.S. at 181–83.

⁸⁰ *Laidlaw*, 528 U.S. at 181–83; see also Craig, *supra* note 79, at 181; Mank, *Future Generations*, *supra* note 75, at 40–41.

⁸¹ *Laidlaw*, 528 U.S. at 183–85; see Craig, *supra* note 79, at 181; Mank, *Future Generations*, *supra* note 75, at 40–41. But see *Laidlaw*, 528 U.S. at 198–201 (Scalia, J., dissenting) (arguing that plaintiffs should have to prove that defendant's activities actually harmed the environment).

⁸² *Laidlaw*, 528 U.S. at 181.

Supreme Court determined that the plaintiffs had suffered a sufficient injury for Article III standing because their reasonable concerns about the harmfulness of the mercury caused them to discontinue recreational use of the river.⁸³ The Court treated the loss or diminishment of the plaintiffs’ recreational or aesthetic enjoyment of the river as the concrete injury.⁸⁴ Because the diminished recreational or aesthetic enjoyment of the river was a sufficient concrete injury to the plaintiffs, the Court avoided the more difficult question of whether the mercury pollution was harmful enough to the plaintiffs to constitute a concrete injury.⁸⁵

The *Laidlaw* majority distinguished the Court’s prior decision in *City of Los Angeles v. Lyons*.⁸⁶ Justice Ginsburg summarized *Lyons* in a manner strikingly similar to Justice Breyer’s subsequent dissent in *Summers*, using the term “realistic threat” as a way to summarize the standing analysis in *Lyons*.⁸⁷ Justice Ginsburg stated, “In *Lyons*, we held that a plaintiff lacked standing to seek an injunction against the enforcement of a police chokehold policy because he could not credibly allege that he faced a *realistic threat* from the policy.”⁸⁸ She continued, “In the footnote from *Lyons* cited by the dissent, we noted that ‘[t]he reasonableness of Lyons’ fear is dependent upon the likelihood of a recurrence of the allegedly unlawful conduct,’ and that his ‘subjective apprehensions’ that such a recurrence would even *take place* were not enough to support standing.”⁸⁹ Justice Ginsburg’s point that “[t]he reasonableness of Lyons’ fear is dependent upon the likelihood of a recurrence of the allegedly unlawful conduct”⁹⁰ is a probabilistic analysis because “likelihood” is simply one way of asking what is the probability of an event occurring.

Contrasting the *Lyons* plaintiff’s merely subjective concern that he might be subject to a police chokehold in the future, Justice Ginsburg emphasized that the *Laidlaw* plaintiffs relied upon “undisputed” evidence “that *Laidlaw*’s unlawful conduct—discharging pollutants in excess of permit limits—was occurring at the time the complaint was filed.”⁹¹ She acknowledged that there was a subjective issue in *Laidlaw* about whether the plaintiffs’ avoidance of the river was reasonable, but she concluded that their concerns were clearly reasonable.⁹² She stated,

⁸³ *Id.* at 183–85.

⁸⁴ *Id.*

⁸⁵ Craig, *supra* note 79, at 181–83; Mank, *Standing and Statistical Persons*, *supra* note 35, at 686.

⁸⁶ 461 U.S. 95 (1983).

⁸⁷ Compare *Summers*, 129 S. Ct. 1142, 1155–56 (2009) (Breyer, J., dissenting) (arguing that in *Lyons* the Court would have found standing had the plaintiff shown “a realistic threat” of future harm due to reoccurrence of the challenged activity (quoting *Lyons*, 461 U.S. at 107 n.7 (emphasis omitted))), with *Laidlaw*, 528 U.S. at 184 (stating that the Court found no standing in *Lyons* because the plaintiff could not prove a “realistic threat” of harm from the policy); see also *infra* Part IV.C (discussing Justice Breyer’s dissent in *Summers*).

⁸⁸ *Laidlaw*, 528 U.S. at 184 (emphasis added).

⁸⁹ *Id.* (alteration in original) (quoting *Lyons*, 461 U.S. at 108 n.8).

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² *Id.* at 185.

Unlike the dissent, we see nothing “improbable” about the proposition that a company’s continuous and pervasive illegal discharges of pollutants into a river would cause nearby residents to curtail their recreational use of that waterway and would subject them to other economic and aesthetic harms. The proposition is entirely reasonable, the District Court found it was true in this case, and that is enough for injury in fact.⁹³

Implicitly, the *Laidlaw* decision assessed the probability of harm in determining that the plaintiffs’ fears were reasonable concerns and not “improbable.”⁹⁴ The Court observed that mercury is “an extremely toxic pollutant” and that “repeatedly, Laidlaw’s discharges exceeded the limits set by the permit” in determining that the plaintiffs’ avoidance of recreational activities was based on reasonable concerns about potentially harmful pollution.⁹⁵ If Laidlaw had been dumping a harmless substance into the river, it is doubtful that the Court would have found reasonable grounds for avoiding recreational use of the river.⁹⁶ Thus, implicitly, the Court assessed the probability that the mercury could harm the plaintiffs.

In addressing whether the plaintiffs had standing to seek civil penalties that would be paid to the United States, the Court concluded that plaintiffs had standing to seek such penalties because the penalties would “likely” deter the defendant from committing future violations that could harm the plaintiffs.⁹⁷ The Court acknowledged,

[T]here may be a point at which the deterrent effect of a claim for civil penalties becomes so insubstantial or so remote that it cannot support citizen standing. The fact that this vanishing point is not easy to ascertain does not detract from the deterrent power of such penalties in the ordinary case.⁹⁸

In determining that the penalties would likely deter the defendant from committing future violations that could harm the plaintiff, the Court implicitly considered the probability of deterrence.

Although the *Laidlaw* Court did not use the term “probabilistic standing,” both the Court’s reasonable concerns and future deterrent effect conclusions in the majority opinion were implicitly based on a probabilistic analysis.⁹⁹ Determining whether a concern is “reasonable” or not depends on how likely a harmful event is to occur, which is a probabilistic determination.¹⁰⁰ Similarly, deciding whether past penalties are likely to deter future conduct is essentially an exercise in probabilistic prediction.¹⁰¹

⁹³ *Id.* at 184–85.

⁹⁴ *See id.* at 183–85.

⁹⁵ *Id.* at 176, 181–83.

⁹⁶ Mank, *Standing and Statistical Persons*, *supra* note 35, at 686.

⁹⁷ *Laidlaw*, 528 U.S. at 185–87; Mank, *Future Generations*, *supra* note 75, at 41; Mank, *Standing and Statistical Persons*, *supra* note 35, at 732.

⁹⁸ *Laidlaw*, 528 U.S. at 186.

⁹⁹ *See id.* at 184–88.

¹⁰⁰ *See id.* at 183–85 (stating that plaintiffs concerns were “reasonable”).

¹⁰¹ *See id.* at 185–87 (stating that civil penalties can deter future violations and thus provide redress to the citizen).

Accordingly, probabilistic standing analysis underlies *Laidlaw* even if the Court never explicitly used the term “probabilistic standing.”

B. Justice Scalia’s Dissenting Opinion

Justice Scalia in his dissenting opinion, which was joined by Justice Thomas,¹⁰² argued that “[i]n the normal course” plaintiffs must demonstrate injury both to the environment and themselves to have standing.¹⁰³ He acknowledged that it was “perhaps possible” for a plaintiff to be injured even if the environment was not by, for instance, a loss of property value, as the *Laidlaw* plaintiffs had too vaguely alleged, but “such a plaintiff would have the burden of articulating and demonstrating the nature of that injury”¹⁰⁴—a burden which he contended the plaintiffs had failed to meet.¹⁰⁵ Additionally, he rejected the majority’s subjective reasonable concerns test as inconsistent with *Lyons*. Quoting *Lyons*, he stated, “Ongoing ‘concerns’ about the environment are not enough, for ‘[i]t is the *reality* of the threat of repeated injury that is relevant to the standing inquiry, not the plaintiff’s subjective apprehensions.’”¹⁰⁶

Furthermore, Justice Scalia argued that the plaintiffs had failed the redressability requirement of standing because it was too speculative, contrary to the majority’s conclusion that past civil penalties paid by the defendant would deter future violations by the defendant that might harm the plaintiffs.¹⁰⁷ As discussed in Part IV, Justice Scalia’s skepticism in *Laidlaw* about using past penalties to predict future deterrent effect is analytically similar to his concern in *Summers* about using past alleged government violations of the law or past behavior by members of an organization to predict future injuries. He implicitly rejected probabilistic standing in *Laidlaw* before he explicitly rejected it in *Summers*.

IV. SUMMERS

In *Summers*, after the United States Forest Service (Service) approved the Burnt Ridge Project, the salvage sale of timber on 238 acres of fire-damaged federal land in the Sequoia National Forest, several environmental organizations filed suit to enjoin the Service from applying its regulations exempting salvage sales of less than 250 acres from the notice, comment, and appeal process that Congress had required the Service to apply for “more significant land management decisions” and to challenge other regulations that did not apply to Burnt Ridge.¹⁰⁸ The district court

¹⁰² *Id.* at 198 (Scalia, J., dissenting).

¹⁰³ *Id.* at 199.

¹⁰⁴ *Id.*

¹⁰⁵ *Id.* at 199–200.

¹⁰⁶ *Id.* at 199 (alteration in original) (quoting *Lyons*, 461 U.S. 95, 107 n.8 (1983)).

¹⁰⁷ *Id.* at 202, 207–09.

¹⁰⁸ *Summers*, 129 S. Ct. 1142, 1147–48 (2009); see Forest Service Decision Making and Appeals Reform Act, Pub. L. No. 102-381, § 322, 106 Stat. 1374, 1419 (1992), *reprinted in*

granted a preliminary injunction against the Burnt Ridge salvage-timber sale and the parties settled their dispute over that project.¹⁰⁹ Despite the government's argument that the plaintiffs lacked standing as soon as they settled the Burnt Ridge Project dispute, the district court adjudicated the merits of the plaintiffs' challenges by invalidating five of the Service's regulations and entering a nationwide injunction against their application.¹¹⁰ The Ninth Circuit held that the plaintiffs' challenges to regulations not at issue in the Burnt Ridge Project were not ripe for adjudication, but affirmed the district court's conclusion that two regulations that were applicable to the Burnt Ridge Project were contrary to law, and upheld the nationwide injunction against their application.¹¹¹

A. Justice Scalia's Majority Opinion

In *Summers*, Justice Scalia's majority opinion concluded that the plaintiffs no longer satisfied the injury prong of the standing test once they settled the Burnt Ridge Project dispute.¹¹² The plaintiffs had initially satisfied the injury requirement when they submitted an affidavit alleging that organization member Ara Marderosian had repeatedly visited the Burnt Ridge site, that he had imminent plans to visit the site again, and that the government's actions would harm his aesthetic interests in viewing the flora and fauna at the site.¹¹³ The settlement, however, had remedied Marderosian's injury and no other affidavit submitted by the plaintiffs alleged that the Service's application of the challenged regulations was causing a particular organization member an imminent injury at a specific site.¹¹⁴ One affiant, Jim Bensman, asserted that he visited many national parks, had suffered injury in the past from development on Forest Service land, and planned to visit several unnamed national forests in the future.¹¹⁵ The Court rejected his affidavit as insufficient because he could not identify any particular site where he was likely to be harmed by timber sales or other actions authorized by the challenged regulations.¹¹⁶

In its *Summers* decision, the Supreme Court for the first time specifically addressed the question of probabilistic standing based on potential future injuries to an organization's members.¹¹⁷ Several environmental organizations

16 U.S.C. § 1612 note (2006) (requiring the Forest Service to establish a notice, comment, and appeal process for "proposed actions of the Forest Service concerning projects and activities implementing land and resource management plans developed under the Forest and Rangeland Renewable Resources Planning Act of 1974").

¹⁰⁹ *Summers*, 129 S. Ct. at 1148.

¹¹⁰ *Id.*

¹¹¹ *Id.*

¹¹² *Id.* at 1149–50.

¹¹³ *Id.* at 1149.

¹¹⁴ *Id.* at 1149–51.

¹¹⁵ *Id.* at 1150.

¹¹⁶ *Id.* ("There may be a chance, but is hardly a likelihood, that Bensman's wanderings will bring him to a parcel about to be affected by a project unlawfully subject to the regulations.").

¹¹⁷ Mank, *Standing and Statistical Persons*, *supra* note 35, at 749.

challenged the government’s sales as harming their members.¹¹⁸ The largest membership organization among the plaintiffs, the Sierra Club, asserted in its complaint that it has more than “700,000 members nationwide, including thousands of members in California who use and enjoy the Sequoia National Forest,”¹¹⁹ and, therefore, that it is likely that the Service’s future application of its challenged regulations would harm at least one of its members.¹²⁰ Justice Scalia’s majority opinion rejected the plaintiffs’ probabilistic standing argument because “[t]his novel approach to the law of organizational standing would make a mockery of our prior cases, which have required plaintiff-organizations to make specific allegations establishing that at least one identified member had suffered or would suffer harm.”¹²¹ He maintained that a court cannot rely on an organization’s general assertions about its members’ activities, and that the Court’s precedent required an organizational member to file an individual affidavit confirming that he or she uses a specific site that the government is affecting and that his or her recreational interests will be harmed by the government’s alleged failure to comply with legal requirements.¹²² The Court observed that its precedent required individual members of an organization to file affidavits affirming how each one is harmed or will be imminently harmed by a challenged activity, unless all members of an organization are harmed by an activity and that exception was clearly inapplicable.¹²³

Because federal courts have an independent duty to assess whether standing exists even if no party challenges standing, the Court reasoned that an Article III court may not accept a plaintiff organization’s assertions that some of its members will probably be harmed by a challenged activity, but must verify that standing exists by examining affidavits from individual members that have used particular government lands and have suffered an injury caused by the challenged activity.¹²⁴ Justice Scalia argued, “While it is certainly possible—perhaps even *likely*—that one individual will meet all of these [standing] criteria, that speculation does not suffice.”¹²⁵ The Court concluded that none of the timely filed affidavits “establish[ed] that the affiants’ members will *ever* visit one of the small parcels at issue.”¹²⁶ Additionally, the majority rejected all late-filed affidavits, introduced by the plaintiffs after the district court entered its judgment and after they had filed

¹¹⁸ *Summers*, 129 S. Ct. at 1147, 1151; *accord id.* at 1154 (Breyer, J., dissenting) (listing the membership size of the various plaintiff organizations).

¹¹⁹ *Id.* at 1154 (Breyer, J., dissenting) (internal quotation marks omitted) (quoting Corrected Complaint for Declaratory and Injunctive Relief app. at 34, *Earth Island Inst. v. Pengilly*, 376 F. Supp. 2d 994 (E.D. Cal. 2005) (No. CIV F-03-6386 JKS)) (listing the membership size of the various plaintiff organizations).

¹²⁰ *See id.*

¹²¹ *Id.* at 1151 (majority opinion).

¹²² *Id.* at 1151–52.

¹²³ *Id.* at 1152 (citing *NAACP v. Alabama ex rel. Patterson*, 357 U.S. 449, 459 (1958) (noting that the release of membership lists affected all organization members)).

¹²⁴ *Id.*

¹²⁵ *Id.* at 1152 (emphasis added).

¹²⁶ *Id.* at 1153.

a notice of appeal, because the Court concluded that such late supplementation of the record was inappropriate under the Federal Rules of Civil Procedure despite the dissenting opinion's contrary view.¹²⁷ Because it held that the plaintiffs failed to demonstrate standing, the Court did not address the government's contention that the case was not ripe for review or whether a nationwide injunction would have been appropriate if the plaintiffs had prevailed.¹²⁸

B. Justice Kennedy's Concurring Opinion

In a brief concurring opinion, Justice Kennedy explained that he joined in full the opinion of the Court because a plaintiff can challenge the alleged violation of a procedural right only if the plaintiff can demonstrate a separate concrete injury arising from that violation and that the plaintiffs in the case had failed to prove such a concrete injury.¹²⁹ He observed that "[t]his case would present different considerations if Congress had sought to provide redress for a concrete injury 'giv[ing] rise to a case or controversy where none existed before.'"¹³⁰ Justice Kennedy concluded that the statute at issue did not include an express citizen suit provision "indicat[ing] [that] Congress intended to identify or confer some interest separate and apart from a procedural right."¹³¹

Justice Breyer's dissenting opinion read Justice Kennedy's concurring opinion as implying that Congress has the authority to allow probabilistic organizational standing if a statute, especially one containing a citizen suit provision,¹³² carefully specifies when such an organization may sue.¹³³ Justice Breyer observed that if Congress had expressly enacted a statute allowing standing for parties injured by salvage sales in the past to have standing if they are likely to use salvage parcels in the future, provided that they have objected to such sales in the past and will do so in the future, "[t]he majority

¹²⁷ *Id.*

¹²⁸ *Id.*

¹²⁹ *Id.* (Kennedy, J., concurring).

¹³⁰ *Id.* (quoting *Lujan*, 504 U.S. 555, 580 (1992) (Kennedy, J., concurring in part and concurring in judgment)).

¹³¹ *Id.*

¹³² Several citizen suit statutes allow "any person" to sue as a private attorney general. *E.g.*, Federal Election Campaign Act of 1971, 2 U.S.C. § 437g(a)(8)(A) (2006); Toxic Substances Control Act § 20, 15 U.S.C. § 2619(a) (2006); Endangered Species Act of 1973, 16 U.S.C. § 1540(g) (2006); Surface Mining Control and Reclamation Act of 1977 § 520, 30 U.S.C. § 1270(a) (2006); Federal Water Pollution Control Act § 505, 33 U.S.C. § 1365(a) (2006); Safe Drinking Water Act § 1449, 42 U.S.C. § 300j-8 (2006); Resource Conservation and Recovery Act of 1976 § 7002, 42 U.S.C. § 6972(a) (2006); Clean Air Act § 304, 42 U.S.C. § 7604(a) (2006); *see also* Elliott, *supra* note 35, at 493 & n.160; Mank, *Standing and Statistical Persons*, *supra* note 35, at 681 & n.81.

¹³³ *Summers*, 129 S. Ct. at 1154–55 (Breyer, J., dissenting) ("To understand the *constitutional* issue that the majority decides, it may prove helpful to imagine that Congress enacted a *statutory* provision that expressly permitted environmental groups like the respondents here to bring cases just like the present one."); *see also* Mank, *Standing and Statistical Persons*, *supra* note 35, at 753.

cannot, and does not, claim that such a statute would be unconstitutional.”¹³⁴ It is possible that organizations such as Earth Island Institute or the Sierra Club will lobby Congress to amend statutes to give them standing in similar cases in the future to test Justice Breyer’s interpretation of Justice Kennedy’s concurring opinion.¹³⁵

C. Justice Breyer’s Dissenting Opinion

In his dissenting opinion, Justice Breyer borrowed language from *Lyons* in proposing a realistic threat test for determining when an injury is sufficient for standing.¹³⁶ Because the “Service sells timber for logging on ‘many thousands’ of small (250-acre or less) woodland parcels without following legally required procedures—procedures which, if followed, could lead the Service to cancel or to modify the sales,”¹³⁷ Justice Breyer’s dissenting opinion argued that the plaintiffs, who collectively have more than 700,000 members in the United States, had standing because their members were likely to be affected by the government’s allegedly illegal salvage timber sales in the future.¹³⁸ He argued that the majority had acknowledged that the plaintiff organizations had demonstrated that “they have members who have used salvage-timber parcels in the past,”¹³⁹ and that the Service’s unlawful procedures affect those parcels by allowing sales without the “notice, comment, and appeal procedures required by law,” but that the majority had denied the likelihood that members of these organizations will be harmed by future salvage sales by imposing an unnecessarily restrictive definition of what is an imminent injury.¹⁴⁰

Justice Breyer argued that the Court should adopt a realistic approach to what is an imminent or likely future injury.¹⁴¹ He acknowledged that the Court had “sometimes” used the term “imminent” in its standing decisions,¹⁴² but he argued that the majority had inappropriately used the term to bar standing in contrast to previous decisions that had used that term to reject

¹³⁴ *Summers*, 129 S. Ct. at 1155 (Breyer, J., dissenting); Mank, *Standing and Statistical Persons*, *supra* note 35, at 753.

¹³⁵ Mank, *Standing and Statistical Persons*, *supra* note 35, at 753.

¹³⁶ *Summers*, 129 S. Ct. at 1155–58 (Breyer, J., dissenting). Justice Breyer’s approach to standing is rooted in a “public law” conception of standing that seeks to prevent the Executive Branch from ignoring congressional directives in statutes addressing matters of public concern, including public health and the environment, by allowing liberal use of citizen suits to enforce the law. By contrast, Justice Scalia’s more limited approach to standing arguably is grounded in a private law or common law view of the judiciary, which limits courts to adjudicating disputes involving concrete injuries that would be largely if not entirely recognizable to common law English judges.

¹³⁷ *Id.* at 1153.

¹³⁸ *Id.* at 1153–55. The plaintiff Sierra Club has more than 700,000 members, Earth Island Institute has over 15,000 members, and the Center for Biological Diversity has over 5000 members in the United States. *Id.* at 1154.

¹³⁹ *Id.*

¹⁴⁰ *Id.* at 1155–56.

¹⁴¹ *Id.*

¹⁴² *Id.* at 1155.

standing only where the alleged harm was “merely ‘conjectural’ or ‘hypothetical’ or otherwise speculative.”¹⁴³ Justice Breyer contended that the majority’s use of the imminent test was inappropriate where a plaintiff has “*already* been subject to the injury it wishes to challenge,” as it had in the case at issue, and “there is a *realistic likelihood* that the challenged future conduct will, in fact, recur and harm the plaintiff.”¹⁴⁴ In *Lyons*, the Court had stated that the plaintiff, who had been subject to an unlawful police chokehold in the past, “would have had standing had he shown ‘a *realistic threat*’ that reoccurrence of the challenged activity would cause him harm ‘in the reasonably near future.’”¹⁴⁵ Justice Breyer maintained that the Court’s standing precedent required only a realistic threat and did not require a plaintiff to meet “identification requirements more stringent than the word ‘realistic’ implies.”¹⁴⁶ Accordingly, although he acknowledged that plaintiffs could not predict from which specific tracts of fire-damaged land the Service will sell timber as salvage without following the procedural rules that the plaintiffs argued are mandatory, he concluded that there was a realistic threat that a member of the plaintiff organizations will be harmed by a sale by the Service and, therefore, that the plaintiffs were entitled to standing under the Court’s precedent.¹⁴⁷

Justice Breyer argued that the Court had implicitly used a probabilistic or realistic approach to standing in several other areas of law. He asked,

Would courts deny *standing* to a holder of a future interest in property who complains that a life tenant’s waste of the land will almost inevitably hurt the value of his interest—though he will have no personal interest for several years into the future? Would courts deny *standing* to a landowner who complains that a neighbor’s upstream dam constitutes a nuisance—even if the harm to his downstream property (while bound to occur) will not occur for several years? Would courts deny *standing* to an injured person seeking a protection order from future realistic (but nongeographically specific) threats of further attacks?¹⁴⁸

Justice Breyer argued that “a threat of future harm may be realistic even where the plaintiff cannot specify precise times, dates, and GPS coordinates.”¹⁴⁹ Relying on the *Massachusetts v. EPA* decision, he reasoned, “[W]e recently held that Massachusetts has *standing* to complain of a procedural failing, namely, EPA’s failure properly to determine whether to restrict carbon dioxide emissions, even though that failing would create Massachusetts-based harm which (though likely to occur) might not occur

¹⁴³ *Id.* (quoting *Lujan*, 504 U.S. 555, 560 (1992)); see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 668.

¹⁴⁴ *Summers*, 129 S. Ct. at 1155–56 (Breyer, J., dissenting); see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 752.

¹⁴⁵ *Summers*, 129 S. Ct. at 1156 (Breyer, J., dissenting) (quoting *Los Angeles v. Lyons*, 461 U.S. 95, 107 n.7, 108 (1983)).

¹⁴⁶ *Id.*

¹⁴⁷ *Id.* at 1156–58; Mank, *Standing and Statistical Persons*, *supra* note 35, at 752–53.

¹⁴⁸ *Summers*, 129 S. Ct. at 1156 (Breyer, J., dissenting).

¹⁴⁹ *Id.*

for several decades.”¹⁵⁰ There has been uncertainty about whether *Massachusetts v. EPA*’s liberal approach to standing for future injuries applies only to state plaintiffs or all plaintiffs.¹⁵¹ If Justice Breyer is correct that *Massachusetts v. EPA*’s standing analysis for probabilistic future injuries applies to nonstate plaintiffs,¹⁵² then *Summers*’s rejection of probabilistic standing is hard to justify. His dissent, however, commanded only four of the five members of the *Massachusetts v. EPA* majority because Justice Kennedy, who was in the majority in *Massachusetts v. EPA*,¹⁵³ sided with the majority in *Summers*.¹⁵⁴ Accordingly, it is not clear that a majority of the Court agrees with Justice Breyer’s view that *Massachusetts v. EPA* recognized probabilistic standing for nonstate plaintiffs. Yet a future Court majority that is more sympathetic to probabilistic standing than the current majority might use *Massachusetts v. EPA* as a precedent to expand standing as Justice Breyer’s dissent suggests.

Justice Breyer asserted that the Service’s actions in conducting, as the Service conceded, “thousands of further salvage-timber sales”¹⁵⁵ were as likely to harm the plaintiffs as the examples given in the preceding two paragraphs and thus constituted a realistic threat deserving of standing under the *Lyons* test.¹⁵⁶ For example, affiant Bensman stated that he had visited seventy National Forests and visited some of them hundreds of times.¹⁵⁷ Although Bensman’s affidavit did not state “which particular sites will be affected” by future Service projects,¹⁵⁸ Justice Breyer concluded that there was a realistic threat that Bensman would be affected by one of the thousands of future exempted Service projects that do not follow required procedural rules.¹⁵⁹ Justice Breyer provided a compelling analogy, stating, “To know, virtually for certain, that snow will fall in New England this winter is not to know the name of each particular town where it is bound to arrive. The law of standing does not require the latter kind of specificity.”¹⁶⁰

Additionally, Justice Breyer argued that the majority had wrongly excluded the affidavits filed by the plaintiffs after they settled the Burnt

¹⁵⁰ *Id.*

¹⁵¹ See Mank, *States Standing*, *supra* note 37, at 1746–47 (discussing uncertainties about whether standing analysis in *Massachusetts v. EPA* applies only to states or to all plaintiffs); Kurz, *supra* note 71, at 1076–80. Some portion of *Massachusetts v. EPA* appears to apply to all procedural plaintiffs, 549 U.S. 497, 517–18 (2007), but the definition and scope of what are procedural rights is uncertain. See Mank, *States Standing*, *supra* note 37, at 1727 (arguing the “some possibility” standard in *Massachusetts v. EPA* applies to all procedural plaintiffs); *id.* at 1747–52 (arguing the definition and scope of procedural rights exception is uncertain).

¹⁵² See *Summers*, 129 S. Ct. at 1156 (Breyer, J., dissenting).

¹⁵³ *Massachusetts v. EPA*, 549 U.S. at 501 (listing the majority as including Justices Stevens, Kennedy, Souter, Ginsburg, and Breyer).

¹⁵⁴ See *supra* Part IV.B.

¹⁵⁵ *Summers*, 129 S. Ct. at 1156 (Breyer, J., dissenting).

¹⁵⁶ *Id.* at 1156–57.

¹⁵⁷ *Id.* at 1157.

¹⁵⁸ *Id.*

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

Ridge dispute.¹⁶¹ He argued that the plaintiffs had not seen the need to file additional affidavits while the Burnt Ridge case was pending because even the majority agreed that the plaintiffs had standing to bring that case and that the need for additional affidavits only became apparent when they settled that dispute.¹⁶² He argued that neither the Constitution nor any statutes or the Federal Rules of Civil Procedure prohibited the filing of additional affidavits, and that Federal Rule of Civil Procedure 15(d) empowered a district court judge with liberal discretion to amend a complaint and hence allow additional affidavits even if one dispute is settled.¹⁶³ The late-filed affidavits identified a number of pending salvage timber sales in areas that the affiants frequently visited and planned to visit again in the near future.¹⁶⁴ Justice Breyer contended that these affidavits clearly demonstrated a “‘realistic threat’ of injury to plaintiffs brought about by reoccurrence of the challenged conduct—conduct that the Forest Service thinks lawful and *admits* will reoccur.”¹⁶⁵

D. Analysis

Justice Scalia and Justice Breyer disagreed about whether, to establish standing, a plaintiff must demonstrate exactly when and how injury will follow from the government’s allegedly illegal actions as Justice Scalia maintained for the majority, or that it is enough for a plaintiff to allege sufficient facts that injury will probably follow from the government actions, as Justice Breyer argued. The difference in their approaches is shown in the divergent ways they interpreted and applied *Lyons* to the facts in *Summers*. According to Justice Scalia, the facts alleged by the plaintiffs in *Summers* were weaker than those in *Lyons*:

The allegations here present a weaker likelihood of concrete harm than that which we found insufficient in *Lyons* where a plaintiff who alleged that he had been injured by an improper police chokehold sought injunctive relief barring use of the hold in the future. We said it was “no more than conjecture” that Lyons would be subjected to that chokehold upon a later encounter. Here we are asked to assume not only that Bensman will stumble across a project tract unlawfully subject to the regulations, but also that the tract is about to be developed by the Forest Service in a way that harms his recreational interests, and that he would have commented on the project but for the regulation. Accepting an intention to visit the National Forests as adequate to confer standing to challenge any Government action affecting any portion of those forests would be tantamount to eliminating the requirement of concrete, particularized injury in fact.¹⁶⁶

¹⁶¹ *Id.* at 1157–58.

¹⁶² *Id.*

¹⁶³ *Id.* at 1158; FED. R. CIV. P. 15(d).

¹⁶⁴ *Summers*, 129 S. Ct. at 1157–58.

¹⁶⁵ *Id.*

¹⁶⁶ *Id.* at 1150 (majority opinion) (citations omitted).

Based upon his interpretation that *Lyons* requires a plaintiff to establish with certainty that he would be subject to a chokehold, Justice Scalia reasoned that the *Summers* plaintiffs failed to demonstrate an injury because they could not prove when a member of their organization would be harmed at a specific site by the government’s failure to follow notice and comment procedures with a particular fire-salvage sale.¹⁶⁷

By contrast, Justice Breyer argued that *Lyons* only required a plaintiff to demonstrate a realistic threat of future injury.¹⁶⁸ According to Justice Breyer, the *Summers* plaintiffs met his realistic threat test because the facts alleged by the plaintiffs demonstrated that one of their thousands of members who regularly used federal forest lands would be harmed in the reasonably near future by one of the thousands of fire salvage sales conducted by the Service.¹⁶⁹ In particular, it seemed likely that Bensman would be harmed because he regularly traveled to numerous Service forest properties.¹⁷⁰

V. EASY CASES

Courts are likely to distinguish *Laidlaw* from *Summers* in cases that are factually similar to one of those two cases. Thus, in cases in which the plaintiff alleges that she has ceased to use a river or other recreational area because of a fear of pollution, courts are likely to follow *Laidlaw* and find standing even though the determination of what are reasonable concerns is likely to involve to some extent an assessment of probabilistic harm.¹⁷¹ On the other hand, if an organizational plaintiff argues that allegedly illegal government actions are likely to harm its members in the future, but there are no allegations of current harms or lost recreational activities, then *Summers* will control and the court will find no standing.¹⁷² Some pre-*Summers* cases had suggested that courts are more willing to find probabilistic standing in environmental cases than in nonenvironmental cases, but that distinction is now no longer tenable in light of *Summers*.¹⁷³

A. Lower Court Decisions Relying on *Laidlaw* to Recognize Probabilistic Standing

As discussed in this Part, three courts of appeals decisions factually similar to *Laidlaw* have recognized standing for threatened or probabilistic injuries. In each of these cases there was some present pollution and some change in the plaintiffs’ recreational activities in light of that pollution. Thus, even after *Summers*, the Supreme Court would likely find standing in each of

¹⁶⁷ *Id.*

¹⁶⁸ *Id.* at 1156 (Breyer, J., dissenting).

¹⁶⁹ *Id.* at 1156–58.

¹⁷⁰ *Id.* at 1157.

¹⁷¹ See *infra* Part V.A.

¹⁷² See *infra* Part V.B.

¹⁷³ See *infra* Part V.C.

these cases, although the Court might disagree with some of the courts of appeals' language regarding probabilistic standing.

In *Friends of the Earth, Inc. v. Gaston Copper Recycling Corp. (Gaston Copper)*,¹⁷⁴ the plaintiff alleged that he swam and fished in a lake less often than before because of his concern about the defendant's discharge of pollution into the lake.¹⁷⁵ The Fourth Circuit in an en banc decision concluded that the plaintiff "has plainly demonstrated injury in fact" because "[h]e has produced evidence of actual *or threatened injury* to a waterway in which he has a legally protected interest."¹⁷⁶ The court interpreted *Laidlaw* to allow standing where a plaintiff has reasonable concerns about a *probabilistic* injury and stated, "The Supreme Court has consistently recognized that threatened rather than actual injury can satisfy Article III standing requirements Threats or increased risk thus constitutes cognizable harm. Threatened environmental injury is by nature *probabilistic*."¹⁷⁷

In *Ecological Rights Foundation v. Pacific Lumber Co.*, the Ninth Circuit recognized that a plaintiff may demonstrate an injury in fact if the defendant's actions increase the probability that the plaintiff will suffer future injury.¹⁷⁸ Several plaintiffs alleged that they had regularly swam or fished in Yager Creek, but further alleged that they had stopped or diminished these recreational activities because of their fears about the harmfulness of the defendant's pollution of the Creek.¹⁷⁹ Citing *Laidlaw* and *Gaston Copper*, the *Ecological Rights Foundation* decision stated that a plaintiff's reasonable concerns about an increased risk of harm from a defendant's activities is sufficient for standing.¹⁸⁰ Additionally, the Ninth Circuit stated that a plaintiff could obtain standing to reduce the risk of future pollution even if no actual harm had occurred yet:

The Clean Water Act . . . not only regulates actual water pollution, but embodies a range of prophylactic, procedural rules designed to reduce the risk of pollution. It is not necessary for a plaintiff challenging violations of rules

¹⁷⁴ 204 F.3d 149 (4th Cir. 2000) (en banc).

¹⁷⁵ *Id.* at 156; Mank, *Future Generations*, *supra* note 75, at 42; Mank, *Standing and Statistical Persons*, *supra* note 35, at 687.

¹⁷⁶ *Gaston Copper*, 204 F.3d at 156 (emphasis added); *see also* Craig, *supra* note 79, at 191 & n.207; Mank, *Future Generations*, *supra* note 75, at 41–42; Mank, *Standing and Statistical Persons*, *supra* note 35, at 687.

¹⁷⁷ *Gaston Copper*, 204 F.3d at 160 (emphasis added); *accord Ecological Rights Found.*, 230 F.3d 1141, 1151 (9th Cir. 2000) (quoting *Gaston Copper* with approval); Craig, *supra* note 79, at 191 (discussing *Gaston Copper* as recognizing that increased risk is enough to provide standing for plaintiff); Mank, *Future Generations*, *supra* note 75, at 41; Mank, *Standing and Statistical Persons*, *supra* note 35, at 687.

¹⁷⁸ *Ecological Rights Found.*, 230 F.3d at 1151–52; Craig, *supra* note 79, at 191–92; Mank, *Future Generations*, *supra* note 75, at 42; Mank, *Standing and Statistical Persons*, *supra* note 35, at 688.

¹⁷⁹ *Ecological Rights Found.*, 230 F.3d at 1144–45, 1150–52.

¹⁸⁰ *Id.* at 1152; Mank, *Future Generations*, *supra* note 75, at 42–43; Mank, *Standing and Statistical Persons*, *supra* note 35, at 688.

designed to reduce the *risk* of pollution to show the presence of *actual* pollution in order to obtain standing.¹⁸¹

The Ninth Circuit’s argument that standing is possible to avoid future harm even if there is no actual harm yet is arguably consistent with the underlying reasoning supporting *Laidlaw’s* reasonable concerns and deterrent effect conclusions.¹⁸² The *Summers* decision, however, suggests that prophylactic standing is only possible if the future harm is imminent.¹⁸³

Furthermore, the First Circuit has recognized that a plaintiff has standing if a defendant’s actions present a realistic threat of a probabilistic near-term harm.¹⁸⁴ In *Maine People’s Alliance v. Mallinckrodt, Inc.*,¹⁸⁵ the First Circuit determined that the citizen suit provision of the Resource Conservation and Recovery Act (RCRA)¹⁸⁶ “allows citizen suits when there is a reasonable prospect that a serious, *near-term* threat to human health or the environment exists.”¹⁸⁷ The court explained that “[i]t is the *threat* that must be close at hand, even if the perceived *harm* is not.”¹⁸⁸ Providing an example, the decision observed that “if there is a reasonable prospect that a carcinogen released into the environment today may cause cancer twenty years hence, the threat is near-term even though the perceived harm will only occur in the distant future.”¹⁸⁹ The plaintiffs alleged that they stopped eating fish or shellfish from the Penobscot River and avoided recreating in the River because of their fear of harm from the defendant’s mercury discharges.¹⁹⁰ Rejecting the defendant’s claim that the plaintiffs must provide evidence of actual environmental harm, the First Circuit determined that “probabilistic harms are legally cognizable, and the district court made a supportable finding that a sufficient probability of harm exists to satisfy the Article III standing inquiry.”¹⁹¹ The First Circuit’s “reasonable prospect” test is based upon and arguably consistent with *Laidlaw’s* reasonable concerns

¹⁸¹ *Ecological Rights Found.*, 230 F.3d at 1152 n.12; see also Craig, *supra* note 79, at 192; Mank, *Future Generations*, *supra* note 75, at 43.

¹⁸² Mank, *Standing and Statistical Persons*, *supra* note 35, at 688.

¹⁸³ See *Summers*, 129 S. Ct. 1142, 1149–53 (2009) (adopting narrow definition of what is an imminent injury).

¹⁸⁴ Mank, *Future Generations*, *supra* note 75, at 43–44; Mank, *Standing and Statistical Persons*, *supra* note 35, at 688.

¹⁸⁵ 471 F.3d 277 (1st Cir. 2006).

¹⁸⁶ Resource Conservation and Recovery Act of 1976, 42 U.S.C. §§ 6901–6992k (2006) (amending Solid Waste Disposal Act, Pub. L. No. 89-272, 79 Stat. 992 (1965)).

¹⁸⁷ *Me. People’s Alliance*, 471 F.3d at 279 (emphasis added); see also Craig, *supra* note 79, at 193; Mank, *Future Generations*, *supra* note 75, at 43; Mank, *Standing and Statistical Persons*, *supra* note 35, at 681–82 & n.81.

¹⁸⁸ *Me. People’s Alliance*, 471 F.3d at 279 n.1 (emphasis added); see also Craig, *supra* note 79, at 193; Mank, *Future Generations*, *supra* note 75, at 43; Mank, *Standing and Statistical Persons*, *supra* note 35, at 681–82 & n.81.

¹⁸⁹ *Me. People’s Alliance*, 471 F.3d at 279 n.1; see also Craig, *supra* note 79, at 193; Mank, *Future Generations*, *supra* note 75, at 43; Mank, *Standing and Statistical Persons*, *supra* note 35, at 681–82 & n.81.

¹⁹⁰ *Me. People’s Alliance*, 471 F.3d at 284.

¹⁹¹ *Id.* at 283–84; see also Craig, *supra* note 79, at 193; Mank, *Future Generations*, *supra* note 75, at 43; Mank, *Standing and Statistical Persons*, *supra* note 35, at 681–82 & n.81.

test. The *Summers* majority, however, might be troubled by characterizing an injury “twenty years hence” as an imminent one.¹⁹²

The First Circuit interpreted *Laidlaw*’s reasonable concerns standing test to require the plaintiffs to prove a realistic threat of harm, which is the same test that Justice Breyer subsequently proposed in his *Summers* dissenting opinion.¹⁹³ The court stated,

Still, neither a bald assertion of such a harm nor a purely subjective fear that an environmental hazard may have been created is enough to ground standing. Rather, an individual’s decision to deny herself aesthetic or recreational pleasures based on concern about pollution will constitute a cognizable injury only when the concern is premised upon a realistic threat.¹⁹⁴

The probabilistic approach of the First, Fourth, and Ninth Circuits is similar in many ways to Justice Breyer’s dissenting opinion in *Summers*, especially the First Circuit’s use of the same realistic threat test.¹⁹⁵ Nevertheless, a majority of the current Supreme Court might affirm the result in these three cases as consistent with *Laidlaw* because the facts of these cases are comparable; they all involved plaintiffs who alleged that they avoided recreational activities in a river because they feared harm from pollution dumped in the river by the defendant. Some Justices who joined the *Summers* majority might accept the standing determination in the three decisions, but also dismiss those three decisions’ approval of probabilistic standing as unnecessary dicta that is no longer valid in light of the *Summers* decision.¹⁹⁶

B. Cases Similar to Summers

As will be discussed below, before the Court decided *Summers*, a panel of the District of Columbia Circuit similarly rejected an organization’s standing claims based upon the probability of future injuries to its members. In *Public Citizen v. National Highway Traffic Safety Administration* (*Public Citizen I*),¹⁹⁷ the court suggested that probabilistic injuries are never sufficient for constitutional standing.¹⁹⁸ The court conceded that the Circuit

¹⁹² *Me. People’s Alliance*, 471 F.3d at 279 n.1; see *Summers*, 129 S. Ct. 1142, 1149–53 (2009) (adopting a narrow definition of what is an imminent injury).

¹⁹³ *Me. People’s Alliance*, 471 F.3d at 284; *Summers*, 129 S. Ct. at 1156–58 (Breyer, J., dissenting) (proposing realistic threat test for what constitutes sufficient injury for standing); see also Mank, *Future Generations*, *supra* note 75, at 44; Mank, *Standing and Statistical Persons*, *supra* note 35, at 681–82 n.81.

¹⁹⁴ *Me. People’s Alliance*, 471 F.3d at 284.

¹⁹⁵ Compare *Summers*, 129 S. Ct. at 1156–58 (Breyer, J., dissenting) (proposing realistic threat test for what constitutes sufficient injury for standing), with *Me. People’s Alliance*, 471 F.3d at 284 (interpreting *Laidlaw*’s reasonable concerns standing test to require the plaintiffs to prove a realistic threat of harm).

¹⁹⁶ *Summers*, 129 S. Ct. at 1151–53 (rejecting dissent’s theory of probabilistic standing).

¹⁹⁷ 489 F.3d 1279 (2007), modified on reh’g, 513 F.3d 234 (D.C. Cir. 2008) (per curiam).

¹⁹⁸ *Id.* at 1291–99; see also *Pub. Citizen v. Nat’l Highway Traffic Safety Admin. (Public Citizen II)*, 513 F.3d 234, 237 (D.C. Cir. 2008) (per curiam); Mank, *Future Generations*, *supra* note 75, at 49–50;

in a few previous cases had allowed standing in decisions involving probabilistic future injuries, but strongly implied that standing in such cases violated separation of powers principles by intruding on the role of the political branches.¹⁹⁹ The three-judge panel encouraged the Circuit to sit as an en banc court in a future case to address whether probabilistic standing should be prohibited.²⁰⁰ The *Summers* decision has partially answered that question by stating that organizational standing based upon probabilistic injuries is inappropriate, but, as Part VI.C argues, that decision did not resolve all issues concerning probabilistic standing.²⁰¹

Public Citizen alleged that its members had an increased risk of future injury from an automobile accident because the National Highway Traffic Safety Administration’s (NHTSA) standards for tire pressure monitors were less stringent than the alternative requirements that Public Citizen had proposed.²⁰² In 2000, Congress enacted the Transportation Recall Enhancement, Accountability, and Documentation Act (TREAD Act)²⁰³ to require new tire safety requirements.²⁰⁴ The TREAD Act required the Secretary of Transportation to issue regulations mandating new vehicles to include a warning system “to indicate to the operator when a tire is significantly under inflated.”²⁰⁵

In 2005, NHTSA promulgated a final rule regulating tire safety: Federal Motor Vehicle Safety Standard 138.²⁰⁶ Standard 138 requires automakers to install tire pressure monitoring systems that warn drivers “when the pressure in the vehicle’s tires is approaching a level at which permanent tire damage could be sustained as a result of heat buildup and tire failure is

Mank, *Standing and Statistical Persons*, *supra* note 35, at 673; Cassandra Sturkie & Suzanne Logan, *Further Developments in the D.C. Circuit’s Article III Standing Analysis: Are Environmental Cases Safe from the Court’s Deepening Skepticism of Increased-Risk-of-Harm Claims?*, 38 *Env’tl. L. Rep.* (Env’tl. Law Inst.) 10,460, 10,464, 10,470 (2008) (arguing that the two *Public Citizen* decisions seek to severely limit or eliminate probabilistic standing claims).

¹⁹⁹ *Public Citizen I*, 489 F.3d at 1291–92; *Public Citizen II*, 513 F.3d at 237; Mank, *Standing and Statistical Persons*, *supra* note 35, at 679–84; Sturkie & Logan, *supra* note 198, at 10,467.

²⁰⁰ *Public Citizen II*, 513 F.3d at 241; Mank, *Standing and Statistical Persons*, *supra* note 35, at 669; Sturkie & Logan, *supra* note 198, at 10,466.

²⁰¹ See *infra* Part V.C (questioning *Summers*’s rejection of probabilistic reasoning).

²⁰² *Public Citizen I*, 489 F.3d at 1291; Mank, *Future Generations*, *supra* note 75, at 49; Mank, *Standing and Statistical Persons*, *supra* note 35, at 707; Sturkie & Logan, *supra* note 198, at 10,464.

²⁰³ Pub. L. No. 106-414, 114 Stat. 1800 (2000) (codified as amended in scattered sections of 49 U.S.C.).

²⁰⁴ See *id.*; see also Mank, *Future Generations*, *supra* note 75, at 49; Mank, *Standing and Statistical Persons*, *supra* note 35, at 707.

²⁰⁵ Transportation Recall Enhancement, Accountability, and Documentation Act § 13, 49 U.S.C. § 30123 (2006); see also Mank, *Future Generations*, *supra* note 75, at 49; Mank, *Standing and Statistical Persons*, *supra* note 35, at 707–08; Sturkie & Logan, *supra* note 198, at 10,464.

²⁰⁶ See Tire Pressure Monitoring Systems, 70 Fed. Reg. 18,136, 18,136 (Apr. 8, 2005) (codified at 49 C.F.R. pts. 571, 585); Tire Pressure Monitoring Systems, 70 Fed. Reg. 53,079, 53,079 (Sept. 7, 2005) (codified at 49 C.F.R. pts. 571, 585) (“The petitions for reconsideration are granted in part and denied in part, and through this document, we are amending the standard and related provisions accordingly.”); Mank, *Future Generations*, *supra* note 75, at 49.

possible.”²⁰⁷ Public Citizen, four individual tire manufacturers, and the Tire Industry Association filed petitions for review in the D.C. Circuit that challenged Standard 138 for four alleged deficiencies: 1) the absence of a requirement that pressure monitors be compatible with all replacement tires, 2) the up to twenty-minute delay between significant under inflation and the illumination of the dashboard warning light, 3) the use of the twenty-five percent below-placard-pressure standard for under inflation, and 4) the testing that NHTSA required for pressure monitors.²⁰⁸

I. Public Citizen I

The first *Public Citizen* decision was critical concerning Public Citizen’s claim of organizational standing based on future probabilistic injuries to its members, but a majority of the court allowed Public Citizen to file supplemental briefs to address whether Standard 138 demonstrably and imminently increased the probability that its members would be injured in a traffic accident.²⁰⁹ The court recognized that Public Citizen had demonstrated a “concrete” and “particularized” injury because “[i]njuries from car accidents are particularized—each person who is in an accident is harmed personally and distinctly” and they are concrete even if many other persons suffer similar injuries.²¹⁰ Similar to the subsequent *Summers* decision, the *Public Citizen I* court, however, doubted that Public Citizen’s alleged injuries were “actual or imminent” because Public Citizen raised only “remote and speculative claims of possible future harm to its members.”²¹¹ The court questioned whether the future traffic injuries alleged by Public Citizen were imminent:

[N]o one can say who those several hundred individuals are out of the 300 million people in the United States, nor can anyone say when such accidents might occur. For any particular individual, the odds of such an accident occurring are extremely remote and speculative, and the time (if ever) when any such accident would occur is entirely uncertain.²¹²

Additionally, similar to the reasoning in the *Summers* decision, the *Public Citizen I* court stated that Public Citizen could not achieve

²⁰⁷ Tire Pressure Monitoring Systems, 70 Fed. Reg. at 18,148; see also Mank, *Future Generations*, *supra* note 75, at 49; Mank, *Standing and Statistical Persons*, *supra* note 35, at 708.

²⁰⁸ *Public Citizen I*, 489 F.3d at 1286; see also Mank, *Future Generations*, *supra* note 75, at 49; Mank, *Standing and Statistical Persons*, *supra* note 35, at 708.

²⁰⁹ *Public Citizen I*, 489 F.3d at 1291–98; see also Mank, *Future Generations*, *supra* note 75, at 50–52; Mank, *Standing and Statistical Persons*, *supra* note 35, at 708; Sturkie & Logan, *supra* note 198, at 10,464–65.

²¹⁰ *Public Citizen I*, 489 F.3d at 1292–93; see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 708; Sturkie & Logan, *supra* note 198, at 10,464.

²¹¹ *Public Citizen I*, 489 F.3d at 1293–95; see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 708–09; Sturkie & Logan, *supra* note 198, at 10,464.

²¹² *Public Citizen I*, 489 F.3d at 1293–94; see also Mank, *Future Generations*, *supra* note 75, at 50; Mank, *Standing and Statistical Persons*, *supra* note 35, at 708–09; Sturkie & Logan, *supra* note 198, at 10,464.

organizational standing by aggregating the probabilistic claims of its members, stating, “Nor does it help Public Citizen to aggregate a series of remote and speculative claims.”²¹³ The fact that Public Citizen had 130,000 members did not help its standing case. The court stated,

Under the Supreme Court’s precedents, it therefore does Public Citizen no good to string together 130,000 remote and speculative claims rather than one remote and speculative claim. Each claim is still remote and speculative, which under the Supreme Court’s precedents is an impermissible basis for our exercising the judicial power.²¹⁴

The *Public Citizen I* court stated that the political branches rather than the courts should decide claims of probabilistic harm:

To the extent Congress is concerned about Executive under-regulation or under-enforcement of statutes, it also may exercise its oversight role and power of the purse. . . . The Supreme Court has repeatedly held that disputes about future events where the possibility of harm to any given individual is remote and speculative are properly left to the policymaking Branches, not the Article III courts.²¹⁵

The court reasoned that judicial recognition of probabilistic harm cases was improper because “virtually *any* citizen—because of a fractional chance of benefit from alternative action—would have standing to obtain judicial review of the agency’s choice” and recognition of such claims would open the floodgates to judicial challenges of almost all executive actions.²¹⁶ The recognition of probabilistic claims, the court explained,

would drain the “actual or imminent” requirement of meaning in cases involving consumer challenges to an agency’s regulation (or lack of regulation); would expand the “proper—and properly limited”—constitutional role of the Judicial Branch beyond deciding actual cases or controversies; and would entail the Judiciary exercising some part of the Executive’s responsibility to take care that the law be faithfully executed.²¹⁷

²¹³ *Public Citizen I*, 489 F.3d at 1294; see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 709.

²¹⁴ *Public Citizen I*, 489 F.3d at 1294; see also Mank, *Future Generations*, *supra* note 75, at 50; Mank, *Standing and Statistical Persons*, *supra* note 35, at 708–09.

²¹⁵ *Public Citizen I*, 489 F.3d at 1295.

²¹⁶ *Id.*; see also Mank, *Future Generations*, *supra* note 75, at 51; Mank, *Standing and Statistical Persons*, *supra* note 35, at 709; Sturkie & Logan, *supra* note 198, at 10,464–65.

²¹⁷ *Public Citizen I*, 489 F.3d at 1295 (internal quotation marks omitted); see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 709–10. *But see* Brown, *supra* note 56, at 274–75 (arguing the “Take Care” clause in Article II of the Constitution does not give the President discretion to ignore legal requirements, but requires the President to obey the law); Mary M. Cheh, *When Congress Commands a Thing to Be Done: An Essay on Marbury v. Madison, Executive Inaction, and the Duty of the Courts to Enforce the Law*, 72 GEO. WASH. L. REV. 253, 275 (2003) (asserting that the “Take Care” clause imposes a duty on the President, rather than conferring a power).

Thus, the court concluded, “[a]llowing a party to assert such remote and speculative claims to obtain federal court jurisdiction threatens . . . to eviscerate the Supreme Court’s standing doctrine.”²¹⁸ *Public Citizen I* adopted a narrow approach regarding when prospective risks are sufficiently substantial to qualify as an “imminent” risk pursuant to the Supreme Court’s standing test: “We have allowed standing when there was at least *both* (i) a *substantially* increased risk of harm and (ii) a *substantial* probability of harm with that increase taken into account.”²¹⁹

The *Public Citizen I* decision rejected Professor Cass Sunstein’s proposal that an “‘increased risk’ is *itself* concrete, particularized, and *actual* injury for standing purposes.”²²⁰ The court objected, stating,

First, the mere increased risk of some event occurring is utterly abstract—not concrete, direct, real, and palpable. Second, increased risk falls on a population in an undifferentiated and generalized manner; everyone in the relevant population is hit with the same dose of risk, so there is no particularization. . . . Third, the Supreme Court has said that, in temporal terms, there are three kinds of harm—actual harms, imminent harms, and potential future harms that are not imminent. Treating the increased risk of future harm as an actual harm, however, would eliminate these categories. Under this approach, possible future injuries, whether or not they are imminent, would magically become concrete, particularized, and actual injuries merely because they *could* occur. That makes no sense, except as a creative way to end-run the Supreme Court’s standing precedents.²²¹

The *Public Citizen I* decision’s view that potential future harms are not actual or imminent harms is similar to the reasoning in the subsequent *Summers* majority opinion. Despite its strong implication that Public Citizen’s claim of potential future injuries from the challenged tire standards could not meet standing requirements, a majority of the *Public Citizen I* court allowed Public Citizen to file supplemental submissions to determine if any of the organization’s members had suffered injuries sufficient for standing.²²²

²¹⁸ *Public Citizen I*, 489 F.3d at 1294; see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 710. But see Brown, *supra* note 56, at 274–75; Cheh, *supra* note 217, at 275.

²¹⁹ *Public Citizen I*, 489 F.3d at 1295 (citing *Mountain States Legal Found. v. Glickman*, 92 F.3d 1228, 1234–35 (D.C. Cir. 1996)); see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 710; Sturkie & Logan, *supra* note 198, at 10,460, 10,465 (arguing the First Circuit’s two-part substantial probability test is more stringent than the test used in other circuits).

²²⁰ *Public Citizen I*, 489 F.3d at 1297 (citing Sunstein, *supra* note 37, at 228); see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 710–11, 732 (“[C]ourts should treat statistical injuries as sufficiently concrete for standing as long as the increased risk of serious harm . . . is at least one in one million.”).

²²¹ *Public Citizen I*, 489 F.3d at 1297–98 (citations omitted); see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 711; Sturkie & Logan, *supra* note 198, at 10,465.

²²² *Public Citizen I*, 489 F.3d at 1296–98; see also Mank, *Future Generations*, *supra* note 75, at 50–52; Mank, *Standing and Statistical Persons*, *supra* note 35, at 708. Although he acknowledged that the circuit’s precedent gave a court the discretion to supplement the record, Judge Sentelle opposed the portion of the majority’s decision allowing Public Citizen to supplement the record because he concluded that they had failed to demonstrate standing and

2. Public Citizen II

After the litigants submitted supplemental briefs, the D.C. Circuit in *Public Citizen v. National Highway Traffic Safety Administration (Public Citizen II)*²²³ held in a per curiam opinion that Public Citizen did not have standing.²²⁴ The court concluded that Public Citizen’s statistical analysis failed to demonstrate that its members were at a demonstrable and imminent increased risk of traffic injuries from Standard 138 compared to Public Citizen’s alternative proposals.²²⁵ First, Public Citizen was not able to quantify the number of excess injuries caused by Standard 138’s use of a twenty-minute lag time between underinflation of a tire and the activation of a dashboard warning light compared to Public Citizen’s one-minute lag time proposal.²²⁶ Additionally, Public Citizen’s statistical calculations improperly included recalled tires and tires subject to safety programs that are more likely to suffer from structural defects than tire pressure problems.²²⁷

The *Public Citizen II* majority implied that courts should deny standing in any case alleging probabilistic injury, but they acknowledged that a panel decision could not prohibit suits based upon probabilistic standing in light of the Circuit’s prior decisions in *Mountain States Legal Foundation v. Glickman (Mountain States)*²²⁸ and *NRDC II*,²²⁹ which had both allowed probabilistic standing in some circumstances.²³⁰ The *Public Citizen II* majority observed, “[i]f we were deciding this case based solely on the Supreme Court’s precedents, we would agree with the separate opinion,” which completely rejected standing based on probabilistic injuries.²³¹ The *Public Citizen II* majority conceded that “[a]s we read our decisions in

therefore the court lacked jurisdiction over the case. *Public Citizen I*, 489 F.3d at 1299 (Sentelle, J., concurring and dissenting in part).

²²³ 513 F.3d 234 (D.C. Cir. 2008).

²²⁴ *Id.* at 241; see also Mank, *Future Generations*, *supra* note 75, at 52; Mank, *Standing and Statistical Persons*, *supra* note 35, at 711; Sturkie & Logan, *supra* note 198, at 10,465.

²²⁵ *Public Citizen II*, 513 F.3d at 238–41; see also Mank, *Future Generations*, *supra* note 75, at 52; Mank, *Standing and Statistical Persons*, *supra* note 35, at 711; Sturkie & Logan, *supra* note 198, at 10,465–66.

²²⁶ *Public Citizen II*, 513 F.3d at 239–40; see also Mank, *Future Generations*, *supra* note 75, at 52; Mank, *Standing and Statistical Persons*, *supra* note 35, at 711; Sturkie & Logan, *supra* note 198, at 10,466.

²²⁷ *Public Citizen II*, 513 F.3d at 240; see also Mank, *Future Generations*, *supra* note 75, at 52; Mank, *Standing and Statistical Persons*, *supra* note 35, at 711; Sturkie & Logan, *supra* note 198, at 10,466.

²²⁸ 92 F.3d 1228, 1234 (D.C. Cir. 1996) (recognizing standing for plaintiffs who challenged the Forest Service’s plan to prohibit logging in a national forest because the plan would increase the probability of a catastrophic fire by permitting fuel to accumulate in dead trees).

²²⁹ 464 F.3d 1, 7 (D.C. Cir. 2006) (recognizing standing where members of an organization had an increased risk of one in 129,000 or one in 200,000 of developing skin cancer because of government exemptions for methyl bromide).

²³⁰ See *Public Citizen II*, 513 F.3d at 241; see also Mank, *Future Generations*, *supra* note 75, at 46–48; Mank, *Standing and Statistical Persons*, *supra* note 35, at 712; Sturkie & Logan, *supra* note 198, at 10,466.

²³¹ *Public Citizen II*, 513 F.3d at 241; see also Mank, *Future Generations*, *supra* note 75, at 52; Mank, *Standing and Statistical Persons*, *supra* note 35, at 665.

Mountain States and [*NRDC II*], however, ‘this Court has not closed the door to all increased-risk-of-harm cases.’”²³² The three-judge panel encouraged the D.C. Circuit to address the legality of probabilistic standing in an en banc decision: “In an appropriate case, the en banc Court may have to consider whether or how the *Mountain States* principle should apply to general consumer challenges to safety regulations.”²³³ Until an en banc court decided that question, the *Public Citizen II* majority concluded that it would apply a stringent standard of proof in cases in which a plaintiff sought standing based upon probabilistic injuries because “the constitutional requirement of imminence as articulated by the Supreme Court’ requires ‘a very strict understanding of what increases in risk and overall risk levels’ will support injury in fact.”²³⁴

In his separate concurring opinion in *Public Citizen II*, Judge Sentelle asserted that Article III federal courts should reject probabilistic standing because of separation of powers principles:

As the majority noted in the earlier iteration of this litigation, the probabilistic approach to standing now being applied in increased-risk cases expands the “proper—and properly limited”—constitutional role of the Judicial Branch beyond deciding actual cases or controversies; and . . . entail[s] the Judiciary exercising some part of the Executive’s responsibility to take care that the law be faithfully executed.”

. . . The majority’s discussion today illustrates the ill fit between judicial power and that sort of future event and possible harm. The wide-ranging, near-merits discussion at the standing threshold is the sort of thing that congressional committees and executive agencies exist to explore. The judicial process is constitutionally designed for cases or controversies involving actual or imminent harm to identified persons—that is, the persons who have standing. If we do not soon abandon this idea of probabilistic harm, we will find ourselves looking more and more like legislatures rather than courts.²³⁵

²³² *Public Citizen II*, 513 F.3d at 241 (quoting *Public Citizen I*, 489 F.3d 1279, 1295 (D.C. Cir. 2007), *modified on reh’g*, 513 F.3d 234 (D.C. Cir. 2008) (per curiam)); *see also* Mank, *Future Generations*, *supra* note 75, at 53; Mank, *Standing and Statistical Persons*, *supra* note 35, at 700.

²³³ *Public Citizen II*, 513 F.3d at 241; *see also* Mank, *Future Generations*, *supra* note 75, at 53; Mank, *Standing and Statistical Persons*, *supra* note 35, at 700; Sturkie & Logan, *supra* note 198, at 10,466. *Public Citizen* will apparently not seek en banc review because it fears that an en banc court might hold that standing may never be based on future injuries. Dawn Reeves & Lara Beaven, *Key Court Eyes New Bid to Limit Standing in Suits Against EPA*, *Experts Say*, *INSIDE E.P.A. WKLY. REP.*, Jan. 25, 2008, at 1, 9.

²³⁴ *Public Citizen II*, 513 F.3d at 241 (quoting *Public Citizen I*, 489 F.3d at 1296); *see also* Mank, *Future Generations*, *supra* note 75, at 53–54; Mank, *Standing and Statistical Persons*, *supra* note 35, at 710; Sturkie & Logan, *supra* note 198, at 10,466–67.

²³⁵ *Public Citizen II*, 513 F.3d at 242 (Sentelle, J., concurring) (quoting *Public Citizen I*, 489 F.3d at 1295); *see also* Mank, *Future Generations*, *supra* note 75, at 52–53; Mank, *Standing and Statistical Persons*, *supra* note 35, at 709–10; Sturkie & Logan, *supra* note 198, at 10,466–67. *But see* Brown, *supra* note 56, at 274–75 (arguing the “Take Care” clause in Article II of the Constitution does not give the President discretion to ignore legal requirements, but requires the President to obey the law); Cheh, *supra* note 217, at 275.

3. Comparing *Summers* with *Public Citizen*

In some ways, the *Public Citizen* decisions anticipated the reasoning in *Summers* by rejecting organizational standing based upon the probability that some of the organization’s members will be harmed in the future.²³⁶ Both the *Public Citizen* decisions and the *Summers* decision reasoned that potential future injuries to unknown members of an organization fail to meet the Court’s test for what constitutes an imminent injury.²³⁷ The *Public Citizen* court went further than *Summers* by suggesting that probabilistic standing claims raised serious separation of powers concerns and that the political branches were better suited to address claims that current government actions might increase the risk of injury to large population groups in the future.²³⁸ In his *Lujan* opinion, Justice Scalia had argued that the standing doctrine’s requirement that a plaintiff have a concrete injury advanced separation of powers principles by limiting the judiciary to actual cases and controversies and leaving all other disputes involving the public interest to the political branches.²³⁹ In his *Summers* opinion, however, Justice Scalia avoided the separation of powers implications of probabilistic organizational standing, unlike the *Public Citizen* decisions. Perhaps the *Summers* majority believed that those issues were unnecessary for the resolution of the case. Another possibility is that other members of the majority disagreed with portions of Justice Kennedy’s solo concurring opinion, which emphasized the broad role of Congress in defining what constitutes an injury for standing purposes, and, therefore, the majority could not agree upon the broader constitutional implications of the case.²⁴⁰

C. Environmental Versus Nonenvironmental Injuries

Before the Court decided *Summers*, some lower court decisions had suggested that probabilistic standing may be appropriate in environmental cases, but not in nonenvironmental cases.²⁴¹ In *Center for Law & Education v. Department of Education*,²⁴² a panel of the D.C. Circuit stated, “Outside of increased exposure to environmental harms, hypothesized ‘increased risk’ has never been deemed sufficient ‘injury.’”²⁴³ Because the plaintiff failed to demonstrate any increased risk of harm from the government’s alleged

²³⁶ Compare *Public Citizen II*, 513 F.3d at 241 (questioning constitutionality of probabilistic standing), and *Public Citizen I*, 489 F.3d at 1293–98, with *Summers*, 129 S. Ct. 1142, 1149–53 (2009) (rejecting constitutionality of probabilistic organizational standing by adopting a narrow definition of what is an imminent injury).

²³⁷ *Summers*, 129 S. Ct. at 1149–53 (holding possible future injuries to unknown members of an organization fail to meet the Court’s definition of what is an imminent injury for standing); *Public Citizen II*, 513 F.3d at 241; *Public Citizen I*, 489 F.3d at 1293–98.

²³⁸ *Public Citizen II*, 513 F.3d at 241; *Public Citizen I*, 489 F.3d at 1293–98.

²³⁹ *Lujan*, 504 U.S. 555, 576–77 (1992).

²⁴⁰ See *Summers*, 129 S. Ct. at 1153 (Kennedy, J., concurring); *supra* Part IV.B.

²⁴¹ Sturkie & Logan, *supra* note 198, at 10,470–71.

²⁴² 396 F.3d 1152 (D.C. Cir. 2005).

²⁴³ *Id.* at 1161.

failure to include educational advocacy groups as members on a negotiated rulemaking committee, the court did not have to answer whether it is ever possible for nonenvironmental probabilistic injuries to be sufficient for Article III standing.²⁴⁴ In his concurring opinion, Judge Harry Edwards agreed that the plaintiff did not meet the Supreme Court's test for standing because she "failed to establish any causal relationship between the substantive Government decision that she desires and a concrete, personal interest."²⁴⁵ He contended, however, that in procedural cases it is possible for a nonenvironmental plaintiff to establish standing based upon an increased risk of injury.²⁴⁶

In *Virginia State Corp. Commission v. Federal Energy Regulatory Commission (Virginia SCC)*,²⁴⁷ a panel of the D.C. Circuit implied in dicta that it agreed with *Center for Law & Education's* distinction between standing in environmental and nonenvironmental cases, stating that "[o]utside the realm of environmental disputes . . . we have suggested that a claim of increased risk or probability cannot suffice."²⁴⁸ The *Virginia SCC* decision acknowledged that there was a conflict among the circuits about probabilistic standing.²⁴⁹ Because the plaintiffs failed to demonstrate how the government's actions had injured them, the court did not have to decide the issue of probabilistic standing.²⁵⁰

Before the *Summers* decision, there was a plausible argument that courts had been more willing to allow probabilistic standing in environmental cases than nonenvironmental cases. The First, Fourth, and Ninth Circuit decisions discussed in Part V.A, as well as the *NRDC II* and *Mountain States* decisions mentioned in Part V.B, recognized probabilistic standing in cases relating to environmental issues. Additionally, *Public Citizen* rejected probabilistic standing in a nonenvironmental decision and did not address whether a different type of analysis might be appropriate in environmental cases, although it seems doubtful that the court would have accepted an exception for environmental cases in light of its strong rejection of probabilistic standing.²⁵¹ *Summers*, however, clearly rejected probabilistic standing in an environmental case.²⁵²

After *Summers*, a court may not openly recognize probabilistic standing, except perhaps in a case involving avoided recreational activities that relies upon *Laidlaw*.²⁵³ Nevertheless, the First, Fourth, and Ninth Circuit decisions correctly interpreted *Laidlaw* to implicitly allow probabilistic standing in cases where plaintiffs allege that their reasonable concerns

²⁴⁴ *Id.*

²⁴⁵ *Id.* at 1167–68 (Edwards, J., concurring).

²⁴⁶ *Id.* at 1166–67.

²⁴⁷ 468 F.3d 845 (D.C. Cir. 2006).

²⁴⁸ *Id.* at 848; *see also* Mank, *Standing and Statistical Persons*, *supra* note 35, at 716; Sturkie & Logan, *supra* note 198, at 10,463.

²⁴⁹ *Virginia SCC*, 468 F.3d at 848.

²⁵⁰ *Id.* at 848–49.

²⁵¹ *See supra* Part V.B.

²⁵² *See supra* Part IV.A.

²⁵³ *See supra* Parts III.A, IV.A; *infra* Part VI.C.

about the impact of pollution lead them to avoid recreational activities.²⁵⁴ Where there is both some present pollution and a present change in recreational activities, *Laidlaw* implies that a court may find standing even though the plaintiff’s primary concern is the probability that harm will occur in the future.²⁵⁵ As is discussed in Part VI.C, in the future, plaintiffs may seek to avoid *Summers* and fall within *Laidlaw*’s scope by manipulating the facts of a case to include claims of lost recreational activities.²⁵⁶

VI. A HARD CASE: *NATURAL RESOURCES DEFENSE COUNCIL V. EPA*

The D.C. Circuit’s decision in *NRDC II* is the strongest case supporting probabilistic standing.²⁵⁷ Because there was strong statistical and risk assessment evidence in *NRDC II* demonstrating that the government’s exemption of methyl bromide pollution would cause several lifetime skin cancer cases among NRDC’s membership, there was a far stronger case of injury than in either *Summers* or *Laidlaw*, which involved aesthetic and recreational injuries.²⁵⁸ Yet if the case had been decided after *Summers*, the *NRDC II* court arguably should have denied standing because it is impossible to know which members of the plaintiff organization would develop skin cancer.²⁵⁹ Because recreational activities were not at issue in *NRDC II*, the relaxed *Laidlaw* framework does not apply.²⁶⁰ If neither *Summers* nor *Laidlaw* would recognize standing on the facts of the compelling *NRDC II* decision, then it is time for the Court to revise its standing test to determine when there is a realistic threat of harm.²⁶¹

A. Natural Resources Defense Council v. EPA, I and II

In *Natural Resources Defense Council v. Environmental Protection Agency (NRDC I)*,²⁶² the plaintiff NRDC challenged a final rule issued by EPA that exempted for the year 2005 “critical” agricultural uses of the otherwise banned chemical methyl bromide, which destroys stratospheric ozone.²⁶³ NRDC argued that the rule violated the United States’s treaty obligations

²⁵⁴ See *supra* Part V.A.

²⁵⁵ See *supra* Parts III.A, IV.A; *infra* Part VI.C.

²⁵⁶ See *infra* Part VI.C.

²⁵⁷ See Mank, *Future Generations*, *supra* note 75, at 47–48; Mank, *Standing and Statistical Persons*, *supra* note 35, at 705–07.

²⁵⁸ See *infra* Part VI.A.

²⁵⁹ See *Summers*, 129 S. Ct. 1142, 1151–53 (2009) (rejecting standing based on statistical probability that some members of plaintiff organization will be harmed in the future).

²⁶⁰ See *infra* Part VI.C.

²⁶¹ See *infra* Parts VI.C, VII.

²⁶² 440 F.3d 476 (D.C. Cir.) (rejecting standing), *withdrawn*, *NRDC II*, 464 F.3d 1 (D.C. Cir. 2006) (holding NRDC had standing because two to four of their members would likely get skin cancer from the government’s exemptions for methyl bromide, a chemical that destroys ozone).

²⁶³ *Id.* at 478–80; see 40 C.F.R. § 82.4(p) (2008); Protection of Stratospheric Ozone: Process for Exempting Critical Uses from the Phaseout of Methyl Bromide, 69 Fed. Reg. 76,982, 76,990 (Dec. 23, 2004) (exempting certain “critical uses” of methyl bromide for 2005); Mank, *Future Generations*, *supra* note 75, at 47; Mank, *Standing and Statistical Persons*, *supra* note 35, at 702.

under the 1987 Montreal Protocol, which requires signatory nations to phase out and eventually ban chemicals that destroy stratospheric ozone,²⁶⁴ and also violated provisions of the Clean Air Act (CAA)²⁶⁵ that implement the Protocol.²⁶⁶ NRDC argued that the exemptions in the final rule were greater than required to comply with genuinely critical U.S. uses.²⁶⁷

NRDC asserted that it had standing because the exemptions would increase its members' risk of developing skin cancer or cataracts because the exempted methyl bromide would destroy some stratospheric ozone, which protects human beings by absorbing most dangerous ultraviolet radiation from the Sun so that dangerously high levels never reach the surface of the Earth.²⁶⁸ NRDC substantiated its standing allegations by submitting an affidavit from Dr. Sasha Madronich, who stated that "it is reasonable to expect more than 10 deaths, more than 2,000 non-fatal skin cancer cases, and more than 700 cataract cases to result from the 16.8 million pounds of new production and consumption allowed by the 2005 exemption rule."²⁶⁹ EPA conceded that NRDC had standing and did not challenge Dr. Madronich's assumptions.²⁷⁰

1. NRDC I

In *NRDC I*, the D.C. Circuit held that NRDC did not have standing to petition the court to review the final rule because the annualized risk to members of NRDC was too remote and hypothetical to meet the injury in fact portion of the standing test.²⁷¹ Understanding Dr. Madronich's affidavit as estimating deaths over the next 145 years and spread among the entire

²⁶⁴ Montreal Protocol on Substances that Deplete the Ozone Layer, Sept. 16, 1987, S. TREATY DOC. NO. 100-10, 1522 U.N.T.S. 29; *see also* Cassandra Sturkie & Nathan H. Seltzer, *Developments in the D.C. Circuit's Article III Standing Analysis: When Is an Increased Risk of Future Harm Sufficient to Constitute Injury-in-Fact in Environmental Cases?*, 37 *Env'tl. L. Rep.* (Env'tl. Law Inst.) 10,287, 10,291 (2007).

²⁶⁵ 42 U.S.C. §§ 7401–7671q (2006).

²⁶⁶ Clean Air Act Amendments of 1990, Pub. L. No. 101-549, tit. VI, 104 Stat. 2399, 2648–72 (codified as amended at 42 U.S.C. §§ 7671–7671q (2006)); 42 U.S.C. § 7671c(h) (2006) ("[EPA] shall promulgate rules for reductions in, and terminate the production, importation, and consumption of, methyl bromide under a schedule that is in accordance with, but not more stringent than, the phaseout schedule of the Montreal Protocol Treaty as in effect on October 21, 1998."); *see also* Mank, *Future Generations*, *supra* note 75, at 47; Mank, *Standing and Statistical Persons*, *supra* note 35, at 702; Sturkie & Seltzer, *supra* note 264, at 10,291.

²⁶⁷ *NRDC I*, 440 F.3d at 480; *see also* Mank, *Standing and Statistical Persons*, *supra* note 35, at 702; Sturkie & Seltzer, *supra* note 264, at 10,292.

²⁶⁸ *NRDC I*, 440 F.3d at 481–82; *see also* Mank, *Standing and Statistical Persons*, *supra* note 35, at 702; Sturkie & Seltzer, *supra* note 264, at 10,292.

²⁶⁹ *NRDC I*, 440 F.3d at 481; *see also* Mank, *Standing and Statistical Persons*, *supra* note 35, at 702–03; Sturkie & Seltzer, *supra* note 264, at 10,292.

²⁷⁰ Sturkie & Seltzer, *supra* note 264, at 10,292 n.89 ("In its merits brief, EPA stated that it 'believes that Petitioner has satisfied the requirements for Article III standing.'"); Mank, *Standing and Statistical Persons*, *supra* note 35, at 703.

²⁷¹ *NRDC I*, 440 F.3d at 483–84; *see also* Craig, *supra* note 79, at 200–01; Mank, *Future Generations*, *supra* note 75, at 47; Mank, *Standing and Statistical Persons*, *supra* note 35, at 703; Sturkie & Seltzer, *supra* note 264, at 10,292–93.

American population of 293-million persons, the D.C. Circuit concluded that “[w]ith ten more skin cancer deaths in 145 years, the probability of fatality from EPA’s rule comes to 1 in 4.2 billion per person per year.”²⁷² Among the NRDC’s 490,000 members, the court observed that the risk of death was “infinitesimal”: one death in approximately 12,000 years.²⁷³ Additionally, the court determined that the “other risks” were “similarly small”—“a 1 in 21 million chance of contracting non-fatal skin cancer and a 1 in 61 million chance of getting a cataract over the next 145 years.”²⁷⁴ The court concluded that the injury was insufficient to meet the Circuit’s substantial probability test because an injury must be more than a “non-trivial” chance of injury.²⁷⁵

The *NRDC I* decision criticized the concept of probabilistic standing. The court stated,

Among those which fit least well are purely probabilistic injuries. Environmental or public health injuries, for example, may have complex etiologies that involve the interaction of many discrete risk factors. The chance that one may develop cancer can hardly be said to be an “actual” injury—the harm has not yet come to pass. Nor is it “imminent” in the sense of temporal proximity.²⁷⁶

The court rejected the implications in decisions by the Second, Fourth, and Ninth Circuits, that any “increase in probability itself constitutes an ‘actual or imminent’ injury.”²⁷⁷ The court concluded “the law of this circuit is that an increase in the likelihood of harm may constitute injury in fact only if the increase is sufficient to ‘take a suit out of the category of the hypothetical.’”²⁷⁸

2. NRDC II

NRDC petitioned for a rehearing on the grounds that the court had miscalculated the risk of the methyl bromide exemption to its members by mistakenly assuming that the harms “were spread over 145 years” rather than the lifetimes of its current members.²⁷⁹ Because methyl bromide has a short atmospheric lifetime, NRDC argued that almost all the harms resulting

²⁷² *NRDC I*, 440 F.3d at 481; see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 703; Sturkie & Seltzer, *supra* note 264, at 10,292.

²⁷³ *NRDC I*, 440 F.3d at 481–82; see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 703; Sturkie & Seltzer, *supra* note 264, at 10,292.

²⁷⁴ *NRDC I*, 440 F.3d at 482 n.8; see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 703; Sturkie & Seltzer, *supra* note 264, at 10,292.

²⁷⁵ *NRDC I*, 440 F.3d at 483 (quoting *Mountain States*, 92 F.3d 1228, 1235 (D.C. Cir. 1996)); see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 703; Sturkie & Seltzer, *supra* note 264, at 10,292–93.

²⁷⁶ *NRDC I*, 440 F.3d at 483; see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 703; Sturkie & Seltzer, *supra* note 264, at 10,293.

²⁷⁷ *NRDC I*, 440 F.3d at 483–84; see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 704; Sturkie & Seltzer, *supra* note 264, at 10,293.

²⁷⁸ *NRDC I*, 440 F.3d at 484 (quoting *Mountain States*, 92 F.3d at 1234–35).

²⁷⁹ Petition for Rehearing or Rehearing En Banc at 8–9, *NRDC II*, 464 F.3d 1 (D.C. Cir. 2006) (No. 04–1438) [hereinafter *NRDC Petition*]; see also Mank, *Standing and Statistical Persons*, *supra* note 35, at 704; Sturkie & Seltzer, *supra* note 264, at 10,293.

from the exemption will occur during the lifetimes of persons, including its members, alive at the time of the suit and therefore the court should have based its calculations on lifetime risk rather than annual risks.²⁸⁰ NRDC argued that the court's one in 4.2 billion risk estimate grossly underestimated the risk to its members and that the actual risk of death or serious illness was about one in 100,000, or approximately five of its 490,000 members.²⁸¹ NRDC argued that the risk of death or serious illness for five of its members was sufficient for standing.²⁸² In opposing NRDC's petition for rehearing, EPA conceded that the court should not have divided the risk by 145 and should have used lifetime risk instead, but the agency also asserted that the risk was not "almost 40,000" times higher as NRDC claimed.²⁸³ The *NRDC II* court granted the petition for rehearing and withdrew its previous opinion because "[i]n their respective petition for and opposition to rehearing, NRDC and EPA offered new information that has led us to change our view of the standing issue."²⁸⁴

In *NRDC II*, the court was more willing to consider the plaintiff's probabilistic standing argument, stating:

Although this claim does not fit comfortably within the Supreme Court's description of what constitutes an "injury in fact" sufficient to confer standing—such injuries must be "actual or imminent, not 'conjectural' or 'hypothetical,'" . . . we have recognized that increases in risk can at times be "injuries in fact" sufficient to confer standing.²⁸⁵

The court, however, warned that "this category of injury may be too expansive."²⁸⁶ Recognizing that the courts of appeals had disagreed about when an increased risk of harm is enough to justify standing, and whether the plaintiff must quantify that risk, the court determined that it did not have to "answer" that difficult question in this case.²⁸⁷ Cassandra Sturkie and Nathan Seltzer, who are practicing attorneys, contend that the court probably did not alter its generally critical approach to probabilistic standing

²⁸⁰ NRDC Petition, *supra* note 279, at 9; *see also* Mank, *Standing and Statistical Persons*, *supra* note 35, at 704–05; Sturkie & Seltzer, *supra* note 264, at 10,293.

²⁸¹ NRDC Petition, *supra* note 279, at 9–10; *see also* Mank, *Standing and Statistical Persons*, *supra* note 35, at 705; Sturkie & Seltzer, *supra* note 264, at 10,293.

²⁸² NRDC Petition, *supra* note 279, at 10–11; *see also* Mank, *Standing and Statistical Persons*, *supra* note 35, at 705; Sturkie & Seltzer, *supra* note 264, at 10,293.

²⁸³ Respondent EPA's Opposition to NRDC's Petition for Rehearing or Rehearing En Banc at 6, *NRDC II*, 464 F.3d 1 (D.C. Cir. 2006) (No. 04–1438) [hereinafter EPA Opposition]; *see also* Mank, *Standing and Statistical Persons*, *supra* note 35, at 705; Sturkie & Seltzer, *supra* note 264, at 10,293–94.

²⁸⁴ *NRDC II*, 464 F.3d at 3; *see also* Mank, *Standing and Statistical Persons*, *supra* note 35, at 705; Sturkie & Seltzer, *supra* note 264, at 10,294.

²⁸⁵ *NRDC II*, 464 F.3d at 6; *see also* Mank, *Standing and Statistical Persons*, *supra* note 35, at 705; Sturkie & Seltzer, *supra* note 264, at 10,294.

²⁸⁶ *NRDC II*, 464 F.3d at 6; *see also* Mank, *Standing and Statistical Persons*, *supra* note 35, at 706; Sturkie & Seltzer, *supra* note 264, at 10,294.

²⁸⁷ *NRDC II*, 464 F.3d at 6–7; *see also* Mank, *Standing and Statistical Persons*, *supra* note 35, at 706; Craig, *supra* note 79, at 201.

claims expressed in its initial opinion. Sturkie and Seltzer suggest that the court may have become more sympathetic to the plaintiff's standing arguments when presented with evidence that its erroneous mathematical calculations in the first opinion significantly underestimated the risk of harm to the plaintiffs.²⁸⁸ Despite the *NRDC II* decision, Sturkie and Seltzer predicted that the D.C. Circuit will reject most probabilistic standing claims;²⁸⁹ after the *Summers* decision, their prediction is almost certainly correct.²⁹⁰

The *NRDC II* court held that NRDC had standing because the methyl bromide exemptions would significantly increase its members' lifetime risk of skin cancer.²⁹¹ The court agreed with evidence presented by an EPA expert that the best measure of risk from ozone depletion is lifetime risk and not the annualized risk methodology used in *NRDC I*.²⁹² The *NRDC II* decision concluded that the lifetime risk that an individual will develop nonfatal skin cancer as a result of EPA's rule is either about one in 200,000, according to the intervenor's expert, or one in 129,000 by EPA's analysis.²⁹³ The court determined that this evidence demonstrated that two to four members of NRDC's approximately half-million members would develop skin cancer during their lifetimes as a result of EPA's rule and that two to four lifetime cases of skin cancer among NRDC's members was a sufficient injury for NRDC to have standing.²⁹⁴ The *NRDC II* decision is the strongest example of probabilistic standing because of the undisputed statistical evidence that two to four members of the plaintiff organization would likely develop skin cancer during their lifetimes.²⁹⁵

B. Covington v. Jefferson County

In addition to *NRDC*, there is one other significant standing decision involving ozone destroying chemicals (ODCs), *Covington v. Jefferson County*.²⁹⁶ As will be discussed below, *Covington* is a weaker case than *NRDC II* because the amount of ODCs released was far less and was uncertain because of poor record keeping. Nevertheless, Part VI.B.2 will examine Judge Gould's concurring opinion in *Covington* because it raised

²⁸⁸ Sturkie & Seltzer, *supra* note 264, at 10,295–96; *see also* Mank, *Standing and Statistical Persons*, *supra* note 35, at 706.

²⁸⁹ Sturkie & Seltzer, *supra* note 264, at 10,295–96; *see also* Mank, *Standing and Statistical Persons*, *supra* note 35, at 706.

²⁹⁰ *See supra* Part IV.A (explaining *Summers* rejected organizational standing based on future probability of injuries to its members).

²⁹¹ *NRDC II*, 464 F.3d at 5–7; *see also* Craig, *supra* note 79, at 201; Mank, *Future Generations*, *supra* note 75, at 47; Mank, *Standing and Statistical Persons*, *supra* note 35, at 693.

²⁹² *NRDC II*, 464 F.3d at 7; *see also* Craig, *supra* note 79, at 201; Mank, *Future Generations*, *supra* note 75, at 48; Mank, *Standing and Statistical Persons*, *supra* note 35, at 693.

²⁹³ *NRDC II*, 464 F.3d at 7; *see also* Mank, *Standing and Statistical Persons*, *supra* note 35, at 671–72; Sturkie & Seltzer, *supra* note 264, at 10,294.

²⁹⁴ *NRDC II*, 464 F.3d at 7; *see also* Craig, *supra* note 79, at 201; Mank, *Future Generations*, *supra* note 75, at 48; Mank, *Standing and Statistical Persons*, *supra* note 35, at 670.

²⁹⁵ *NRDC II*, 464 F.3d at 7; Mank, *Standing and Statistical Persons*, *supra* note 35, at 670.

²⁹⁶ 358 F.3d 626 (9th Cir. 2004).

some interesting points about standing doctrine in general and the *Laidlaw* decision in particular.

1. Majority Opinion

In *Covington*, the Ninth Circuit affirmed the district court's finding that the plaintiffs had standing because they were injured by the defendants' failure to comply with RCRA's safety regulations for a nearby landfill that increased the risk to the plaintiffs of fires, explosions, groundwater contamination, scavengers, and disease-carrying vermin.²⁹⁷ Despite the Ninth Circuit's use of the probabilistic term "risk of harm,"²⁹⁸ it is likely that *Covington's* standing determination survives *Summers* because the Covingtons demonstrated evidence of concrete present harm through a "factual showing of fires, of excessive animals, insects and other scavengers attracted to uncovered garbage, and of groundwater contamination."²⁹⁹ Because *Summers* was a case in which there was no present harm,³⁰⁰ it is distinguishable from a case involving any current injury to the plaintiff, such as *Covington*. Because the animals, vermin, and groundwater contamination were located so close to the Covingtons, even courts that construe standing narrowly would likely be sympathetic to the Covingtons' assertion that they are suffering present harms from the defendants' failure to comply with RCRA's safety regulations.

Additionally, the Ninth Circuit in *Covington* concluded that the plaintiffs had demonstrated a sufficient injury for standing pursuant to the CAA by alleging that the defendants had improperly disposed of chlorofluorocarbons (CFCs) in appliances—"white goods"—delivered to the landfill in violation of the CAA and its regulations.³⁰¹ The court concluded that the defendants had injured the plaintiffs by increasing the risk that CFCs would leak and contaminate the plaintiffs' property.³⁰² The court of appeals disagreed with the district court's finding that there was no evidence of leaking or injury because the plaintiffs had stated in their affidavits that they had observed liquids and gases leaking from the white goods.³⁰³ The Ninth Circuit reversed the district court's finding of no standing under the CAA, stating, "The district court's conclusion on this score cannot stand in

²⁹⁷ 358 F.3d at 626, 638–40 (concluding that plaintiffs had standing under RCRA); *see also* Mank, *Global Warming*, *supra* note 49, at 40.

²⁹⁸ *Covington*, 358 F.3d at 638.

²⁹⁹ *Id.*

³⁰⁰ *See supra* Part IV.A (explaining *Summers* rejected organizational standing based on future probability of injuries to its members).

³⁰¹ *Covington*, 358 F.3d at 640–41 (discussing the CAA's requirements for disposal of CFCs); *id.* at 653 (Gould, J., concurring) (discussing the explicit congressional decision to allow citizen suits to enforce ozone protection requirements); *see* Clean Air Act, 42 U.S.C. § 7671g (2006); 40 C.F.R. §§ 82.154(a), 82.156(f), 82.166(i), (m) (2009) (requiring removal or recapture of CFCs and other ozone-depleting substances before disposal or recycling); *see also* Mank, *Global Warming*, *supra* note 49, at 40.

³⁰² *Covington*, 358 F.3d at 640–41 (concluding that plaintiffs had standing under the CAA); *see also* Mank, *Global Warming*, *supra* note 49, at 40–41.

³⁰³ *Covington*, 358 F.3d at 640 n.19; *see also* Mank, *Global Warming*, *supra* note 49, at 41.

this summary judgment context, where the Covingtons’ evidence, even if contested, must be credited.”³⁰⁴ Additionally, the Ninth Circuit concluded that the defendants had the burden of establishing that CFCs had not leaked from the appliances because they had failed to keep proper records.³⁰⁵ Although it was appropriate for the Ninth Circuit to place the burden of production on the defendants to demonstrate that the CFCs had not leaked because of their failure to keep proper records, the poor recordkeeping in this case makes it impossible to know the precise amount of CFCs that leaked and hence how much damage was caused to the ozone layer.³⁰⁶

The *Summers* majority would likely reject the Ninth Circuit’s standing analysis to the extent that the court of appeals simply relied on an increased risk of future property contamination.³⁰⁷ Even if the plaintiffs’ assertion of leaking should be presumed factually correct in light of the defendants’ failure to keep proper records,³⁰⁸ the *Summers* majority might well demand evidence that the leaking caused some present harm to the plaintiffs because the plaintiffs did not allege that the CFCs actually touched or harmed them directly.³⁰⁹ Nevertheless, the *Summers* majority might agree with the district court and Ninth Circuit that the Covingtons suffered a sufficient injury for standing because of the fires, animals, vermin, and groundwater contamination close to their home.³¹⁰

2. Judge Gould’s Concurring Opinion

As in *NRDC II*, a crucial question in *Covington* was whether plaintiffs who may be harmed in the future from skin cancer or cataracts caused by ODCs can sue today. In his concurring opinion in *Covington*, Judge Gould addressed this more difficult question of whether the plaintiffs had standing to challenge the future or global impacts of the CFCs released from the landfill.³¹¹ According to Judge Gould, because the Covingtons “suffer no greater injury than any other person” from the global impacts of the CFCs

³⁰⁴ *Covington*, 358 F.3d at 640 n.19; see also Mank, *Global Warming*, *supra* note 49, at 41.

³⁰⁵ *Covington*, 358 F.3d at 641 n.19 (“[I]f, as here, a CAA claimant demonstrates a failure on the part of the disposer to compile appropriate paperwork showing that CFCs have been removed from the white goods, we presume that the white goods leaked CFCs unless and until the disposer affirmatively demonstrates otherwise.”); see also Mank, *Global Warming*, *supra* note 49, at 41.

³⁰⁶ See *Covington*, 358 F.3d at 640 n.19; Mank, *Global Warming*, *supra* note 49, at 41.

³⁰⁷ See *Summers*, 129 S. Ct. 1142, 1151–53 (2009) (rejecting standing based on statistical probability that some members of plaintiff organization will be harmed in the future).

³⁰⁸ *Covington*, 358 F.3d at 641 n.19 (observing that defendant failed to keep proper records showing that CFCs have been removed from the white goods and therefore court “presume[d] that the white goods leaked CFCs unless and until the disposer affirmatively demonstrates otherwise”); Mank, *Global Warming*, *supra* note 49, at 41.

³⁰⁹ See generally *Summers*, 129 S. Ct. at 1149, 1152 (observing that standing requires “likely” injury, and reasoning that the plaintiffs in *Summers* failed to demonstrate the “likely” injury necessary for standing).

³¹⁰ *Covington*, 358 F.3d at 638.

³¹¹ See *id.* at 650–55 (Gould, J., concurring); see also Mank, *Global Warming*, *supra* note 49, at 41.

from the landfill, the question is whether a plaintiff can meet standing requirements if he suffers a “widely shared injury.”³¹²

Judge Gould concluded that the plaintiffs had suffered a particularized injury, stating, “The increased risk of skin cancer, cataracts, and/or a suppressed immune system affect the Covingtons in a personal and individual way. Because the asserted injury is so clearly particularized, my analysis focuses more on whether the injury is sufficiently concrete in light of the widespread injury.”³¹³ Additionally, Judge Gould concluded

the injury suffered by the Covingtons is concrete rather than ‘abstract and indefinite’ [because] . . . the scientific evidence shows a marginal increase in the risk of serious maladies from increased UV-B radiation that results from the landfill’s release of CFCs. . . . These are deadly serious maladies, and the risk of such grave harms minimizes the required probability of their occurrence for injury in fact purposes.³¹⁴

Justice Scalia might disagree with Judge Gould’s conclusion that the injuries to the Covingtons from the CFCs were concrete in light of the absence of any “factual showing of perceptible harm” from the chemicals or from increased UV-B radiation.³¹⁵ Additionally, Justice Scalia would very probably, based upon his reasoning in *Summers*, reject standing on the ground that the injury to the Covingtons was not “likely” to occur.³¹⁶ Because we do not know the amount of CFCs released at the landfill,³¹⁷ it is impossible to know the risk that the chemicals pose to society in general, let alone particular individuals such as the Covingtons.

Furthermore, similar to the argument in Justice Breyer’s dissenting opinion in *Summers* that Congress has the authority to broaden standing rights,³¹⁸ Judge Gould’s concurring opinion in *Covington* emphasized that courts should construe standing liberally because Congress specifically prohibited the improper disposal of CFCs and granted an explicit citizen suit provision to enable a citizen to enforce that prohibition.³¹⁹ Additionally, Judge Gould determined that there is causation in *Covington* because

³¹² *Covington*, 358 F.3d at 650–51 (Gould, J., concurring); see also Mank, *Global Warming*, *supra* note 49, at 41.

³¹³ *Covington*, 358 F.3d at 651–52 n.8 (Gould, J., concurring); see also Mank, *Global Warming*, *supra* note 49, at 42.

³¹⁴ *Covington*, 358 F.3d at 652 (Gould, J., concurring); Mank, *Global Warming*, *supra* note 49, at 42.

³¹⁵ See *Summers*, 129 S. Ct. at 1152 (2009) (quoting *Lujan*, 504 U.S. 555, 566 (1992)).

³¹⁶ See *id.* (observing that standing requires “likely” injury).

³¹⁷ *Covington*, 358 F.3d at 641 n.19 (observing that defendant failed to keep proper records showing that CFCs had been removed from the white goods and therefore the court “presume[d] that the white goods leaked CFCs unless and until the disposer affirmatively demonstrates otherwise”); see also Mank, *Global Warming*, *supra* note 49, at 41.

³¹⁸ See *Summers*, 129 S. Ct. at 1154–55 (Breyer, J., dissenting) (“To understand the constitutional issue that the majority decides, it may prove helpful to imagine that Congress enacted a statutory provision that expressly permitted environmental groups like the respondents here to bring cases just like the present one . . .”); *supra* Part IV.B.

³¹⁹ *Covington*, 358 F.3d at 653 (Gould, J., concurring); see also Mank, *Global Warming*, *supra* note 49, at 42–43.

“[t]here is a scientifically proven link between CFCs and ozone-depletion” and Congress had recognized the significance of the risk by enacting legislation to regulate CFCs.³²⁰

Moreover, Judge Gould argued that the injury in the *Covington* case provided a more compelling justification for standing than the facts in *Laidlaw*: “If subjective fear of river pollution alone is enough for injury in fact, then *a fortiori* objective and certain increased risks of skin cancer, cataracts, and depressed immune systems may satisfy the injury in fact standard.”³²¹ A weakness with his argument is that, unlike in the subsequent *NRDC II* decision, we do not know how many ODCs the landfill released in *Covington* and, therefore, do not know the risk that they posed to either the public or the Covingtons.³²² Judge Gould’s argument that *Laidlaw* involved weaker evidence of injury is more apt using the facts of *NRDC II*, where the proven risks of physical harm were greater than in *Laidlaw*.³²³

Finally, Judge Gould concluded that “the injury is imminent and redressable.”³²⁴ He reasoned that the injury to the plaintiffs from the release of CFCs is imminent because the release of CFCs immediately increases their risk of intensified exposure to UV-B radiation.³²⁵ Justice Scalia, however, would probably argue that no injury occurs until an exposed person actually develops skin cancer or cataracts or, alternatively, one can predict that a specific person is likely to suffer an imminent injury.³²⁶ Furthermore, Judge Gould concluded that the injury is redressable under *Laidlaw*’s deterrent analysis because the civil penalties authorized under the CAA against those who mishandle CFCs would deter future violations by the Jefferson County defendants.³²⁷ If suits addressing ozone destruction became too numerous and burdensome on the judiciary, which he believed to be unlikely, Judge Gould conceded that courts could impose prudential

³²⁰ *Covington*, 358 F.3d at 654 (Gould, J., concurring); see also Mank, *Global Warming*, *supra* note 49, at 43.

³²¹ *Covington*, 358 F.3d at 653–54 (Gould, J., concurring); see also Mank, *Global Warming*, *supra* note 49, at 43.

³²² See *Covington*, 358 F.3d at 641 n.19 (observing that defendant failed to keep proper records showing that CFCs had been removed from the white goods and therefore the court “presume[d] that the white goods leaked CFCs unless and until the disposer affirmatively demonstrates otherwise”); Mank, *Global Warming*, *supra* note 49, at 41.

³²³ Compare *Laidlaw*, 528 U.S. 167, 181–83 (1999) (allowing standing even though plaintiffs could not prove mercury releases by defendant would harm human health or the environment), with *NRDC II*, 464 F.3d 1, 5–7 (D.C. Cir. 2006) (finding risk of one in 129,000 or one in 200,000 that individuals living at time of methyl bromide releases would develop skin cancer as a result).

³²⁴ *Covington*, 358 F.3d at 654 (Gould, J., concurring); see also Mank, *Global Warming*, *supra* note 49, at 43.

³²⁵ *Covington*, 358 F.3d at 654 (Gould, J., concurring); see also Mank, *Global Warming*, *supra* note 49, at 43–44.

³²⁶ See *Summers*, 129 S. Ct. 1142, 1152 (2009) (observing that standing requires “likely” injury or “a factual showing of perceptible harm” (quoting *Lujan*, 504 U.S. 555, 566 (1992))).

³²⁷ *Covington*, 358 F.3d at 654 (Gould, J., concurring) (citing *Laidlaw*, 528 U.S. at 185–86); see also Mank, *Global Warming*, *supra* note 49, at 44.

standing limits to bar such suits even if plaintiffs have suffered some minimal injury in fact.³²⁸

C. Applying *Laidlaw* and *Summers* to *NRDC II*

Applying the standing analysis in *Laidlaw* and *Summers* to the facts of *NRDC II* demonstrates the weaknesses of both Supreme Court decisions. Judge Gould in his *Covington* concurrence made a good argument that the objective risk of being harmed from skin cancer or cataracts by the release of ozone destroying chemicals is a far stronger basis for standing than the subjective fear of pollution in *Laidlaw*,³²⁹ although the evidence of harm was much weaker in *Covington* than *NRDC II*.³³⁰ The evidence that pollution would cause health impacts was far stronger in *NRDC II* than in *Laidlaw*, but the Supreme Court would likely deny standing in a case involving facts similar to *NRDC II* because there were no allegations of avoided recreational uses in *NRDC II*.³³¹ If the Supreme Court's current standing jurisprudence would find no standing in *NRDC II*, but standing in the far weaker *Laidlaw* decision, then there is a problem with the Court's standing jurisprudence.

Following the reasoning in the *Summers* decision, a court facing the same facts as in the *NRDC II* decision should deny standing because it is not possible to predict the specific members of NRDC who will develop skin cancer in the future.³³² The *Summers* standing framework is flawed because it fails to consider the severity and irreversibility of the future probabilistic

³²⁸ *Covington*, 358 F.3d at 654–55 (Gould, J., concurring); see also Mank, *Global Warming*, *supra* note 49, at 44–49. In addition to constitutional standing limitations, the courts may impose prudential standing limitations as a matter of judicial policy. See, e.g., *Bennett v. Spear*, 520 U.S. 154, 162–63 (1997) (explaining the “zone of interests” standing test as a prudential limitation and not a constitutional requirement); *Duke Power Co. v. Carolina Envtl. Study Group, Inc.*, 438 U.S. 59, 80 (1978) (prohibiting most third party suits under the prudential standing doctrine); see also Mank, *Future Generations*, *supra* note 75, at 28 (discussing prudential standing restrictions). Unlike constitutional limits on standing, however, Congress may expressly override prudential limitations. *Bennett*, 520 U.S. at 162–66 (holding that “unlike their constitutional counterparts, [prudential limits on standing] can be modified or abrogated by Congress,” and concluding that a citizen suit provision abrogated the zone of interest limitation); Mank, *States Standing*, *supra* note 37, at 1712 n.50.

³²⁹ *Covington*, 358 F.3d at 653–54 (Gould, J., concurring).

³³⁰ See Mank, *Global Warming*, *supra* note 49, at 43. Compare *Covington*, 358 F.3d at 640–41 & n.19 (noting that releases of CFCs and other ozone-depleting substances resulted in an unspecified increased risk of harm to plaintiffs and observing that defendant failed to keep proper records showing that CFCs had been removed from the white goods, so the court “presume[d] that the white goods leaked CFCs unless and until the disposer affirmatively demonstrates otherwise”), with *NRDC II*, 464 F.3d 1, 7 (D.C. Cir. 2006) (finding risk of one in 129,000 to 200,000 that individuals living at the time of methyl bromide releases would develop skin cancer as a result).

³³¹ Compare *Laidlaw*, 528 U.S. at 181–85 (allowing standing even though plaintiffs could not prove mercury releases by defendant would harm human health or the environment), with *NRDC II*, 464 F.3d at 7 (finding risk of one to 129,000 or one in 200,000 that individuals living at the time of methyl bromide releases would develop skin cancer as a result).

³³² See *Summers*, 129 S. Ct. 1142, 1151 (2009) (rejecting standing based on statistical probability that some members of plaintiff organization will be harmed in the future).

harm. In *Summers* the harm was merely aesthetic and recreational.³³³ In *NRDC II*, the release of methyl bromide would cause irreversible harm to the ozone layer and result in an increase in dangerous ultraviolet radiation that would harm the health of many persons.³³⁴ Additionally, the *Summers* standing analysis does not consider the quality of the statistical evidence. It is one thing for a court to reject standing if there is only a remote chance of harm, but *Summers*’s complete rejection of a probabilistic harm would result in a serious injustice in cases with strong statistical evidence such as *NRDC II* where it is undisputed that some people during their lifetimes will develop skin cancer.³³⁵

Together *Summers* and *Laidlaw* create a bizarre standing test in which the loss of recreational activities is more important than the probability that a chemical will cause injury or death. After *Summers*, the only way that plaintiffs similar to the *NRDC II* plaintiffs might be able to achieve standing is to allege that their “reasonable fears” of developing skin cancer from the effect of methyl bromide releases on the ozone layer led them to avoid recreational activities in the sun.³³⁶ It would be difficult for most people to make convincing allegations that they avoid all sun exposure, but an affiant might allege that she is inconvenienced by the need to apply sunscreen, to wear a sun hat, and to restrict her recreational activities when UV levels from the sun are high. It seems incongruous that the *NRDC II* plaintiffs could not claim a sufficient injury for standing from a very real risk of developing skin cancer because they cannot identify the specific individuals that will be harmed, as required by *Summers*,³³⁷ but the *NRDC II* plaintiffs might be able to prove a sufficient injury if they avoid recreational activities on sunny days because of a reasonable fear of developing skin cancer, under *Laidlaw*’s standard.³³⁸

In combination, *Summers*’s rejection of all probabilistic standing, apparently without regard to how strong the statistical evidence may be, along with *Laidlaw*’s overly lenient standing exception for any reasonable fear that discourages recreational activities, borders on a bizarre contradiction. *Summers* is too stringent in denying standing in strong statistical cases such as *NRDC II*, and *Laidlaw*’s generous standing exception encourages frivolous allegations regarding forgone recreational uses that are

³³³ See *id.* at 1149–50 (discussing affidavits by members of plaintiff organization that assert recreational use and aesthetic enjoyment of federal forests and parks).

³³⁴ *NRDC II*, 464 F.3d at 7 (finding risk of one in 129,000 or one in 200,000 that individuals living at time of methyl bromide releases would develop skin cancer as a result).

³³⁵ *Id.*

³³⁶ *Laidlaw*, 528 U.S. at 181–85 (finding defendant’s pollution activities sufficiently injured plaintiffs for standing because their fear of pollution caused plaintiffs to avoid recreational use of the river).

³³⁷ See *Summers*, 129 S. Ct. at 1151 (rejecting standing based on statistical probability that some members of plaintiff organization will be harmed in the future).

³³⁸ *Laidlaw*, 528 U.S. at 181–85 (allowing standing even though plaintiffs could not prove mercury releases by defendant would harm human health or the environment because plaintiffs’ fear of pollution caused them to avoid recreational use of the river).

far less substantial than the facts in *NRDC II*.³³⁹ A reasonable standing test ought to find standing in the *NRDC II* case. As is discussed in Part VII, Justice Breyer's realistic threat test makes more sense when applied to the facts of *NRDC II* than either *Summers* or *Laidlaw*.

VII. THE SUPREME COURT SHOULD OVERRULE *SUMMERS* AND ADOPT JUSTICE BREYER'S REALISTIC THREAT TEST

In *Summers*, Justice Scalia quoted his *Lujan* opinion in arguing that standing requires a plaintiff to demonstrate actual harm rather than the mere possibility that harm might occur: "Standing, we have said, is not an ingenious academic exercise in the conceivable . . . [but] requires . . . a factual showing of perceptible harm."³⁴⁰ Accordingly, he concluded,

In part because of the difficulty of verifying the facts upon which such probabilistic standing depends, the Court has required plaintiffs claiming an organizational standing to identify members who have suffered the requisite harm—surely not a difficult task here, when so many thousands are alleged to have been harmed.³⁴¹

Although his argument has some plausibility, there are good policy and logical reasons for rejecting his approach.

Summers's strict rejection of probabilistic standing is implicitly at odds with *Laidlaw's* underlying reasoning. The reasonable concerns test in *Laidlaw* implicitly assesses the probability that harm will occur.³⁴² A concern is not reasonable if it is highly unlikely and, therefore, *Laidlaw* leads courts to consider the probability of harm. It is true that *Laidlaw* limits the scope of probabilistic analysis by requiring a plaintiff to allege current avoidance of recreational activities, but, for plaintiffs alleging the loss of recreational activities, a court must ultimately evaluate the reasonableness or probability of harm.³⁴³ Any plaintiff that can plausibly allege the loss of recreational activities can use *Laidlaw's* reasonable concerns test as an exception to *Summers's* strict standing framework.³⁴⁴ As is discussed in Part VI.C, a court following *Summers* would find no standing in a new case with facts similar to *NRDC II* because the plaintiff organization cannot demonstrate which of its members will contract skin cancer in the future, but a court might find standing if an affiant alleged good faith avoidance of recreational activities

³³⁹ Compare *Summers*, 129 S. Ct. at 1151 (rejecting standing based on statistical probability that some members of plaintiff organization will be harmed in the future), with *Laidlaw*, 528 U.S. at 181–85 (allowing standing even though plaintiffs could not prove mercury releases by defendant would harm human health or the environment because plaintiffs' fear of pollution caused them to avoid recreational use of the river).

³⁴⁰ *Summers*, 129 U.S. at 1152 (internal quotation marks omitted) (alteration in original) (quoting *Lujan*, 504 U.S. 555, 566 (1992)).

³⁴¹ *Id.*

³⁴² *Laidlaw*, 528 U.S. at 181–85; see *supra* text accompanying notes 94–96.

³⁴³ See *supra* text accompanying notes 94–96.

³⁴⁴ *Laidlaw*, 528 U.S. at 181–85.

in the sun because of reasonable fears of contracting skin cancer.³⁴⁵ Logically, the *Laidlaw* and *Summers* decisions are philosophically at odds and one of them should be overruled.³⁴⁶ As Part V explained, however, the Court likely focused on the superficial factual differences between the *Laidlaw* and *Summers* decisions to avoid the underlying philosophical contradictions between them.³⁴⁷

Based on his dissenting opinion in *Laidlaw*, Justice Scalia might argue that *Laidlaw* is an outlier decision that the Court should overrule and the Court should continue to follow the *Lujan* and *Summers* decisions’ relatively narrow approach to standing.³⁴⁸ Yet it seems unlikely that the Court will overrule *Laidlaw*, which commanded seven votes.³⁴⁹ The Court needs a new standing framework that addresses recreational and aesthetic injuries without making them paramount over more objective health and physical injuries.

There are good policy reasons for overruling the *Summers* requirement that a plaintiff organization identify which members will be harmed in the future, and instead using a probabilistic approach similar to the *NRDC II* decision.³⁵⁰ Before *Summers* was decided, Professor Hsu had argued that *Lujan*’s requirement of concrete and imminent injuries implicitly required plaintiffs to identify which individuals will be harmed by a defendant’s challenged action and, therefore, prevented plaintiffs from challenging diffuse environmental problems that will harm unidentifiable persons in the future.³⁵¹ The *Summers* decision reinforces *Lujan*’s requirement of identifying specific individuals who will be harmed in the future.³⁵² Because environmental toxins often cause harm only years after exposure,³⁵³ the goal of protecting the public health and the environment would be advanced by eliminating *Lujan*’s and *Summers*’s requirement that plaintiffs identify which individuals will be harmed in the future.³⁵⁴ Instead courts should recognize

³⁴⁵ See *supra* Part VI.C.

³⁴⁶ See *supra* Part VI.C.

³⁴⁷ See *supra* Part V.

³⁴⁸ See *supra* Part III.B.

³⁴⁹ *Laidlaw*, 528 U.S. at 171.

³⁵⁰ Mank, *Standing and Statistical Persons*, *supra* note 35, at 724, 728, 732–33.

³⁵¹ Shi-Ling Hsu, *The Identifiability Bias in Environmental Law*, 35 FLA. ST. U. L. REV. 433, 436, 440–51, 466–69, 473 (2008) (arguing that *Lujan*’s requirement of concrete and imminent injuries for standing implicitly requires plaintiffs to identify the individuals who will be injured by defendant’s actions and thereby prevents suits where injury will occur to unknown persons in the future); see *Summers*, 129 S. Ct. 1142, 1151–53 (2009) (rejecting standing based on statistical probability that some members of plaintiff organization will be harmed in the future); *Lujan*, 504 U.S. 555, 560–61 (1992) (requiring concrete and immediate injury); see also Mank, *Future Generations*, *supra* note 75, at 27 (discussing Hsu’s argument that standing doctrine has identifiability bias); Mank, *Standing and Statistical Persons*, *supra* note 35, at 728–30.

³⁵² See *Summers*, 129 S. Ct. at 1151–53 (rejecting standing based on statistical probability that some members of plaintiff organization will be harmed in the future).

³⁵³ Mank, *Standing and Statistical Persons*, *supra* note 35, at 689.

³⁵⁴ See Hsu, *supra* note 351, at 466–69, 473 (arguing that courts, agencies, and legislatures should recognize standing and legal liability for probabilistic harms even if the future victims cannot yet be identified); Mank, *Future Generations*, *supra* note 75, at 27 (discussing Hsu’s

standing if there is a realistic probability that an environmental pollutant will harm at least one member of a plaintiff organization.³⁵⁵

Justice Breyer's realistic threat test in his *Summers* dissent is a more reasonable methodology for determining if an injury has occurred for standing purposes than Justice Scalia's traditional test in his *Summers* majority opinion of requiring proof of an actual or imminent harm.³⁵⁶ A realistic threat of harm should be enough for standing. Modern science understands that many environmental and health threats are probabilistic in nature because only a certain percentage of the population exposed to a toxic chemical is likely to be harmed.³⁵⁷ The *NRDC II* decision is a compelling example for applying the realistic threat approach to standing.³⁵⁸ Under *Summers*, a court should deny standing in *NRDC II* because it is impossible to predict which members of NRDC will contract skin cancer.³⁵⁹ *Summers* leads to an unfortunate policy result in *NRDC II* because no one would have standing to challenge a government action that will subject one in 129,000 or one in 200,000 people to the horrors of skin cancer.³⁶⁰ Even someone who develops skin cancer in the future probably cannot sue because that person could not prove that the methyl bromide exemptions at issue in *NRDC II* caused the particular case of skin cancer because probability theory can never predict with certainty which individual or individuals will actually suffer harm, and there are usually other possible sources of harm.³⁶¹ By contrast, Justice Breyer's realistic threat test for standing would very likely allow a court to conclude that NRDC had established standing to sue in light of their strong statistical evidence of harm.³⁶² The realistic threat test produces a better policy outcome in both *NRDC II* and *Summers* by enabling plaintiffs to prevent serious predictable harm.³⁶³

In addition, Justice Breyer's realistic threat test might clarify the reasonable concerns test in *Laidlaw*. The *Laidlaw* decision did not provide

argument that courts should recognize standing for probabilistic injuries); Mank, *Standing and Statistical Persons*, *supra* note 35, at 728.

³⁵⁵ Mank, *Standing and Statistical Persons*, *supra* note 35, at 739 (arguing courts should recognize standing if plaintiff has at least a one in one million probability of suffering serious injury from the defendant's alleged actions).

³⁵⁶ Compare *supra* Part IV.A (discussing Justice Scalia's majority opinion in *Summers*), with *supra* Part IV.C (discussing Justice Breyer's dissenting opinion in *Summers*).

³⁵⁷ See Mank, *Standing and Statistical Persons*, *supra* note 35, at 735, 739.

³⁵⁸ See *supra* Parts VI.A, .C.

³⁵⁹ See *Summers*, 129 S. Ct. 1142, 1151–53 (2009) (rejecting standing based on statistical probability that some members of plaintiff organization will be harmed in the future); *supra* Part VI.C.

³⁶⁰ See *supra* Parts VI.A, .C.

³⁶¹ Elliott, *supra* note 35, at 504–05. “An individual risk of death of one in 200,000 does not actually translate into certainty that one person in a particular group of 200,000 people will die; the larger the group gets, the more likely that it contains someone who will eventually suffer the event subject to the risk analysis, but the question is always one of *probability*, not one of *certainty*.” *Id.* at n.221.

³⁶² See *supra* Part VI.A.

³⁶³ See *supra* Part VI.C.

any real guidance on what constitutes a reasonable concern.³⁶⁴ Based on the science at that time, the *Laidlaw* plaintiffs could not prove that any of them were at risk of physical harm, yet the Court found standing.³⁶⁵ By contrast, Justice Breyer’s realistic threat test suggests that a plaintiff organization might need to show that at least one of its members will actually suffer harm in the future.³⁶⁶ The realistic threat test is not perfectly clear, but it appears to be more transparent than the reasonable concerns test in *Laidlaw*. Accordingly, courts could use the realistic threat test to supplement or supplant the wobbly reasonable concerns test in *Laidlaw*.

VIII. CONCLUSION

The *Summers* decision purported to prohibit organizational standing based upon the statistical probability that some of an organization’s members will likely be harmed in the near future by the defendant’s allegedly illegal actions. Justice Scalia’s majority opinion condemned Justice Breyer’s dissenting opinion’s proposed realistic threat test as wholly inconsistent with the Court’s standing jurisprudence. Yet implicitly the Court recognized some form of probabilistic standing in *Laidlaw*, which found standing where plaintiffs avoided recreational activities because of reasonable concerns about future health injuries from pollution.³⁶⁷

There is an inherent tension between the *Summers* decision’s rejection of any consideration of probabilistic future injuries and the *Laidlaw* decision’s probabilistic assessment of what are reasonable concerns.³⁶⁸ The Court has fudged this tension by limiting *Laidlaw* to cases in which a plaintiff alleges avoidance of recreational activities because of a fear of pollution.³⁶⁹ It is likely that courts will ignore the tension by limiting the application of the *Summers* and the *Laidlaw* decisions to cases that are factually similar.³⁷⁰ Nevertheless, future plaintiffs may seek to avoid *Summers* and embrace *Laidlaw* by manipulating the facts of a case to include claims of lost recreational activities.³⁷¹

This Article applies the *Summers* and *Laidlaw* frameworks to the facts in *NRDC II*.³⁷² Both *Summers* and *Laidlaw* produce questionable results when

³⁶⁴ See *Laidlaw*, 528 U.S. 167, 181–85 (2000); *supra* Part VI.C.

³⁶⁵ *Laidlaw*, 528 U.S. at 181–85.

³⁶⁶ See Elliott, *supra* note 35, at 504–05 & n.222 (arguing the *NRDC II* decision requires that at least one member of an organization has suffered harm); see also *Summers*, 129 S. Ct. 1142, 1155–58 (2009) (Breyer, J., dissenting) (arguing that plaintiff organizations have standing because there is a realistic threat that at least one of their members is likely to be injured in the future).

³⁶⁷ *Laidlaw*, 528 U.S. at 181–83 (adopting the “reasonable concerns” test for whether plaintiff’s avoidance of recreational activities is sufficient for standing).

³⁶⁸ See *supra* Part V.C.

³⁶⁹ See *supra* Part V.C.

³⁷⁰ See *supra* Part V.

³⁷¹ See *supra* Part V.C.

³⁷² See *supra* Part VI.C.

applied to *NRDC II*'s facts.³⁷³ *Summers*'s rejection of all probabilistic standing is difficult to justify in the face of the government's admission in *NRDC II* that its exemption of certain uses of methyl bromide would cause some members of NRDC to develop skin cancer.³⁷⁴ In *Summers*, the government did not admit that its policies would cause harm, and any possible harm was purely aesthetic and recreational and thus less serious than in *NRDC II*.³⁷⁵ *Summers*'s requirement that a plaintiff organization must identify which of its members will be harmed in the future is more difficult to justify when the government authorizes the release of harmful toxic chemicals that it concedes will harm some people in the future.³⁷⁶

Likewise, the *Laidlaw* decision produces questionable results when it is applied to the facts of *NRDC II*.³⁷⁷ *Laidlaw* allowed standing where there was no proof of actual harm to the environment or the plaintiffs because their reasonable concerns about mercury pollution led the plaintiffs to avoid recreational activities in a river.³⁷⁸ Judge Gould in his concurring opinion in *Covington* correctly reasoned that the injury caused by ODCs was far greater than the aesthetic and recreational harm in *Laidlaw*, although the facts of *NRDC II* present a stronger case than those in *Covington*.³⁷⁹ It is incongruous to recognize standing in *Laidlaw*, but deny it in *NRDC II* because we cannot predict which particular members of NRDC will develop skin cancer.³⁸⁰ The only way plaintiffs similar to the *NRDC II* plaintiffs can achieve standing is to allege that they have curtailed recreational activities, but the injury caused by avoiding sunbathing is far less serious than the probabilistic risk of developing skin cancer, which is probably not a grounds for standing under current law.³⁸¹ The combination of *Summers*'s strictness and *Laidlaw*'s leniency will encourage plaintiffs to manipulate the facts of a case to allege that members have, for instance, avoided sunbathing activities because of their reasonable concerns about getting skin cancer.³⁸² A better approach to standing is needed.

Because of the tensions and inconsistencies revealed when *Summers* and *Laidlaw* are applied to the facts of the *NRDC II* decision, the Court should abandon both *Summers* and *Laidlaw* approaches to standing and instead adopt Justice Breyer's proposed realistic threat test to achieve more equitable and uniform standing determinations.³⁸³ Justice Breyer's test is more sensible about the nature of injuries than *Summers*.³⁸⁴ His approach is consistent with citizen suit statutes in which Congress has provided that

³⁷³ See *supra* Part VI.C.

³⁷⁴ See *supra* Part VI.C.

³⁷⁵ Compare *supra* Part IV.A (*Summers*), with *supra* Part VI.A.1 (*NRDC II*).

³⁷⁶ See *supra* Part VI.C.

³⁷⁷ See *supra* Part VI.C.

³⁷⁸ *Laidlaw*, 528 U.S. 167, 181–83 (2000).

³⁷⁹ *Covington*, 358 F.3d 626, 653–54 (9th Cir. 2004) (Gould, J., concurring).

³⁸⁰ See *supra* Part VI.C.

³⁸¹ See *supra* Part VI.C.

³⁸² See *supra* Part VI.C.

³⁸³ See *supra* Parts VI.C, VII.

³⁸⁴ See *supra* Part VII.

“any person” may bring suit.³⁸⁵ Surely, it is realistic to assume that at least one of the Sierra Club’s 700,000 members will be harmed by the Service’s timber salvage sales and would have commented if the Service had followed its public notice and comment procedures; even Justice Scalia acknowledged that it was “certainly possible—perhaps even likely—that one individual will meet all of these criteria.”³⁸⁶ The weakness and lack of realism of Justice Scalia’s approach is even more obvious and harmful when applied to the threat of environmental harms that are more serious and inherently probabilistic harms such as developing skin cancer as a result of the action of ODCs.³⁸⁷ Additionally, the realistic threat test provides more clarity than the reasonable concerns test in *Laidlaw*.³⁸⁸ The realistic threat test could produce more uniform results because it could be applied to both nonrecreational and recreational cases and thus could supplant the inconsistent *Summers* and *Laidlaw* frameworks.³⁸⁹ As Justice Breyer suggested in his dissent, a future court might use a broad reading of either *Lyons* or *Massachusetts v. EPA* to argue that the Court has already endorsed probabilistic standing, at least where there is a realistic threat of harm.³⁹⁰

If the Court does not overrule *Summers*, Congress could adopt Justice Breyer’s advice and test the Court’s standing doctrine by adopting a statute that explicitly confers standing rights on plaintiffs challenging future timber salvage sales.³⁹¹ It would be interesting to see how Justice Kennedy would decide a case where Congress has explicitly conferred standing rights on behalf of an organization whose members are likely to be harmed in the future by the Executive Branch’s alleged failure to enforce the law.³⁹² Only through probabilistic standing can citizens truly enforce the numerous citizen suit statutes that Congress has enacted to allow citizens to sue as private attorneys general to force the Executive Branch to comply with specific congressional directives in those statutes.³⁹³

³⁸⁵ See *supra* Parts I, IV.B.

³⁸⁶ *Summers*, 129 S. Ct. 1142, 1152 (2009); see also *id.* at 1156, 1158 (Breyer, J., dissenting) (arguing that it is likely that members of the plaintiff organizations will be harmed by the government’s sale of fire-damaged timber without required public notice and comment); *supra* Part IV.C.

³⁸⁷ See *supra* Parts VI.C, VII.

³⁸⁸ See *supra* Part VII.

³⁸⁹ See *supra* Parts VI.C, VII.

³⁹⁰ See *supra* Part IV.C.

³⁹¹ See *supra* Part IV.B.

³⁹² See *supra* Part IV.B.

³⁹³ See *supra* note 34 and accompanying text (discussing citizen suits and “public law” statutes).