
Surviving *Summers*

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In Summers v. Earth Island Institute, the Supreme Court held that an organizational plaintiff could not establish standing based on the likelihood of having among its members an injured individual. The standing requirement was not met until that individual and his or her injury were specifically identified. The move apparently reined in the development of “probabilistic” theories of injury. However, the concept of probabilistic injury has not been well defined, and consequently the case law and commentary on probabilistic injury suffer from imprecise and inconsistent reasoning. To clarify the doctrine, this Note proposes that probabilistic injury can be divided into three categories: “uncertain injury” cases, “uncertain plaintiff” cases, and “increased-risk-as-injury” cases. Reading Summers with these categories in mind permits a clearer picture of how Summers affects the concept of probabilistic standing. Summers restricts, or maintains the restrictions on, uncertain injury and uncertain plaintiff cases. Meanwhile, the theory of increased risk as injury survives Summers. Increased risk injuries should be recognized by the Court as cognizable injuries for standing purposes. This recognition is not only constitutionally permissible but also desirable to ensure that meritorious claims are not barred. Increased-risk-as-injury cases, which survive Summers, should continue to survive.

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INTRODUCTION

In March 2009, the Supreme Court decided *Summers v. Earth Island Institute*, denying standing to a group of environmental organizations.¹ The Court held that the plaintiffs' allegations of future injury were insufficiently specific to satisfy the injury-in-fact requirement of Constitutional standing.² In particular, the Court rejected the organizational plaintiffs' arguments suggesting a statistical likelihood of having an injured member, and insisted that no organization could have standing without expressly identifying an individual injured member.³ According to certain commentators, *Summers* represents a significant tightening of standing doctrine and indicates "a limit to the role and usefulness of statistics and probability in standing."⁴ Some speculate that *Summers* may threaten probabilistic theories of standing in general.⁵ This Note examines the extent to which *Summers* does limit the use of probability in standing, and suggests that at least one form of "probabilistic standing" survives.

In this Note, I review the state of standing doctrine prior to the decision in *Summers v. Earth Island Institute*, and examine the impact that *Summers* will have on future standing jurisprudence. In order to do so, I divide the existing case law on "probabilistic injury," which has up until now been defined only vaguely, into three categories: "uncertain injury" cases, "uncertain plaintiff" cases, and "increased-risk-as-injury" cases. *Summers* affects each of these types of cases differently, and I explore what those effects are. I conclude that *Summers* confirms the imminence requirement that restricts uncertain injury cases; that uncertain plaintiff cases are no longer viable; and that the door is still open for increased-risk-as-injury cases. Finally, I propose that increased-risk-as-injury cases both can and should be recognized by courts as presenting cognizable injuries for standing purposes.

To provide background for the analysis, Part I describes the origins of standing jurisprudence. Part II considers probabilistic injury in detail, describing the three different types of probabilistic injury. The lack of precision in the writings of courts and commentators discussing

1. *Summers v. Earth Island Inst.*, 129 S. Ct. 1142 (2009).

2. *Id.* at 1150.

3. *Id.* at 1151–52.

4. David B. Salmons et al., *Earth Island's Tighter Standing Requirement*, LAW 360 (March 11, 2009), available at <http://www.bingham.com/Media.aspx?MediaID=8388>.

5. See, e.g., Environmental Law Institute, Recent Cases: *Summers v. Earth Island Institute*, http://www.endangeredlaws.org/case_summers.htm (last visited Feb. 24, 2010); Karl S. Coplan, *Ideological Plaintiffs, Administrative Lawmaking, Standing, and the Petition Clause*, 61 ME. L. REV. 377, 412 (2009) ("More recently, the Supreme Court more emphatically rejected the possibility of using probabilistic harms to establish standing, at least in the case of alleged procedural injuries and on a record that did not establish a factual basis for the probabilistic analysis.").

probabilistic injury is a current source of confusion. Part II aims to clarify and organize the body of cases that fall under the label of “probabilistic” to facilitate future analysis.

Part III describes *Summers* and its holdings and analyzes how *Summers* affects the three different types of probabilistic injury, concluding that one type of probabilistic injury—increased risk as injury—survives. Part IV discusses increased risk as injury in greater detail, and explains why increased risk as injury is a viable theory of injury for standing purposes that not only survives the analysis of *Summers* but should also continue to be recognized in the future.

I. THE LAW OF STANDING

Courts look to the doctrine of standing in determining their jurisdiction to entertain the cases before them. Those with standing are entitled to be plaintiffs; those without may not bring suit. Standing doctrine has two components: the Constitutional component, consisting of constitutionally compelled limits on the Court’s ability to accept plaintiffs, and the prudential component, consisting of the Court’s own rules for self-restraint.⁶ First, this Part will briefly describe Constitutional standing, including the requirements, the underlying theory, and the injury-in-fact element, as well as particular requirements for organizational plaintiffs, procedural plaintiffs, and environmental plaintiffs. This Part will then conclude by describing the requirements for prudential standing.

A. Constitutional Standing

1. Constitutional Standing Requirements

No federal court may entertain a question unless the person raising it is constitutionally entitled to do so.⁷ Prior to the development of standing doctrine, courts decided which plaintiffs had the legal right to enforce an asserted legal duty by referring to common law traditions or statutory interpretation.⁸ The mid-twentieth century saw an increase in litigation over public values and the rise of the administrative state; therefore, more plaintiffs sought to enforce their rights through the federal courts, and new rights and duties developed through statutes and regulation.⁹ In

6. See *Warth v. Seldin*, 422 U.S. 490, 498 (1975).

7. See *Valley Forge Christian Coll. v. Ams. United for Separation of Church & State, Inc.*, 454 U.S. 464, 488 n.24 (1982) (“Neither the Administrative Procedure Act, nor any other congressional enactment, can lower the threshold requirements of standing under Art. III.”).

8. See William A. Fletcher, *The Structure of Standing*, 98 *YALE L.J.* 221, 226 (1988).

9. See *id.* at 225, 227.

response to this increase in litigation, the Court began to articulate new standards for determining which plaintiffs were entitled to sue.¹⁰ The emerging standing doctrine was based on Article III of the Constitution, which limits the jurisdiction of federal courts to the resolution of “cases” and “controversies.”¹¹ The logical leap from the minimal language in Article III to current standing principles is not always clear, and the constitutional origins and justifications of standing doctrine are contested.¹² Nevertheless, standing is now well established as a threshold jurisdictional question.¹³ To show standing sufficient to bring a case in federal court, a plaintiff must demonstrate (a) that she has suffered or will imminently suffer an “injury in fact”; (b) that this injury is “fairly traceable” to the alleged conduct of the defendant; and (c) that the injury is redressable by a favorable decision of the court.¹⁴ These requirements constitute an “irreducible constitutional minimum” for bringing suit.¹⁵

2. *The Theory behind Constitutional Standing*

Courts have articulated a number of principles underlying the standing doctrine. First, it is said that standing requirements are

10. *See id.*

11. “[T]he ‘cases and controversies’ language of Art. III forecloses the conversion of courts of the United States into judicial versions of college debating forums.” *Valley Forge Christian Coll.*, 454 U.S. at 473. U.S. CONST. art. III, § 2, cl. 1 reads:

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.

12. *See, e.g.*, James Leonard & Joanne C. Brant, *The Half-Open Door: Article III, the Injury-in-Fact Rule, and the Framers’ Plan for Federal Courts of Limited Jurisdiction*, 54 RUTGERS L. REV. 1 (2001) (defending the injury-in-fact rule as “an acceptable interpretation of Article III”); Gene R. Nichol, Jr., *The Impossibility of Lujan’s Project*, 11 DUKE ENVTL. L. & POL’Y F. 193, 198 (2001) (“[T]he personal harm standard appears nowhere in the text of the Constitution And for over 30 years scholars have beaten home the point that injury was not a requisite for judicial authority—for the existence of a ‘case’—in either the colonial, framing, or early constitutional periods.”); John G. Roberts, Jr., *Article III Limits on Statutory Standing*, 42 DUKE L.J. 1219, 1232 (1993) (“The Court’s recognition that injury in fact is a requirement of Article III ensures that the courts will more properly remain concerned with tasks that are, in Madison’s words, ‘of a Judiciary nature.’”); Fletcher, *supra* note 8, at 222 (“I propose that we . . . abandon the idea that Article III requires a showing of ‘injury in fact.’”); Antonin Scalia, *The Doctrine of Standing as an Essential Element of the Separation of Powers*, 17 SUFFOLK U. L. REV. 881, 882 (1983) (“The requirement of standing has been made part of American constitutional law through (for want of a better vehicle) the provision of Art. III, Sec. 2.”).

13. *See, e.g.*, *Nat’l Org. for Women, Inc. v. Scheidler*, 510 U.S. 249, 255 (1994); *Warth v. Seldin*, 422 U.S. 490, 517–18 (1975).

14. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992).

15. *Id.*

necessary to promote the issuance of well-reasoned opinions; when litigants are truly adverse and have a concrete personal stake in the outcome, they will more effectively present the issues that the court is called upon to decide.¹⁶ Indeed, in the early 1960s the Supreme Court described the personal stake and genuine adversity of the litigants as “the gist of the question of standing.”¹⁷ The requirement that every case before the court be anchored in a “concrete factual context” ensures that the legal questions presented will be resolved “not in the rarified atmosphere of a debating society,” but rather with “a realistic appreciation of the consequences of judicial action.”¹⁸

Standing principles also play a role in maintaining the separation of powers by enforcing the judiciary’s limited role under the Constitution. Article III limits the federal judicial power “to those disputes which confine federal courts to a role consistent with a system of separated powers and which are traditionally thought to be capable of resolution through the judicial process.”¹⁹ Ensuring the adverseness of parties and their personal stake in the litigation prevents the courts from exercising undue power over the other two branches of government: it prevents the courts from issuing constitutionally impermissible advisory opinions,²⁰ and reserves the exercise of judicial power over the political branches to genuine controversies about individual rights.²¹ Standing doctrine restricts Congress’s ability to allow “undifferentiated public interests” to be contested in the courts²² or to “conscript[] the courts in its battles with the executive branch.”²³ This restriction preserves the executive branch’s constitutional duty to “take care that the laws be faithfully executed.”²⁴ Thus, standing is a tool for keeping the judiciary within the bounds that are illustrated by the Constitution,²⁵ bounds considered proper for a democratic society.²⁶ Notwithstanding the Court’s previous emphasis on “personal stake” as the “gist of the question of standing,” the Court has

16. See *Baker v. Carr*, 369 U.S. 186, 204 (1962).

17. *Id.*

18. *Valley Forge Christian Coll. v. Ams. United for Separation of Church & State, Inc.*, 454 U.S. 464, 472 (1982).

19. *Flast v. Cohen*, 392 U.S. 83, 97 (1968).

20. See *Lujan*, 504 U.S. at 598 n.4 (Blackmun, J., dissenting).

21. See *Valley Forge Christian Coll.*, 454 U.S. at 473–74; Roberts, *supra* note 12, at 1220 (citing *Marbury v. Madison*, 5 U.S. 137 (1803)); *Stark v. Wickard*, 321 U.S. 288, 309–10 (1944).

22. *Lujan*, 504 U.S. at 577.

23. Heather Elliott, *The Functions of Standing*, 61 STAN. L. REV. 459, 463 (2008).

24. U.S. CONST. art. II, § 3.

25. See *Valley Forge Christian Coll.*, 454 U.S. at 471.

26. See *Warth v. Seldin*, 422 U.S. 490, 498 (1975) (citing *Schlesinger v. Reservists to Stop the War*, 418 U.S. 208, 221–27 (1974); *United States v. Richardson*, 418 U.S. 166, 188–97 (1974)).

held more recently that separation of powers is the main principle underlying restrictions on standing.²⁷

Finally, the Court's standing requirements might also be informed by pragmatic considerations of docket control.²⁸ Broad access to the courts might threaten to overwhelm the judiciary. As the Court noted in *Flast v. Cohen*, which denied taxpayer standing, a broader conception of standing might allow litigation "in respect of every other appropriation act and statutes whose administration requires the outlay of public money, and whose validity may be questioned."²⁹

3. *The Injury-In-Fact Requirement*

Since *Association of Data Processing Service Organizations v. Camp*,³⁰ the Supreme Court has held that a plaintiff could not bring suit unless she had suffered "injury in fact."³¹ The modern rule defines an injury in fact as the "invasion of a legally protected interest which is (a) concrete and particularized, and (b) "actual or imminent, not conjectural or hypothetical."³² An injury in fact is both "distinct and palpable"³³ and "real and immediate."³⁴ Justice Scalia places great weight on the "particularized" nature of the injury; standing, to him, should depend on an injury that "sets [the plaintiff] apart from the citizenry at large."³⁵ At the same time, the Court has held that injuries that are widely shared are not necessarily disqualified from being considered injury in fact.³⁶ Injury to purely aesthetic or recreational interests is cognizable for the purposes of standing;³⁷ however, injury to a plaintiff's abstract interest in seeing the law properly applied is not a constitutionally recognized injury in fact.³⁸

27. *Baker v. Carr*, 369 U.S. 186, 204 (1962) (finding a personal stake to be the "gist of the question of standing"); see also *Allen v. Wright*, 468 U.S. 737, 752 (1984) ("[T]he law of Art. III standing is built on a single basic idea—the idea of separation of powers.").

28. See Coplan, *supra* note 5, at 425.

29. *Id.*

30. 397 U.S. 150 (1970).

31. *Id.* at 152–53. Prior to the development of modern standing doctrine, the right to bring suit depended partially on whether the plaintiff had a concrete interest that had been recognized by statute or the common law as a basis for suit. Cass Sunstein, *What's Standing After Lujan? Of Citizen Suits, "Injuries," and Article III*, 91 MICH. L. REV. 163, 170 (1992). What was important, at that time, was not whether there was an "actual injury," but whether there had been a legally cognizable injury, that is, a cause of action. *Id.*

32. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992) (internal citations omitted).

33. *Warth v. Seldin*, 422 U.S. 490, 501 (1975).

34. *City of Los Angeles v. Lyons*, 461 U.S. 95, 102 (1983).

35. Scalia, *supra* note 12, at 882.

36. See, e.g., *Sierra Club v. Morton*, 405 U.S. 727, 738 (1972).

37. See *id.*

38. See *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 573–74 (1992).

As for the imminence requirement, the strictness with which that requirement is interpreted has apparently varied among different courts.³⁹ Some courts have held that “[s]tanding depends on the probability of harm” rather than “its temporal proximity”⁴⁰—a view embraced by the dissent in *Summers*, discussed below. In *Lujan v. Defenders of Wildlife*, the Court conceded that imminence was a “somewhat elastic concept,”⁴¹ and noted that the purpose of this requirement was to ensure that the alleged injury was “certainly impending” rather than speculative and indefinite.⁴² For environmental plaintiffs, the requirement that injury be shown with some certainty and concreteness includes a requirement that plaintiffs challenging action on a particular area of land demonstrate their use of that specific area.⁴³ Environmental plaintiffs adequately allege injury in fact by showing that they use the area in question and that the aesthetic and recreational values of the area are diminished as a result of the defendant’s conduct.⁴⁴ However, it is insufficient for organizational environmental plaintiffs to aver only that they have members who use unspecified portions of a large tract of territory, some portions of which are affected by the challenged action.⁴⁵

Finally, the injury required for standing purposes need not be of any minimum magnitude, as long as it is a cognizable injury. The Court has held that “an identifiable trifle,” such as a \$1.50 poll tax, can suffice to establish a plaintiff’s standing.⁴⁶

39. *Lujan* emphasizes that the imminence requirement is meant to ensure that the injury is not too speculative to permit standing. *Id.* at 564 n.2. However, *Lujan* also requires a “high degree of immediacy” in instances where the injury is alleged to occur at “some indefinite future time.” *Id.* *Whitmore v. Arkansas* contrasts imminent harms with those that are “conjectural” or “hypothetical.” 495 U.S. 149, 155 (1990). The Seventh Circuit has held, with regard to the imminence requirement, that “[s]tanding depends on the probability of harm, not its temporal proximity.” 520 S. Mich. Ave. Assocs., Ltd. v. Devine, 433 F.3d 961, 962 (7th Cir. 2006). Meanwhile, *City of Los Angeles v. Lyons* requires a showing that the plaintiff has sustained or is in immediate danger of sustaining some direct injury. 461 U.S. at 101–02.

40. 520 S. Mich. Ave. Assocs., Ltd., 433 F.3d at 962.

41. *Lujan*, 504 U.S. at 564 n.2.

42. *Id.*

43. See, e.g., *Sierra Club v. Morton*, 405 U.S. 727, 735 (1972) (holding that there was no standing where the plaintiff organization had not alleged that any of its members would use the land in question for any purpose); *Lujan*, 504 U.S. at 564 (holding that plaintiffs had no injury where they could not show a firm commitment to visit the geographic area where the defendant’s actions were challenged); *Douglas County v. Babbitt*, 48 F.3d 1495, 1501 n.5 (9th Cir. 1995) (stating that the “geographic nexus” test is equated with the “concrete interest” test of *Lujan*).

44. See *Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc.*, 528 U.S. 167, 183 (2000) (citing *Sierra Club*, 405 U.S. at 735).

45. *Lujan v. Nat’l Wildlife Federation*, 497 U.S. 871, 889 (1990).

46. *United States v. Students Challenging Regulatory Agency Procedures (SCRAP)*, 412 U.S. 669, 690 n.14 (1973) (quoting Kenneth C. Davis, *Standing: Taxpayers and Others*, 35 U. CHI. L. REV. 601, 613 (1967), and drawing on *Harper v. Va. Bd. of Elections*, 383 U.S. 663 (1966), for its example of the \$1.50 poll tax).

4. *Procedural Standing and Injury in Fact*

The National Environmental Policy Act (NEPA) requires federal agencies to prepare an Environmental Impact Statement (EIS) prior to any “major Federal action[] significantly affecting the quality of the human environment.”⁴⁷ NEPA has no citizen suit provision; plaintiffs commonly bring suit under the Administrative Procedure Act to enforce this responsibility.⁴⁸ The injury in such cases is procedural: it is an injury to the plaintiff’s interest in having the proper procedures carried out by the agency.⁴⁹ Plaintiffs with such a procedural right to protect their concrete interests may do so without meeting the standards for redressability and immediacy that are normally required to establish standing.⁵⁰ As the D.C. Circuit has explained, standing related to the preparation of an EIS is based on whether the plaintiffs show a “particularized environmental interest of theirs that will suffer demonstrably increased risk” if a proper EIS is not completed.⁵¹

Standards for procedural standing vary somewhat among the circuit courts. For the D.C. Circuit, the injury-in-fact requirement for a procedural plaintiff is satisfied where the failure to prepare an adequate EIS creates a demonstrably increased risk of serious environmental harm, leading to an actual threat to a particular interest of the plaintiff.⁵² Other courts apparently have a more relaxed standing requirement for procedural injury; for example, in the Ninth Circuit procedural plaintiffs need only demonstrate “a procedural right that, if exercised, *could* protect their concrete interests.”⁵³ In any case, it is established that an agency’s failure to follow proper procedure can be sufficient to establish injury in fact for certain plaintiffs.⁵⁴

5. *Constitutional Standing for Organizations*

Drawing on Article III, the Court has also developed requirements for “associational” or “organizational” standing. An organization may

47. 42 U.S.C. § 4332(2)(C) (2006); 40 C.F.R. § 1502.4 (2009).

48. *See, e.g.*, *Pub. Citizen v. U.S. Trade Representative*, 5 F.3d 549, 551 (D.C. Cir. 1993).

49. *See Or. Envtl. Council v. Kunzman*, 817 F.2d 484, 491 (9th Cir. 1987).

50. *See Lujan v. Defenders of Wildlife*, 504 U.S. 555, 573 n.7 (1992) (“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.”).

51. *Fla. Audubon Soc’y v. Bentsen*, 94 F.3d 658, 665 (D.C. Cir. 1996).

52. *See id.* at 667.

53. *Salmon Spawning & Recovery Alliance v. Gutierrez*, 545 F.3d 1220, 1226 (9th Cir. 2008) (citing *Defenders of Wildlife v. EPA*, 420 F.3d 946, 957 (9th Cir. 2005)) (emphasis in original? Or added?). Emphasis in original (Defenders of Wildlife).

54. *See Or. Envtl. Council*, 817 F.2d at 491.

have standing to bring suit on behalf of its members only if (1) its members would have standing to sue in their own right, (2) the interests the organization seeks to protect are germane to its purpose, and (3) neither the claim asserted nor the relief requested requires the participation of an individual member of the organization.⁵⁵ At a minimum, the organization must identify at least one person who would have standing in her own right, that is, one individual who can show injury in fact, causation, and redressability.⁵⁶

B. Prudential Standing

Aside from the Constitutional requirements for standing, courts also employ self-imposed prudential standing requirements to avoid deciding “questions of broad social import” and to ensure that access to the federal courts is limited to those best suited to assert particular claims.⁵⁷ Absent Congress’s grant of a right of action, courts will not entertain suits from plaintiffs who are raising the rights of a third party, who are seeking redress for generalized grievances, or whose claims do not fall within the zone of interests that the statute they invoke is meant to protect.⁵⁸ Where a statute confers standing on a particular class of people, these prudential standing limits do not apply.⁵⁹ Constitutional standing limits, on the other hand, cannot be removed by an act of Congress.⁶⁰

II. PROBABILISTIC INJURY AND STANDING BEFORE *SUMMERS*

Plaintiffs can base their standing on either a past or an imminent future injury in fact. A current question about the doctrine of standing is the extent to which a future “probabilistic injury” can give rise to standing. Before such a question can be addressed, however, it is necessary to define the meaning of “probabilistic standing.”

Courts and commentators so far have been unclear about what exactly they mean by the terms “probabilistic standing” or “probabilistic injury.”⁶¹ This lack of precision leads to confusion about what standing cases actually hold.⁶² A more precise doctrine of probabilistic standing

55. See *Hunt v. Wash. State Apple Adver. Comm’n*, 432 U.S. 333, 343 (1977).

56. See *Sierra Club v. EPA*, 292 F.3d 895, 898 (D.C. Cir. 2002) (citing *Hunt*, 432 U.S. at 342–43).

57. *Gladstone, Realtors v. Vill. of Bellwood*, 441 U.S. 91, 99–100 (1979).

58. See *Allen v. Wright*, 468 U.S. 737, 751 (1984); *Simon v. E. Ky. Welfare Rights Org.*, 426 U.S. 26, 39 n.19 (1976).

59. See *Warth v. Seldin*, 422 U.S. 490, 501 (1975).

60. See *Valley Forge Christian Coll. v. Ams. United for Separation of Church & State, Inc.*, 454 U.S. 464, 488 n.24 (1982) (“Neither the Administrative Procedure Act, nor any other congressional enactment, can lower the threshold requirements of standing under Art. III.”).

61. See *infra* Part II.D for examples of imprecision by the courts.

62. See *id.*

would make court decisions more transparent. A more precise doctrine also allows analysis of how *Summers* affects different types of probabilistic cases in different ways.

“Probabilistic” injuries can be divided into three types according to the fact patterns presented. Basing these categories on fact patterns is appropriate, given that standing is typically a fact-specific determination. In some cases, the injury is probabilistic in the sense of being likely, but uncertain; I will refer to these as “uncertain injury” cases. A second type of probabilistic injury exists where an organization asserts standing by claiming some statistical probability that it has among its members an injured individual, rather than asserting standing by naming that individual; these are “uncertain plaintiff” cases. A third type of probabilistic standing exists where plaintiffs allege that an increased risk of injury is itself a cognizable injury; these are “increased-risk-as-injury” cases. It appears that wherever courts use the term “probabilistic injury,” they are referring to at least one of these three situations. However, because distinctions between types of probabilistic injury have not previously been drawn, there exist cases whose reasoning on probabilistic injury is imprecise, and which therefore do not fit cleanly within these three categories. Such cases, also discussed below, demonstrate the confusion of the current doctrine and the need for precise categories so that future cases can be decided in a more systematic manner.

A. *Uncertain Injury Cases*

The first category of probabilistic injury consists of those cases where the injury alleged by plaintiffs will not occur with certainty, but only with some degree of probability. All future injury is in a sense “probabilistic.”⁶³ Thus, courts deciding whether to admit a future injury as a cognizable injury in fact must determine whether the injury is likely enough to be “certainly impending” or unlikely enough to be simply “speculative.”⁶⁴

Injury that is merely speculative, of course, does not give rise to standing.⁶⁵ For example, in *City of Los Angeles v. Lyons*, the Court denied standing to a plaintiff seeking an injunction against the city and

63. See, e.g., *Friends of the Earth, Inc. v. Gaston Copper Recycling Corp.*, 204 F.3d 149, 160 (4th Cir. 2000) (“Threatened environmental injury is by nature probabilistic.”).

64. See *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 564 n.2 (1992).

65. See, e.g., *City of Los Angeles v. Lyons*, 461 U.S. 95, 105–06 (1983). *But see SCRAP*, 412 U.S. 669, 676 (1973) (an apparent outlier case that permitted standing where students alleged that regulatory action increased the relative cost of transporting recycled materials, thus increasing the use of raw materials and thereby threatening plaintiffs’ recreational and aesthetic interests in areas that might be exploited for natural resources).

police department enjoining their use of chokeholds.⁶⁶ The plaintiff had previously been subjected to a chokehold when stopped for a minor traffic infraction.⁶⁷ The Court held that, since any expectation that the plaintiff would again encounter police and suffer another incident involving a chokehold was “speculative,” he had no standing to seek the injunction.⁶⁸

Meanwhile, where courts are satisfied that the plaintiff’s alleged future injury reaches a certain threshold of probability, they deem the injury sufficiently certain to give rise to standing.⁶⁹ In some cases, the injury is apparently so likely that the question of imminence is not discussed.⁷⁰ Whether the imminence requirement emphasizes temporal proximity or the likelihood of injury is unclear; different approaches seem to be taken in different contexts.⁷¹

In between “speculative” injuries and “certainly impending” injuries are injuries of moderate probability. It is in this middle ground that the standing doctrine for uncertain injury cases is least clear. Cases have arisen involving injuries that do not seem to fall squarely into either extreme, but courts have not explained their methodology for determining whether they are sufficient for standing. For example, in *North Shore Gas Co. v. EPA*, the plaintiff’s claimed injury was that the construction of a new structure could potentially increase its costs of rehabilitating a Superfund site.⁷² The Seventh Circuit held, in a few conclusory sentences, that this possible increased cost was a cognizable injury in fact: “True, [the plaintiff’s] benefit [from winning the suit] would be probabilistic rather than certain, because North Shore’s responsibility for the clean up has not yet been determined. But a probabilistic benefit from winning a suit is enough ‘injury in fact.’”⁷³ The Seventh Circuit did not consider North Shore’s injury to be “certainly impending,” but

66. *Lyons*, 461 U.S. at 105.

67. *Id.* at 105.

68. *Id.* at 109.

69. See, e.g., *Lafleur v. Whitman*, 300 F.3d 256, 270 (2d. Cir. 2002) (“[T]here can be no question that petitioner Cohen is likely to be exposed to emissions from the facility.”).

70. *Id.* Plaintiffs in this case brought a petition under the Clean Air Act, challenging the EPA’s decision not to object to the New York State Department of Environmental Conservation’s issuance of a permit for the construction of a solid waste management facility. *Id.* at 259. The plaintiff raised concerns about an increase in air pollution as a result of the construction that would negatively affect her quality of life. *Id.* at 270. Although the facility had not been built, the Court held that the petitioner had standing to bring the challenge. *Id.* at 271. The Court simply stated, without reference to the imminence requirement: “Petitioner’s likely exposure to additional SO₂ in the air where she works is certainly an “injury-in-fact” sufficient to confer standing.” *Id.* at 270.

71. See *supra* note 39.

72. *N. Shore Gas Co. v. EPA*, 930 F.2d 1239, 1242 (7th Cir. 1991).

73. *Id.* at 1242.

neither was it too “speculative” for standing.⁷⁴ Where along the continuum of likelihood the Seventh Circuit was placing North Shore’s claim, and why it was close enough to the “imminent” end of the spectrum to merit standing, was a mystery.

Any discussion of uncertain injury cases would be incomplete without reference to the growing body of cases involving global warming plaintiffs.⁷⁵ The leading case is *Massachusetts v. EPA*,⁷⁶ where the Supreme Court held that the state of Massachusetts had standing to challenge the EPA’s failure to regulate carbon dioxide emissions. Injuries due to global warming seem to be future, uncertain injuries. However, *Massachusetts v. EPA* is not likely to be highly applicable to any future cases or to the development of theories of “probabilistic” injury. First, the scope of the decision is narrow; the Court held that the Commonwealth of Massachusetts, being a quasi-sovereign entity, was entitled to “special solicitude” in the court’s standing analysis.⁷⁷ Second, although harms related to global warming are generally thought of as future, probabilistic harms, Massachusetts was granted standing based not only on future injury, but on actual injury; Massachusetts alleged that it had already suffered a loss of coastal land as a result of climate change.⁷⁸ Thus, *Massachusetts v. EPA* reveals relatively little about the Court’s direction on the topic of standing for uncertain injury cases.

Finally, it is important in a discussion of uncertain injury cases to discuss *Friends of the Earth, Inc. v. Laidlaw Environmental Services (TOC), Inc.*,⁷⁹ a recent landmark case in the development of standing doctrine.⁸⁰ *Laidlaw* is sometimes incorrectly treated as a “probabilistic” case, and, in particular, an uncertain injury case.⁸¹ In fact, *Laidlaw* does

74. *Id.*

75. See, e.g., *Massachusetts v. EPA*, 549 U.S. 497, 504 (2007); *Comer v. Murphy Oil USA*, 585 F.3d 855, 867 (5th Cir. 2009), *vacated*, No. 07-60756, 2010 U.S. App. LEXIS 4253 (5th Cir. Feb. 26, 2010) (holding that plaintiffs had standing to bring nuisance suit based on harms due to global warming); *Connecticut v. Am. Elec. Power Co.*, 582 F.3d 309 (2d Cir. 2009) (holding that plaintiffs had standing to bring a federal common-law nuisance claim based on current and future harms resulting from global warming); *Friends of the Earth, Inc. v. Mosbacher*, 488 F. Supp. 2d 889, 892 (N.D. Cal. 2007) (challenging the Overseas Private Investment Corporation and the U.S. Export-Import Bank for providing funding to international fossil fuels projects without complying with NEPA’s EIS requirements; the court held in an earlier decision in this case that plaintiffs had sufficiently demonstrated standing based on procedural injury, *Friends of the Earth, Inc. v. Watson*, No. C 02-4106 JSW, 2005 U.S. Dist. LEXIS 42335, at *9, (N.D. Cal. Aug. 23, 2005).

76. *Massachusetts v. EPA*, 549 U.S. at 497.

77. *Id.* at 520.

78. *Id.* at 522.

79. 528 U.S. 167 (2000).

80. See Robert V. Percival & Joanna B. Goger, *Escaping the Common Law’s Shadow: Standing in the Light of Laidlaw*, 12 DUKE ENVTL. L. & POL’Y F. 119, 120 (2001).

81. See, e.g., Bradford Mank, *Summers v. Earth Island Institute Rejects Probabilistic Standing, But a “Realistic Threat” of Harm is a Better Standing Test*, 40 ENVTL. L. (forthcoming 2010)

not fit into any of the categories of probabilistic injury cases suggested here. An exploration of what *Laidlaw* means, and how it has been wrongly interpreted, sheds light on the systematic confusion surrounding the meaning of probabilistic standing, and is essential to an understanding of the current state of standing doctrine. Further, while *Laidlaw* is not a probabilistic case, it is useful in determining how the concept of probabilistic standing can be limited to prevent overuse.⁸²

In *Laidlaw*, the Court found standing where environmental plaintiffs alleged injuries resulting from the defendant's discharge of excess mercury into a stream, in violation of its Clean Water Act permit.⁸³ The plaintiffs stated that because of the mercury discharge they had curtailed their use of the land and water downstream from the defendant and, consequently, suffered recreational and aesthetic harm.⁸⁴ They alleged that they had previously used the waterway and surrounding areas for swimming, camping, boating, hiking, picnicking, and other activities.⁸⁵ However, because they knew of the illegal pollution occurring upstream, they avoided these activities that they had once enjoyed.⁸⁶

The Court held that this injury was sufficient to confer standing on plaintiffs.⁸⁷ Importantly, the Court held that it was the harm to the plaintiffs, and not to the environment, that was relevant to the standing question; thus, there was no need to prove environmental damage to the waterway for standing purposes.⁸⁸ Further, the Court noted, "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."⁸⁹

This last comment is probably the source of the confusion that has arisen around *Laidlaw*. Some have seen *Laidlaw* as a "probabilistic" case and cited *Laidlaw* for the proposition that a threat of injury is a cognizable injury sufficient for standing.⁹⁰ However, *Laidlaw* is clear in

(incorrectly stating that the Court implicitly recognized probabilistic standing in *Laidlaw*); Coplan, *supra* note 5, at 430–31 (incorrectly describing *Laidlaw* as a case in which pure ideological interest and subjective emotional state was a sufficient injury for standing purposes).

82. See *infra* Part IV.B.3.

83. *Laidlaw*, 528 U.S. at 183–84.

84. *Id.*

85. *Id.* at 182–83.

86. *Id.*

87. *Id.* at 183.

88. *Id.* at 181.

89. *Id.* at 184.

90. See, e.g., Bradford Mank, *Standing and Future Generations: Does Massachusetts v. EPA Open Standing for Generations to Come?* 34 COLUMBIA J. ENVTL. L. 1, 41 (2009) (construing *Laidlaw* as conferring standing to challenge future harms for plaintiffs with reasonable fears about a present harm); Cent. Delta Water Agency v. United States, 306 F.3d 938, 947–48 (9th Cir. 2002) (stating that

holding that the harm alleged was *actual*, not merely *imminent*; plaintiffs had already suffered the recreational and aesthetic harm that resulted from their reluctance to use their waterway.⁹¹ Since plaintiffs were alleging a harm that had already occurred, the injury was in no way “probabilistic.” Rather, the court’s discussion of probability went to the issue of the reasonableness of plaintiff’s reactions. The Court implied that if plaintiffs had stopped enjoying their stream out of some irrational fear, their injury would not have been cognizable; but since their reactions were reasonable, they had suffered an injury in fact.⁹² Thus, the court in *Laidlaw* was concerned about the likelihood of harm not to evaluate whether the *injury* was likely—it had already occurred—but to determine whether plaintiffs’ reactions were reasonable and therefore a legitimate basis for injury in fact. The injury in *Laidlaw*—the lost opportunity to camp, hike, boat, and swim—was not a probabilistic injury.

B. Uncertain Plaintiff Cases

Uncertain plaintiff cases involve organizational plaintiffs attempting to bring suit on behalf of their members. Ordinarily, in order to bring suit on behalf of its members, an organizational plaintiff must demonstrate the existence of an individual member who has suffered a cognizable injury.⁹³ Uncertain plaintiff cases are those where an organization, rather than identifying an injured member, instead avers that it has a statistical probability of having at least one injured member.

This type of probabilistic standing has been addressed mainly by the D.C. Circuit. In *Natural Resources Defense Council v. EPA* (“*NRDC II*”),⁹⁴ NRDC challenged EPA’s methyl bromide emissions regulations.⁹⁵

Laidlaw held that the threat of injury in fact was sufficient to confer standing). An arguably more appropriate way to misunderstand *Laidlaw* would have been to see it as elaborating an “uncertain injury” theory.

91. *Laidlaw*, 528 U.S. at 169 (indicating that the relevant injury was the injury to the plaintiff—that is, the actual loss of recreational opportunities—rather than the injury to the environment, which would have been conceived as a “probabilistic” injury, and noting that injury in fact had been “adequately documented”).

92. *Id.* at 184. The Court evaluated whether or not the plaintiffs’ injury was cognizable by comparing this case to *Lyons*, where there was no injury in fact because the injury alleged was too speculative. *Id.* In *Laidlaw*, the Court reasoned that there was a cognizable injury because the injuries suffered by plaintiffs arose from a reasonable fear. *Id.* The reasonableness of the plaintiffs’ fear seems to speak more to the causation prong of standing rather than the injury-in-fact prong; nevertheless, in *Laidlaw* and similar cases courts have included this analysis as part of injury in fact. *Id.* at 184; see also *Friends of the Earth, Inc. v. Gaston Copper Recycling Corp.*, 204 F.3d 149, 157 (4th Cir. 2000) (noting in its analysis of the injury in fact element, that plaintiffs had provided ample evidence that their fears of environmental pollution were reasonable and not based on mere conjecture).

93. See, e.g., *Am. Chem. Council v. Dep’t of Transp.*, 468 F.3d 810, 815 (D.C. Cir. 2006).

94. *Natural Res. Def. Council v. EPA (NRDC II)*, 464 F.3d 1 (D.C. Cir 2006).

95. *Id.* at 5.

NRDC sued as an organization on behalf of its members, claiming that the EPA's inadequate regulations would lead to increased incidence of skin cancer because the release of excess methyl bromide would damage the ozone layer.⁹⁶ Unable to identify an individual member who would develop skin cancer as a result of the regulations, NRDC depended on a statistical calculation. Based on its membership of 500,000, and an expert estimate that the regulations increased the lifetime risk of nonfatal skin cancer by one in 200,000, the court inferred that two to four members of NRDC would develop skin cancer as a result of the regulation.⁹⁷ The identification of these hypothetical future plaintiffs was sufficient to confer organizational standing on NRDC.⁹⁸

Later the same year, however, the D.C. Circuit decided *American Chemistry Council v. Department of Transportation*,⁹⁹ another case in which an organizational plaintiff's standing was challenged. There, the court unequivocally stated, "Our standard has never been that it is *likely* that at least one member has standing. At the very least, the identity of the party suffering an injury in fact must be firmly established."¹⁰⁰ *American Chemistry Council* did not, however, mention or explicitly overrule *NRDC II*.

Such uncertain plaintiff cases had not reached the Supreme Court prior to *Summers*. Thus, at the time of *Summers*, whether uncertain plaintiff cases were viable was an open question.

C. Increased-Risk-as-Injury Cases

A third type of probabilistic standing consists of cases in which plaintiffs complain that the defendant's challenged conduct puts them at increased risk of harm, and that this very increase in risk is a cognizable injury in fact. This approach was explicitly accepted by several circuits prior to *Summers*, and hinted at in a few Supreme Court cases.¹⁰¹ Cases related to the National Environmental Policy Act (NEPA) and the Civil Rights Act also hint at this principle; however, such cases can be read narrowly and do not necessarily demonstrate that the Supreme Court has implicitly accepted increased risk as injury in all contexts.

96. *Id.* at 6.

97. *Id.* at 7.

98. *Id.*

99. 468 F.3d 810 (D.C. Cir. 2006).

100. *Id.* at 820.

101. See, e.g., *Helling v. McKinney*, 509 U.S. 25 (1993); *Duke Power Co. v. Carolina Env'tl. Study Group, Inc.*, 438 U.S. 59 (1978); *Mountain States Legal Found. v. Glickman*, 92 F. 3d 1228 (D.C. Cir. 1996).

The Supreme Court has hinted at increased-risk theories of injury in *Duke Power Co. v. Carolina Environmental Study Group*¹⁰² and *Helling v. McKinney*.¹⁰³ In the former case, the Court recognized the emission of radiation into the plaintiffs' environment as a "direct and present injury."¹⁰⁴ In the latter, the Court did not discuss standing but recognized involuntary exposure to tobacco smoke in prison as an injury sufficient to support a claim under the Eighth Amendment.¹⁰⁵ However, the Court did not directly address the theory of increased-risk injury in either case.

In *Mountain States Legal Foundation v. Glickman*, the D.C. Circuit granted standing to plaintiffs challenging regulations on the grounds that they would lead to an increase in the risk of wildfires.¹⁰⁶ The regulations specified the volume of logging that could occur on specific parcels of land.¹⁰⁷ Plaintiffs alleged that the current regulations caused a 5.4 percent reduction in the volume of high risk fuels in the relevant areas of forested land, whereas an alternate plan would have reduced high risk fuels by 14.2 percent.¹⁰⁸ The court agreed that this increased risk constituted a cognizable injury, noting, "The potential destruction of fire is so severe that relatively modest increments in risk should qualify for standing."¹⁰⁹

The D.C. Circuit has reiterated the possibility of increased-risk theories of injury in subsequent cases.¹¹⁰ However, it limits the availability of increased-risk standing to cases where the risk of harm is substantially increased and the probability of harm, with that increase taken into account, is also "substantial."¹¹¹ The D.C. Circuit has also suggested that such theories would likely be unavailable outside the realm of environmental disputes,¹¹² although it did grant standing in *Public Citizen v. National Highway Traffic Safety Administration*, an increased-risk case based on consumer safety.¹¹³ The D.C. Circuit's approach, however, has been over the dissent of Judge Sentelle—now Chief Judge—who warned, "If we do not soon abandon this idea of probabilistic harm, we will find ourselves looking more and more like legislatures rather than courts."¹¹⁴

102. *Duke Power Co.*, 438 U.S. at 74.

103. *Helling*, 509 U.S. at 35.

104. *Duke Power Co.*, 438 U.S. at 74.

105. *Helling*, 509 U.S. at 35–36.

106. *Mountain States Legal Found.*, 92 F. 3d at 1234–35.

107. *Id.* at 1231.

108. *Id.* at 1234.

109. *Id.* at 1235.

110. See, e.g., *Pub. Citizen, Inc. v. Nat'l Highway Traffic Safety Admin. (Public Citizen II)*, 513 F.3d 234, 237 (D.C. Cir. 2008); *NRDC II*, 464 F.3d 1, 6 (D.C. Cir. 2006).

111. *Public Citizen II*, 513 F.3d at 237.

112. *Va. State Corp. Comm'n v. Fed. Energy Regulatory Comm'n*, 468 F.3d 845, 848 (D.C. Cir. 2006).

113. *Public Citizen II*, 513 F.3d at 237.

114. *Id.* at 241.

Similar movements have been underway in the First, Second, and Eighth Circuits. In *Dimarzo v. Cahill*, the First Circuit recognized an injury in fact where a prison inmate complained of unsafe conditions and fire hazard in the prison.¹¹⁵ In particular, the court found that the floors of the catwalks were flammable, the cells could only be unlocked individually, and the mattresses in the cells were made of either flammable ticking or foam that would emit toxic gases if ignited.¹¹⁶ The First Circuit held that being kept in such unsafe conditions constituted injury in fact.¹¹⁷ While the court did not expressly label this injury as consisting of the increased risk, its reasoning strongly suggests such classification: rather than identifying as the injury as the harm that would occur in the event of a *future* fire, the court stated that the injury in fact consisted of the *present* fire hazard.¹¹⁸ Other courts have recognized this case as representing an injury consisting of increased risk.¹¹⁹

Meanwhile, the Second Circuit has explicitly accepted increased risk as a cognizable injury in the food and consumer safety context.¹²⁰ In *Baur v. Veneman*, where the plaintiff alleged that the U.S. Department of Agriculture policies increased the risk of food-borne illnesses in beef, the court agreed that “exposure to an enhanced risk of disease transmission may qualify as injury in fact in consumer food and drug safety suits.”¹²¹ The court explicitly held that Baur had alleged a “sufficiently credible risk of harm” to survive the motion to dismiss on standing grounds.¹²² Thus, *Baur* appears to require some minimum threshold of risk before standing can be found, although it is unclear what that threshold is.

Shain v. Veneman suggests an acceptance of risk-as-injury in the Eighth Circuit.¹²³ In *Shain*, the plaintiff complained that the Department of Agriculture’s financing of a sewage treatment plant on a flood plain near his property would increase the likely damage in the case of a 100-year flood.¹²⁴ This risk, the court held, was insufficient to show increased risk as injury, because the underlying event—the 100-year flood—was

115. *Dimarzo v. Cahill*, 575 F.2d 15, 16 (1st Cir. 1978).

116. *Id.*

117. *Id.*

118. *Id.*

119. *See* Mountain States Legal Found. v. Glickman, 92 F.3d 1228, 1235 (D.C. Cir. 1996).

120. *Baur v. Veneman*, 352 F.3d 625, 634 (2d Cir. 2003).

121. *Id.* at 628.

122. *Id.*

123. *Shain v. Veneman*, 376 F.3d 815 (8th Cir. 2004). *Shain* has been cited as a case that rejects increased- risk-as-injury. *See* 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, 194 (2007). That interpretation seems incorrect. *Shain* narrows, confirms, and distinguishes its understanding of *Elk Grove Village*’s risk-as-injury principle, but does not reject it. On a separate note, it is unclear that *Elk Grove Village* is a risk-as-injury case. *See infra* Part II.D.

124. *Shain*, 376 F.3d at 819.

highly unlikely.¹²⁵ The court distinguished this fact pattern from cases such as *Elk Grove Village*, where plaintiffs in a regular floodplain were concerned about increased damage as a result of regular and predictable flooding that defendant's actions would exacerbate.¹²⁶ Such a heightened risk of future harm, based on a likely occurrence (not an unlikely occurrence such as a 100-year flood), could be a cognizable injury.¹²⁷

The Supreme Court's rulings on procedural injury cases may also be relevant to the increased-risk-as-injury theory. Under the National Environmental Policy Act (NEPA), federal agencies must prepare environmental impact statements prior to "major Federal actions significantly affecting the quality of the human environment," to ensure that important environmental consequences are considered before irreversible decisions are made.¹²⁸ NEPA does not require agencies to reach any particular decision, but it does require them to follow certain procedures in making those decisions.¹²⁹ Plaintiffs have interests in the agency's compliance with these procedures, and under certain circumstances may sue to enforce them.¹³⁰

These plaintiffs' procedural interests can ultimately be understood as interests in minimizing risk. The purpose of NEPA is to encourage agency decision making that takes environmental consequences into account. Failure of an agency to follow the proper procedures creates the risk that these considerations will not be made.¹³¹ Various courts have recognized that the underlying injury in the NEPA context is not only the procedural injury, but also the increased risk.¹³²

NEPA cases, however, may not be like other increased-risk cases. While neither the Court nor Congress may remove the constitutional injury-in-fact requirement, Congress has the power to create and define new statutory rights, violations of which constitute cognizable injuries in fact.¹³³ It is possible that NEPA cases imply only that Congress has created a right to specific risk-reducing procedures, and do not necessarily imply that increased-risk claims, outside of the NEPA context, give rise to constitutional standing.

125. *Id.*

126. *Id.*

127. *Id.*

128. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 348–49 (1989).

129. *See id.* at 350.

130. *See Fla. Audubon Soc'y v. Bentsen*, 94 F. 3d 658, 674–75 (D.C. Cir. 1996).

131. *See Comm. to Save the Rio Hondo v. Lucero*, 102 F.3d 445, 448–49 (10th Cir. 1996).

132. *See, e.g., id.* at 449; *City of Davis v. Coleman*, 521 F.2d 661, 671 (9th Cir. 1975).

133. *See Lujan v. Defenders of Wildlife*, 504 U.S. 555, 578 (1992) (“[I]njury required by Art. III may exist solely by virtue of ‘statutes creating legal rights, the invasion of which creates standing.’” (citing *Warth v. Seldin*, 422 U.S. 490, 500; *Linda R.S. v. Richard D.*, 410 U.S. 614, 617 n.3 (1973))).

As in the NEPA cases, *Regents of the University of California v. Bakke* could support the idea of increased risk as injury.¹³⁴ In *Bakke*, the plaintiff challenged a medical school's affirmative action program that reserved a certain number of seats for minority and disadvantaged students.¹³⁵ In its standing analysis, the Court specifically held that although there was no certainty that Bakke would have been admitted to the school absent this program, there was injury in fact because he had been denied the opportunity to compete for the reserved seats.¹³⁶ Standing in this case seems to be consistent with the idea that increased risk (or decreased chance of benefit) can constitute injury for standing purposes. Again, however, this standing holding might be narrowly read. *Bakke* may reflect not that increased risk is an acceptable injury, but that the Court was recognizing Congress's creation of a statutory right to equal treatment under the Civil Rights Act.

Finally, just as *Laidlaw* has been considered an uncertain injury case, it could also be interpreted as an increased-risk-as-injury case. This interpretation is not well supported by the language of the case, however; as the injury articulated in *Laidlaw* was the actual aesthetic and recreational injury already suffered by the plaintiffs, not the risk of future injury as a result of environmental contamination.¹³⁷

Thus, various Circuits have accepted increased-risk-as-injury theories of injury in fact. While some Supreme Court cases also appear to accept such theories, these are arguably special cases that do not compel the conclusion that such theories are acceptable in all contexts.

D. Cases Whose Reasoning Makes Them Difficult to Categorize

Finally, there are many ambiguous cases that can be interpreted as falling into more than one of the categories of probabilistic injury. Courts dealing with probabilistic or statistical elements in their standing analyses are not always clear about the basis on which they make their decisions. A brief discussion of these cases highlights the lack of clarity that governs probabilistic cases, and the need for a classification system such as the one proposed here.

One such case is *Village of Elk Grove Village v. Evans*, where the Seventh Circuit granted standing to a plaintiff village concerned about future floods that might result from construction approved by the U.S.

134. *Regents of Univ. of Cal. v. Bakke*, 438 U.S. 265, 281 n.14 (1978); see Sunstein, *supra* note 31, at 203.

135. *Bakke*, 438 U.S. at 277.

136. *Id.* at 281 n.14.

137. See *Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc.*, 528 U.S. 167, 183 (2000).

Army Corps of Engineers.¹³⁸ The Village asserted that it was in a flood prone area, and that the proposed construction would increase the risk of flooding by limiting drainage from the creek.¹³⁹ The Seventh Circuit found these facts sufficient to establish standing for Elk Grove Village.

In making its decision, the Seventh Circuit held, “The injury is of course probabilistic, but even a small probability of injury is sufficient to create a case or controversy.”¹⁴⁰ The Seventh Circuit’s mention of the risk of injury has prompted some commentators and courts to cite *Elk Grove Village* for the proposition that increased risk is itself a cognizable injury.¹⁴¹ However, because a close reading of the case shows that the court defined the injury as the actual flood and not as the increased risk of flood,¹⁴² *Elk Grove Village* may also be understood as an uncertain injury case. It is possible that the court was motivated by some instinct that an increased risk of harm was an injury in itself, although it failed to make that analysis explicit. On the other hand, the Seventh Circuit may have determined that the future flood—admittedly an occurrence with a “small probability”¹⁴³ of occurring at any specific time—was a sufficiently “imminent” and “certainly impending” injury to give rise to standing. It is unclear, then, whether *Elk Grove Village* is an uncertain injury case or a risk-as-injury case.

The confusion continues with *Friends of the Earth, Inc. v. Gaston Copper Recycling Corp.* The Court in *Gaston Copper* held that a plaintiff who had curtailed his recreational activities in a lake allegedly polluted by the defendant had standing to sue. The Fourth Circuit’s analysis focuses on the single plaintiff who alleges damage to his recreational and aesthetic interests, and emphasizes that he has suffered actual, particularized injury. It declares this plaintiff to be “precisely the type of plaintiff that the Supreme Court envisioned in *Lujan v. Defenders of Wildlife*.”¹⁴⁴ Meanwhile, it declines to pass on the standing of other plaintiffs, who do not allege such specific disruption to their preferred recreational activities.¹⁴⁵ These are strong indications that the Fourth Circuit was simply following *Laidlaw* and was not creating a new probabilistic theory of harm.

138. *Vill. of Elk Grove Vill. v. Evans*, 997 F.2d 328, 328–29 (7th Cir. 1993).

139. *Id.* at 329.

140. *Id.*

141. *See, e.g., Mountain States Legal Found. v. Glickman*, 92 F.3d 1228, 1234 (D.C. Cir. 1996).

142. *Elk Grove Vill.*, 997 F.2d at 329. By noting that “even a small probability of injury is sufficient to create a case or controversy,” the court indicated that it conceived of the injury not as an increased risk of harm, but as the injury resulting from a potential flood. *Id.*

143. *Id.*

144. *Friends of the Earth, Inc. v. Gaston Copper Recycling Corp.*, 204 F.3d 149, 159 (4th Cir. 2000).

145. *Id.* at 156–57.

Nevertheless, many commentators and subsequent cases have treated *Gaston Copper* as an increased-risk-as-injury case.¹⁴⁶ In the midst of what appears to be a thorough injury-in-fact analysis, firmly rooted in *Laidlaw*, *Gaston Copper* notes: “Courts have also left no doubt that threatened injury to [the plaintiff] is by itself injury in fact Threats or increased risk thus constitute cognizable harm. Threatened environmental injury is by nature probabilistic.... [O]ther circuits have had no trouble understanding the injurious nature of risk itself.”¹⁴⁷ While a close reading suggests that *Gaston Copper* is in fact a *Laidlaw*-type case, and not an increased-risk-as-injury case, these phrases have been picked up by commentators and other courts to support the increased-risk-as-injury theory.¹⁴⁸

A final example of imprecise reasoning in probabilistic cases is *Central Delta Water Agency v. United States*.¹⁴⁹ For most of its standing discussion, *Central Delta* appears firmly committed to the increased-risk-as-injury theory, citing *Laidlaw* and *Gaston Copper* (somewhat erroneously) as well as *Mountain States Legal Foundation* and *Dimarzo* for the proposition that “a credible threat of harm is sufficient to constitute actual injury for standing purposes.”¹⁵⁰ The court ends its discussion, however, with an unclear statement: “In short, we conclude that the risk of harm to plaintiffs’ crops created by the Bureau’s water management procedures is not so speculative or diffuse as to render the controversy a hypothetical one. Rather, the risk is sufficient to afford plaintiffs standing.”¹⁵¹

If the risk itself constitutes the harm, why does the Ninth Circuit feel the need to discuss whether it is speculative? While that is a proper question for uncertain injury cases, increased-risk cases focus on the risk itself rather than the ultimate injury. Perhaps the Ninth Circuit is being vague about whether it sees this as an increased risk case or an uncertain injury case. Alternately, only certain risks are sufficient to constitute injury in and of themselves, but the Ninth Circuit has declined to elaborate on why this particular risk meets the threshold. *Central Delta* and the other cases in this Part demonstrate how amorphous theories of probabilistic standing have led to confusing and imprecise reasoning in the courts.

146. See, e.g., Mank, *supra* note 90, at 41–42; *Cent. Delta Water Agency v. United States*, 306 F.3d 938, 948 (9th Cir. 2002).

147. *Gaston Copper*, 204 F.3d at 160.

148. *Cent. Delta*, 306 F.3d at 948.

149. *Id.* at 938.

150. *Id.* at 950.

151. *Id.*

III. *SUMMERS V. EARTH ISLAND INSTITUTE*A. *The Case*

In *Summers v. Earth Island Institute*, the Supreme Court held that plaintiffs had no standing to challenge agency regulations where they could not identify with specificity an imminent injury that would result from the application of those regulations.¹⁵² The Court held, by a 5–4 majority led by Justice Scalia, that plaintiffs had failed the injury prong of the constitutional standing analysis.¹⁵³

Five environmental organizations challenged the U.S. Forest Service’s regulations exempting certain small timber salvage sales from notice, comment, and appeal procedures.¹⁵⁴ Under the Forest Service Decisionmaking and Appeals Reform Act of 1992 (“Appeals Reform Act”), the Forest Service is obliged to establish notice, comment, and appeal procedures prior to implementing its land and resource management plans.¹⁵⁵ The Forest Service’s regulations interpreting the Appeals Reform Act exempted from such procedures any projects that the Service considered categorically excluded from the requirement to file either an EIS or an Environmental Assessment (EA) under NEPA.¹⁵⁶ Furthermore, the Forest Service later adopted a rule exempting all salvage-timber sales of 250 acres or less from EIS or EA requirements.¹⁵⁷ Consequently, such projects also became exempt from the Appeals Reform Act’s notice, comment, and appeals procedures.¹⁵⁸

The plaintiffs’ original complaint was prompted by a salvage sale on a 238-acre plot of the Sequoia National Forest, known as the Burnt Ridge project.¹⁵⁹ The project was approved by the Forest Service without notice, comment, or appeals procedures.¹⁶⁰ Plaintiffs challenged the Burnt Ridge project and the regulations that permitted it to be approved without these procedures.¹⁶¹

After the District Court granted a preliminary injunction against the Burnt Ridge salvage-timber sale, the parties settled the suit with regard to the Burnt Ridge project.¹⁶² However, plaintiffs continued to challenge

152. *Summers v. Earth Island Inst.*, 129 S. Ct. 1142, 1151 (2009).

153. *Id.*

154. *Id.* at 1147.

155. *Id.*

156. *Id.*

157. *Id.*

158. *Id.*

159. *Id.* at 1147–48.

160. *Id.* at 1148.

161. *Id.*

162. *Id.*

the regulations.¹⁶³ The government argued that since the matter had been settled, the plaintiffs no longer had standing to challenge the regulations.¹⁶⁴ However, both the District Court and the Ninth Circuit apparently found that plaintiffs had sufficient standing.¹⁶⁵ The District Court invalidated the regulations that had permitted the salvage sale without notice, comment, or appeals, and established a nationwide injunction on the application of those regulations.¹⁶⁶ The Ninth Circuit affirmed.¹⁶⁷

In *Summers*, the Supreme Court reversed the Ninth Circuit, holding that once the Burnt Ridge dispute had been settled, plaintiffs no longer had an imminent injury in fact to support their standing to challenge the regulations.¹⁶⁸ The Court was not persuaded by plaintiffs' allegations that the regulations posed a threat of imminent injury.¹⁶⁹ Plaintiffs had not demonstrated that in the near future some identified members of the plaintiff organizations were planning to use specific sites and that the Forest Service might approve timber salvage sales on those sites without following the procedures of the Appeals Procedure Act.¹⁷⁰ While the Court acknowledged that it was "perhaps even likely" that one of the plaintiff organizations' members would suffer aesthetic and recreational injury as a result of the Forest Service's failure to perform these procedures, it would not find standing where this injury had not been properly demonstrated.¹⁷¹ Thus, since the plaintiffs had not identified specific members who would suffer concrete injury, and had not identified specific sites where the injury would take place, there was no standing to challenge the regulations.

In a dissent written by Justice Breyer, a minority of the Court found it implausible that plaintiffs had not established sufficient future injury for standing purposes. Breyer wrote that in order to determine whether there was sufficient injury in fact, the court needed only determine whether the plaintiff had shown a "realistic threat" to the plaintiff's interests.¹⁷² Breyer then noted certain undisputed facts that demonstrated to him that such a showing had been made: the plaintiffs, including the Sierra Club, were organizations with hundreds of thousands of members who regularly made use of national forests; the plaintiffs regularly

163. *Id.*

164. *Id.*

165. *Id.*

166. *Id.*

167. *Id.*

168. *Id.* at 1150.

169. *Id.*

170. *Id.*

171. *Id.* at 1152.

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

opposed salvage timber sales; the organizations intended to continue their opposition to such sales; and the Forest Service intended to continue its salvage-timber sales, without public comment procedures.¹⁷³ Finally, Breyer noted that there was an affidavit in the record in which a member of one of the plaintiff organizations stated that he frequently visited the Allegheny National Forest, that he had commented on about one thousand Forest Service salvage-timber sales proposals, and that the Forest Service planned in the future to conduct salvage-timber sales on twenty parcels in the Allegheny National Forest. Breyer found these statements to have sufficient specificity to establish a future injury.¹⁷⁴

This case thus turned on the question of what, at minimum, must be alleged to satisfy a court that there is a likely future injury. The dissent would have found standing based on a showing of a “realistic threat” of injury, and found that such a showing had been made.¹⁷⁵ The majority, however, despite admitting that injury was “perhaps even likely,” would not find standing absent a specific allegation of injury that included the identities of the individuals who might be injured and the specific plots of land where those injuries would take place.¹⁷⁶

While some commentators have treated *Summers* as a definitive case limiting standing,¹⁷⁷ a careful analysis of the case reveals that *Summers*'s project is much more modest. *Summers* requires that plaintiffs in an environmental suit show a nexus between the geographic area on which the contested action is taking place and the geographic area which plaintiffs use for recreational, aesthetic, or other purposes.¹⁷⁸ *Summers* also states that organizational plaintiffs cannot sue unless they have among their members at least one individual who would have constitutional standing to sue in her own right.¹⁷⁹ Neither of these principles is new; rather, they are well established features of standing doctrine.¹⁸⁰

The majority in *Summers* vigorously defends the “imminence” requirement of injury in fact, rejecting the dissent’s proposal that a “reasonable likelihood” fulfills this requirement.¹⁸¹ While it is possible

173. *Id.* at 1156–57.

174. *Id.* at 1157.

175. *Id.* at 1156.

176. *Id.* at 1152 (majority opinion).

177. *See, e.g.,* *Salmons et al.*, *supra* note 4.

178. *Summers*, 129 S. Ct. at 1152.

179. *Id.*

180. *See* *Lujan v. Nat'l Wildlife Federation*, 497 U.S. 871, 889 (1990) (requiring plaintiffs to show that they use the specific area of land in question); *Hunt v. Wash. State Apple Adver. Comm'n*, 438 U.S. 333, 342–43 (1977) (organizational standing requires the existence of a member who would have had constitutional standing in her own right).

181. *Summers*, 129 S. Ct. at 1152–53.

that *Summers* will trigger renewed strictness in the lower courts' approaches to uncertain injury cases, it is unlikely for reasons explained below.

However, there is one issue upon which *Summers* provides new clarity, namely organizational standing. *Summers* clarifies that the Court will insist that organizations name their injured parties and may not rely on probability in lieu of fulfilling this requirement.¹⁸²

B. Consequences of *Summers*

1. The Effect of *Summers* on Uncertain Injury Cases

Prior to *Summers*, courts had already established a practice of granting standing for imminent injuries and denying standing for speculative injuries, with some uncertainty for injuries falling between those extremes.¹⁸³ *Summers* confirms that speculative injuries are not cognizable for standing purposes. *Summers* could be read to signal a stricter approach to uncertain injury cases in general, but probably does not.

It was already well established prior to *Summers* that environmental cases where the plaintiff could not show a strong likelihood of visiting the geographical area in question were deemed to involve only speculative injury.¹⁸⁴ *Summers* simply reaffirmed this principle, reinforcing the "imminence" requirement as it applies to environmental cases.¹⁸⁵

At the same time, it is possible to read *Summers* as addressing the meaning of "imminence" more broadly. The dissent proposed that the imminence requirement for injury should be satisfied by a showing of a "realistic threat." The majority in *Summers*, in rejecting this proposal, apparently interprets the imminence requirement to primarily refer to the temporal proximity of the harm.¹⁸⁶ This is contrary to the approach that some Courts of Appeals have taken.¹⁸⁷ The Court's insistence on "imminence" rather than a "realistic threat" may have an effect on courts who previously have granted standing for injuries that were likely to occur but not immediate.¹⁸⁸ In particular, this may hinder global warming

182. *Id.* at 1151.

183. *See supra* note 39.

184. *See, e.g.,* Lujan v. Defenders of Wildlife, 504 U.S. 555, 563–64 (1992).

185. *Summers*, 129 S. Ct. at 1151.

186. *Id.* at 1152 ("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 recurrence of the challenged activity would cause [the plaintiff harm] 'in the reasonably near future.'").

187. *See, e.g.,* 520 S. Mich. Ave. Assocs. Ltd. v. Devine, 433 F.3d 961, 962 (7th Cir. 2006); *supra* note 39.

188. *See, e.g.,* 520 S. Mich. Ave., 433 F.3d at 962.

plaintiffs who have difficulty showing imminent harm, but who believe that they face a realistic threat. On the other hand, *Summers*'s rejection of the "realistic threat" approach can be read narrowly to apply only to uncertain plaintiff situations. Indeed, if *Summers* had intended to impose a strict temporal imminence test on all future injuries and repudiate differing approaches in the lower courts, one might have expected the decision to devote more time to this issue and perhaps name a few of the cases it meant to overrule. This discussion, of course, would have been beyond the scope of the *Summers* decision, since the Court was confronted only with the narrow question of standing in the case of an organization alleging the likelihood of having an injured member. Further, "immediacy" had already been called for in *Lujan*, but that did not prevent lower courts from using more lenient "imminence" requirements.¹⁸⁹ Given that the *Summers* Court did not give explicit instructions to cease this practice, lower courts may well continue their analysis of the "imminence" prong without much change.

It is worth noting that *Laidlaw* and similar cases are not at all affected by *Summers*. As noted in Part II, *Laidlaw* is not a probabilistic case: the injury found in *Laidlaw* was actual, not threatened, harm. The standing requirements for a geographic nexus, for having an injured member, and for identifying that injured member all existed prior to *Laidlaw*. *Summers*'s reaffirmance of these principles thus does not disturb the holdings of *Laidlaw* and cases that follow it.

2. *The Effect of Summers on Uncertain Plaintiff Cases*

Summers has the most direct effect on uncertain plaintiff cases, where organizational plaintiffs attempt to establish standing based on the statistical likelihood of having an injured member. *Summers* categorically rejected this method of establishing organizational standing, noting that all prior cases had required organizational plaintiffs to make "specific allegations establishing that at least one identified member had suffered or would suffer harm."¹⁹⁰ According to the Court, the requirement of naming the affected members "has never been dispensed with in light of statistical probabilities, but only where *all* the members of the organization are affected by the challenged activity."¹⁹¹ The Court's insistence on the requirement of naming the injured individual may well put an end to cases like *NRDC II*, where the plaintiff organization convinced the D.C. Circuit of the statistical likelihood that at least one of

189. Cf. *Lujan*, 504 U.S. at 564 n.2 (stating that "'imminence' is concededly a somewhat elastic concept").

190. *Summers*, 129 S. Ct. at 1151.

191. *Id.* at 1152.

its members would suffer nonfatal skin cancer as a result of lax EPA regulations.¹⁹²

Summers might be narrowed such that the plaintiffs in *NRDC II* could escape its holding on uncertain plaintiff cases. This escape lies in distinguishing *NRDC II* from *Summers* on the facts and the type of injury alleged. In a sense, the injury alleged in *NRDC II* is more truly “probabilistic” than that in *Summers*. Plaintiffs in *Summers* challenged an agency policy which, if carried out, would cause injury to identifiable people, depending on where it would be done. It was probabilistic only in the sense that plaintiffs did not know, at this early stage, what the agency was planning to do. Once the agency implemented its regulations, the identity of the injured persons would be knowable.

Plaintiffs in *NRDC II*, however, alleged a very different type of injury. At the moment when the challenged agency policy would be carried out, the identities of the injured people would remain inherently unknowable. For the *NRDC II* plaintiffs, by the time any injured persons could finally be identified, the time for injunctive relief would be long past. The uncertainty of their injury was due to the inherently probabilistic nature of the injury, rather than a lack of knowledge of what the agency might do next.

This distinction is important, because the reasoning in *Summers* relies on the assumption that it would have been possible for plaintiffs to bolster their claim of imminent injury by naming an injured individual. The Court held that, at a minimum, plaintiffs in *Summers* should have identified members who would use the specific area affected by the challenged activity and whose use would be burdened by the Forest Service’s regulations.¹⁹³ Justice Scalia explained, “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.”¹⁹⁴ Essentially, the Court denied standing because it would have been reasonable for the plaintiffs to fulfill the requirement of naming an injured person, or, presumably, to delay their suit until naming such a person would be possible.

For the plaintiffs in *NRDC II*, however, such reasoning could not have applied. NRDC relied on statistics to show that it had an injured member not because it had failed to make the effort to locate an injured individual, but because at no point during the time in which the regulation could be challenged could NRDC identify individuals who

192. *NRDC II*, 464 F.3d 1, 7 (D.C. Cir 2006).

193. *Summers*, 129 S. Ct. at 1152.

194. *Id.*

would develop cancer in the future. Thus, while in *Summers* Justice Scalia implied that the failure to indicate an injured person might imply that no such person existed, such an inference would have been unreasonable for the *NRDC II* plaintiffs.

There is some chance, then, that some uncertain plaintiff cases, more “truly probabilistic” than *Summers*, might survive *Summers*. Nevertheless, the likelihood that the Court would allow such cases to move forward seems low. To begin with, the language in *Summers* was unequivocal: organizations must name their affected members.¹⁹⁵ Second, and perhaps more important, the uncertain plaintiff theory lends itself to potential abuse: as Professor Heather Elliot has pointed out, this theory of standing implies that large organizations, with many members, would be able to “show standing under the statistical [uncertain plaintiff] theory for virtually any risk, running counter to the pro-democracy argument and even the general ban on private attorneys general.”¹⁹⁶

The Court has, in the past, frowned upon using standing as a “gaming device that can be surmounted merely by aggregating the allegations of different kinds of plaintiffs, each of whom may have claims that are remote or speculative taken by themselves.”¹⁹⁷ *Summers* confirms that organizational maneuvers that seek to establish standing where previously there was none are not looked upon favorably by the Court. Thus, despite the theoretical possibility of distinguishing cases like *NRDC II* from *Summers*, uncertain plaintiff cases will probably not survive *Summers*.

3. *The Effect of Summers on Increased-Risk-as-Injury Cases*

While *Summers* directly addresses the question of using probability to assert the existence of an injured party, it does not directly address a different type of probabilistic injury, that is, injury that consists of an increase in the risk of harm. The increased-risk-as-harm approach has been followed in several circuits, including the D.C. Circuit, the First, Second, and Eighth Circuits, and, depending on interpretation, the Seventh Circuit.¹⁹⁸ *Summers*, however, focused its analysis on uncertain injury and uncertain plaintiff cases. After *Summers*, the door should still be open for increased-risk-as-injury cases.

195. *Id.*

196. Elliott, *supra* note 23, at 505 n.222.

197. *ASARCO, Inc. v. Kadish*, 490 U.S. 605, 615 (1989).

198. *See supra* Part II.C.

IV. SHOULD INCREASED RISK BE RECOGNIZED AS INJURY IN FACT?

Summers does not rule out the possibility of asserting enhanced risk as a cognizable injury. There is no fundamental reason why such a theory should not be permitted: allowing some claims based on increased risk of harm does not violate the constitutional justifications for standing doctrine. There are legitimate and straightforward ways to prevent enhanced-risk theories from swallowing the injury-in-fact requirement and flooding the courts. Instead, closing the door on increased risk theories of injury would keep meritorious claims from ever reaching the courthouse.

A. *The Constitutional Permissibility of Increased Risk as Injury*

Given that standing serves concrete purposes—ensuring adversity and a personal stake in the litigation, preserving separation of powers, and preventing the aggrandizement of the judicial branch—a practical, rather than formalistic, approach is appropriate. Indeed, in the 1970s the Court shifted its standing requirement from “legal injury” to “injury-in-fact,” a movement away from formalism and towards an assessment of the actual facts of the case.¹⁹⁹ Thus, while after *Summers* the Court could conceivably exclude all increased-risk-as-injury claims, the approach more consistent with the purposes of standing doctrine would be to draw lines based on constitutional requirements rather than categories of injury. In this Part, I argue that increased-risk-as-injury theories are compatible with the constitutional underpinnings of standing doctrine (adversity, personal stakes, and separation of powers) and that they can be readily limited such that they would not overwhelm the courts or bypass the injury-in-fact requirement.

1. *Increased Risk as Injury and Concrete Interests, True Adversity, and Personal Stakes in Litigation*

One of the main justifications for standing doctrine is the need to ensure that concrete interests and personal stakes are represented in truly adversarial proceedings. Recognizing increased risk as injury is consistent with these principles. It cannot be denied that individuals seek to avoid risk, and are harmed by exposure to risk: the prevalence of risk-averseness is the basis for the entire insurance industry.²⁰⁰ Intuitively, there are many injuries that we recognize as real, even though they are at heart injuries based on increased risk. Justice Scalia himself, no

199. See Albert C. Lin, *The Unifying Role of Harm in Environmental Law*, 2006 WIS. L. REV. 897, 916 (2006).

200. See Daniel A. Farber, *Uncertainty as a Basis for Standing*, 33 HOFSTRA L. REV. 1123, 1126 (2005).

proponent of an expansive definition of “injury in fact,” gave as an example of a proper plaintiff “a worker in the particular plant where the Occupational Safety and Health Administration ha[d] wrongfully waived legal safety requirements.”²⁰¹ This hypothetical plaintiff would be alleging harm based on the enhanced risk of a workplace injury.²⁰²

Further, it is established that, with “ordinary” injury, there is no need to convince the Court of a cognizable interest of some minimum magnitude. Demonstrating injury in fact can be accomplished by an “identifiable trifle,”²⁰³ so long as the Court is satisfied that the trifle establishes adversity and a personal stake in the litigation. A dispute over a relatively tiny sum of money would thus be justiciable according to the Court’s standing jurisprudence. It is hard to dispute the contention that to many plaintiffs, an increase in risk of some future harm is as much of an injury, or more, than some certain small economic loss, and would create at least the same personal stakes and adversity in a lawsuit. Since the latter would definitely be an injury in fact, the former should be as well.

2. *Increased Risk as Injury and Separation of Powers Concerns*

The Court’s requirement of “particularized” injury is meant to ensure that suits are based on personal harms rather than generalized grievances. Opposition to the idea of increased risk as injury, therefore, is likely to be based on a slippery-slope fear: because most agency actions attempt to manage risks, such a theory will make all things actionable by all people, such that “the courts become converted into political forums.”²⁰⁴

Preserving the judicial function of the courts, and maintaining their role as arbiters of individual rights rather than super-legislatures, is of great constitutional importance. However, there is no reason to believe that the very acceptance of increased-risk-as-injury cases would put this constitutional balance in jeopardy. The constitutionally relevant question, when a court is determining whether an injury is cognizable, is whether that injury is concrete and particularized enough to ensure that the court will not be impermissibly enlarging its role by considering generalized grievances.²⁰⁵ Focusing on the classification of injuries rather than the

201. Scalia, *supra* note 12, at 895.

202. It is possible, however, that Justice Scalia would view this injury as being rooted in the rights conferred by the Occupational Health and Safety Act, and not on an intuitive recognition that certain increases in risk are cognizable injuries. In that case, standing in this context would be similar to NEPA procedural injury cases. See *supra* Part II.C.

203. *SCRAP*, 412 U.S. 669, 690 n.14 (1973).

204. Scalia, *supra* note 12, at 892.

205. See *Valley Forge Christian Coll. v. Ams. United for Separation of Church & State, Inc.*, 454 U.S. 464, 474 (1982).

injuries themselves—that is, viewing all increased-risk-as-injury claims as a homogenous group of alleged injuries—gets in the way of adjudicating the actual constitutional question of whether the injury presented is worthy of judicial acknowledgment. Rather, it should be apparent that some injuries involving increased risk are so concrete as to give rise to standing, whereas others are not.

Not only have several Courts of Appeal explicitly embraced increased-risk theories of injury, but the Supreme Court's jurisprudence also hints that increased risk can constitute a cognizable injury. NEPA cases recognize the harm of increased risk to some extent, but they may not be the most helpful cases in this discussion because they may indicate nothing more than the Court's acknowledgment of a statutory right.²⁰⁶ Nevertheless, the Court has given other indications of acknowledging risk as injury, without relying on any statutory direction. In *Duke Power Co. v. Carolina Environmental Study Group, Inc.*, the Court held that plaintiffs challenging regulations capping the liability of owners of nuclear power plants had standing. In making this determination, the Court held that defendants' emissions of non-natural radiation into the plaintiffs' environment "would also seem a direct and present injury, given our generalized concern about exposure to radiation and the apprehension flowing from the uncertainty about the health and genetic consequences of even small emissions like those concededly emitted by nuclear power plants."²⁰⁷ Exposure to radiation is seen not as inherently harmful on its own, but rather is harmful because it is associated with the risks of radiation-related injury. The Court implied here that the increase in risk of harm from exposure to radiation was a constitutionally recognizable injury in fact.²⁰⁸

Similarly, in *Helling v. McKinney*, the Court implicitly accepted an increased risk theory of injury,²⁰⁹ permitting a prison inmate to bring an Eighth Amendment Claim based on involuntary exposure to tobacco smoke.²¹⁰ The Court did not explicitly discuss standing in the case, but did hold that such exposure was an injury sufficient to state a claim under the Eighth Amendment.²¹¹ In fact, the Court held that its reasoning was in line with a stream of precedent holding that exposure to unsafe prison

206. See *supra* Part II.C.

207. *Duke Power Co. v. Carolina Env'tl. Study Group, Inc.*, 438 U.S. 59, 74 (1978).

208. In the same opinion, the Court declined to address whether potential injuries from a nuclear accident, and present concern over such accidents, could satisfy Article III. This, however, does not negate the proposition that the Court was implicitly recognizing risk-as-injury by considering radiation as injury. *Id.* at 78.

209. *Helling v. McKinney*, 509 U.S. 25, 35 (1993).

210. *Id.*

211. *Id.*

conditions could give rise to a claim under the Eighth Amendment.²¹² Thus, the Court held that the plaintiff had sufficiently stated a cause of action by alleging that defendants had, “with deliberate indifference, exposed him to levels of [environmental tobacco smoke] that pose[d] an unreasonable risk of serious damage to his future health.”²¹³ This cause of action was based on the Eighth Amendment, which reads simply: “Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.”²¹⁴ The Court found no separation of powers problem or other constitutional hurdle to recognizing such a cause of action as arising out of this language. The Court’s decision, by permitting the case to go forward and by finding an increased-risk injury to give rise to a cause of action, could imply that some increased-risk injuries satisfy Article III’s standing requirements. At the very least, it reveals an intuition that increased risks can constitute real and cognizable injuries.

Given that at least some risks are implicitly recognized by society and the courts as cognizable injuries, removing all increased-risk injuries from the class of cognizable injuries seems inappropriate. It seems especially inappropriate to categorically exclude such injuries in light of the nature of the injury-in-fact inquiry. When the Court moved away from requiring “legal injury” to its current “injury-in-fact” test, it took on the task of distinguishing judicially cognizable harms from all other harms.²¹⁵ As Professor William Fletcher has pointed out, there is no non-normative rule that can distinguish “injuries in fact” from judicially non-cognizable injuries.²¹⁶ Rather, deciding which harms are worthy of judicial and societal attention is an inescapably subjective exercise, informed by social norms.²¹⁷ Thus, the Court’s acceptance of injury to aesthetic and recreational interests as cognizable injury in *Sierra Club v. Morton* was based on its observation that “[a]esthetic and environmental well-being, like economic well-being, are important ingredients of the quality of life in our society.”²¹⁸ Categorically closing the door on increased-risk-as-injury plaintiffs would divorce the injury question from its basis in societal evaluations of what harms are remediable by the courts.

Finally, any separation of powers concerns associated with standing analysis are greatly lessened by the existence of the *Chevron* doctrine.²¹⁹

212. *Id.* at 33–34.

213. *Id.* at 35.

214. U.S. CONST. amend. VIII.

215. See Fletcher, *supra* note 8, at 231–32.

216. See *id.* at 231.

217. *Id.* at 232.

218. *Sierra Club v. Morton*, 405 U.S. 727, 734 (1972).

219. See Coplan, *supra* note 5, at 460.

Professor Karl S. Coplan has noted that the *Chevron* doctrine, which requires judicial deference to administrative action, permits executive power under the Take Care Clause and judicial review to co-exist. The courts have authority to review executive actions, thus permitting judicial review, but they do so using a deferential standard that permits any reasonable interpretation of the statute, thus preserving the executive's power to carry out the law.²²⁰ A restrictive view of standing is therefore not the only, nor even the best, method of protecting separation of powers.²²¹

It is true that an unlimited risk-as-injury principle would create new possibilities for plaintiffs seeking vindication in the courts while suffering practically no injury. However, the fact that an unlimited principle could be abused is no reason to prohibit a limited principle. Just as some "non-probabilistic" injuries are not cognizable for standing purposes, there are also some "risk-as-injury" claims that could be deemed insufficient. The constitutionally required exercise is thus not to exclude all risk-as-injury claims, but to develop guidelines to separate genuine claims from those where the injury is so slight as to suggest that true adversity is lacking. Such guidelines are the subject of the next Part.

B. Approaches for Limiting the Increased-Risk-as-Injury Theory

It is well recognized that the increased-risk theory of injury, in order to be legitimate, is in need of limiting principles. Courts that already accept this theory of injury have proposed different principles, as have various commentators. I propose that rather than employ the rules that have been suggested, courts limit risk-as-injury cases first by ensuring that they are truly "probabilistic," and then by employing judicial tools that are already in use to define "reasonable" reactions to risk.

1. Current and Proposed Approaches to Increased Risk as Injury

Several courts and commentators have suggested ways to limit the increased-risk-as-injury theory. However, these approaches are not completely satisfying. The law of torts also involves some discussion of "probabilistic" injury, which is interesting but likely not directly applicable to the standing question.

Both the D.C. and Second Circuits have limited their increased-risk-as-injury principles by subject. The Second Circuit allowed increased risk as injury in the food and consumer safety context, but declined to state

220. *Id.*

221. *Id.*

whether it would accept increased risk in other contexts.²²² The D.C. Circuit has suggested that its increased-risk-as-injury cases would not extend beyond the environmental context,²²³ although it has also recognized the theory for suits about consumer safety.²²⁴

Limiting increased risk cases to certain contexts, such as consumer safety or environmental suits, is a categorical approach that is not related to the validity of the injury that is presented; as such, it is unsatisfying for the same reason that a complete denial of all risk-as-injury claims is unsatisfying. Further, it runs the risk of eliminating from the list of cognizable injuries some of the very injuries that support the intuition that risk can constitute injury. An inmate such as the one in *Dimarzo* who complains that unlawful fire hazards in a prison expose him to risk of injury has a clearly cognizable injury, but could not have standing under the D.C. Circuit's or the Second Circuit's restrictive rules.²²⁵

In addition to limiting its risk-as-injury rule to certain subject areas, the D.C. Circuit has also restricted its rule according to some measurement of the magnitude of the risk. It has held that increased risk can only constitute injury in fact if the increase is "substantial" and if the total risk, including that increase, is also "substantial."²²⁶ However, it has not given any guidelines for determining which risks are "substantial."²²⁷

Professor Amanda Leiter has criticized the D.C. Circuit's threshold for increased-risk standing as an unjustified rule that, among other issues, trivializes smaller injuries and does not properly measure the adversity of the parties.²²⁸ Professor Leiter notes that there is no valid theoretical reason to reject all small risks as non-injurious, especially since injuries in the "non-probabilistic" context are not required to meet any minimum threshold of injuriousness in order to be sufficient for standing.²²⁹ Further, she argues, a substantiality-of-the-risk standing threshold is an inappropriate measure of true adversity because it does not completely measure the injury faced by the plaintiff.²³⁰ Actual injury involves both the degree of risk and the magnitude of the threatened harm; the D.C. Circuit's test focuses only on the former while ignoring the latter.²³¹

222. *Baur v. Veneman*, 352 F.3d 625, 642–43 (2d Cir. 2003).

223. *Va. State Corp. Comm'n v. Fed. Energy Regulatory Comm'n*, 468 F.3d 845, 848 (D.C. Cir. 2006).

224. *Public Citizen II*, 513 F.3d 234, 237 (D.C. Cir. 2008).

225. *Dimarzo v. Cahill*, 575 F.2d 15, 18 (1st Cir. 1978).

226. *Public Citizen II*, 513 F.3d at 237.

227. *See id.*

228. Amanda Leiter, *Substance or Illusion? The Dangers of Imposing a Standing Threshold*, 97 GEO. L.J. 391, 394 (2009).

229. *Id.* at 406.

230. *Id.* at 407.

231. *Id.* at 408.

Professor Bradford Mank offers an alternative standing threshold for increased-risk injuries. His principle would provide standing to all plaintiffs challenging governmental actions that would expose them to increased lifetime risk of death or serious injury of one in a million or greater.²³² Such a principle, he suggests, would provide consistency in the courts' standing jurisprudence, and would be applied only where probabilistic data was readily available, such as in regulatory rulemaking.²³³ In cases where such a quantitative analysis would not be possible, Professor Mank suggests that courts exercise their best judgment as to whether the injury is cognizable, based on the "reasonable concerns" test in *Laidlaw*.²³⁴

A bright-line quantitative rule is appealing, but Professor Mank is correct in noting that such a rule could not be applied to all cases. Courts are poorly equipped to evaluate the complicated calculations that would accompany this rule or to adjudicate debates about such calculations. The D.C. Circuit's experience in applying quantitative analysis to a standing issue highlights this problem. In the first iteration of *NRDC v. EPA* ("*NRDC I*"),²³⁵ the D.C. Circuit concluded, based on its own statistical calculations, that it was unlikely that any of NRDC's members would be injured by the challenged regulatory action.²³⁶ After NRDC contested these calculations and pointed out mathematical errors, the court granted rehearing and ultimately withdrew *NRDC I* and replaced it with a revised analysis in *NRDC II*.²³⁷ The one-in-a-million threshold may cause similar problems; even where quantitative evidence about risk is readily available from regulatory agencies, such analysis could involve the courts in complicated statistical debates that they are not well equipped to consider.

Further, while a one-in-a-million threshold appears to be a simple bright-line rule, such a quantitative analysis is subject to manipulation. Risk assessments are sensitive to underlying assumptions and models, such that plausible assessments of the same risk may "vary by several orders of magnitude."²³⁸ Agency officials can thus manipulate risk assessments in order to justify the level of stringency they wish to apply in

232. Bradford Mank, *Standing and Statistical Persons: A Risk-Based Approach to Standing*, 36 *ECOLOGY L.Q.* 665, 671 (2009).

233. *Id.* at 672.

234. *Id.* at 745.

235. *Natural Res. Def. Council v. EPA (NRDC I)*, 440 F.3d 476, 482 n.9 (D.C. Cir. 2006).

236. 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. L. Inst.)* 10287, 10292 (2007).

237. *Id.* at 10293-94.

238. Alon Rosenthal, George M. Gray & John D. Graham, *Legislating Acceptable Cancer Risk from Exposure to Toxic Chemicals*, 19 *ECOLOGY L.Q.* 269, 341 (1992).

their regulations.²³⁹ In addition, agency discretion in producing numerical risk assessments can be “nearly unassailable”;²⁴⁰ courts are instructed to be at their “most deferential” when confronted with challenges to the methodological studies of agencies.²⁴¹ This potential combination of agency manipulation and judicial deference would make a numerical risk threshold highly problematic.

Professor Mank does acknowledge that not all cases will lend themselves to quantitative analysis. He suggests that courts should therefore continue to use their own judgment, permitting standing in cases such as *Laidlaw*, where plaintiffs suffer injury to their recreational or aesthetic interests because of their reasonable concerns about pollution.²⁴² This suggestion is workable; in fact, as discussed below, *Laidlaw* principles can guide the injury-in-fact analysis for increased risk cases of all kinds and need not be restricted to *Laidlaw*-type cases (which, after all, are not increased-risk cases in the first place²⁴³).

Finally, the law of torts suggests some approaches to increased-risk injuries. Such injuries often arise in the medical malpractice context. Plaintiffs in such suits may sue physicians for negligence, alleging that their negligence reduced the patient’s chances of survival. A majority of states recognizes “loss of a chance of survival” as an injury remediable by damages.²⁴⁴ In certain jurisdictions, a plaintiff seeking damages in a “loss of chance of survival” case needs to show that the plaintiff would have had a greater than even chance of survival if it had not been for the defendant’s negligence.²⁴⁵ In other jurisdictions, there can be recovery for loss of chance of survival even if the patient had less than a 50 percent chance of survival to begin with.²⁴⁶ All that is required for the lost chance to be actionable is a showing “that the tort victim had a chance of survival at the time of the professional negligence and that the [defendant’s] action or inaction deprived [him] of all or part of that chance.”²⁴⁷

Another line of tort cases involving increased-risk-type injuries consists of cases relating to toxic exposure. In California, a plaintiff who

239. *Id.*

240. Alex Jackson, *EPA’s Fuzzy Bright Line Approach to Residual Risk*, 36 *ECOLOGY L.Q.* 439, 461 (2009).

241. *Am. Iron & Steel Inst. v. EPA*, 115 F.3d 979, 1006 (D.C. Cir. 1997); *see also* *Columbia Falls Aluminum Co. v. EPA*, 139 F.3d 914, 923 (D.C. Cir. 1998) (concluding that a risk assessment will be upheld unless it “bears no rational relationship to the reality it purports to represent”).

242. Mank, *supra* note 232, at 744–745.

243. *See supra* notes 79–92 and accompanying text.

244. *Smith v. State*, 676 So. 2d 543, 547 n.8 (La. 1996).

245. *See, e.g., Beisel v. Lazenby*, 444 So. 2d 953, 953 (Fla. 1984); *Miller v. Paulson*, 646 N.E.2d 521, 524 (Ohio 1994).

246. *See, e.g., Smith*, 676 So. 2d at 547; *Richmond County Hosp. Auth. Operating Univ. Hosp. v. Dickerson*, 356 S.E.2d 548, 550 (Ga. Ct. App. 1987).

247. *Smith*, 676 So. 2d at 547.

demonstrates toxic exposure that is likely to lead to cancer may recover damages for the serious fear generated by that exposure.²⁴⁸ Other jurisdictions may not permit damages for exposure unless the predicted future disease is “medically reasonably certain to follow,” holding that the “mere increased risk” of future disease resulting from an initial injury is not compensable.²⁴⁹ Toxic exposure cases tend to be framed in terms of emotional distress, rather than increased-risk-as-injury.²⁵⁰

Unfortunately, these cases do not bear directly on the question of whether increased risk should be a cognizable injury for standing purposes. The medical malpractice cases are focused on the question of causation, rather than injury, and the toxic exposure cases are concerned with emotional distress damages. Further, the policy concerns underlying permitting causes of action in tort law are very different from those that govern standing. For example, courts may well be more restrictive in permitting increased risk as a cause of action in tort law, because the purpose of tort law is to allocate damages. Recovery of small amounts of damages by all those who have suffered increased risk may occur at the expense of larger damages for the person who ultimately suffers the threatened harm.²⁵¹ However, while the questions of tort liability and standing are distinct, tort law does provide some insight into a proper approach to increased-risk injuries in fact, by revealing that our society conceives of certain increased risks as cognizable injuries in and of themselves.

2. *Limiting Increased Risk as Injury to Only True Probabilistic Cases*

The limiting principles that were explored in the previous Part—limitations on subject matter and thresholds for the level of risk, both quantitative and non-quantitative—attempt to separate cognizable injuries from non-cognizable ones with the use of bright-line rules. This Part will propose that the courts instead adopt principles that take us closer to the constitutional question of whether an increased-risk injury is an injury appropriate for judicial attention, rather than relying on proxies that may have serious defects. By sorting “true” probabilistic cases from others, and then by applying principles derived from *Laidlaw* and from

248. See *Potter v. Firestone Tire & Rubber Co.*, 863 P.2d 795, 800 (Cal. 1993).

249. *Sterling v. Velsicol Chem. Corp.*, 855 F.2d 1188, 1204 (6th Cir. 1988) (applying Tennessee law).

250. See Gregory G. Sarno, Annotation, *Infliction of Emotional Distress: Toxic Exposure*, 6 A.L.R.5th 162 (2009).

251. See Leiter, *supra* note 228, at 407 (citing *In re Rezulin Prods. Liab. Litig.*, 361 F. Supp. 2d 268, 275 (S.D.N.Y. 2005) (“[P]olicy concerns weigh[] against compensating [latent] injury because plaintiffs might compete against those with manifest diseases for the legal system’s limited resources.”)).

expressed societal values, we can come closer to an appropriate determination of what constitutes an injury in fact.

First, one of the simplest ways to limit the increased-risk-as-injury cases, and prevent plaintiffs from simply reframing all cases as increased-risk-as-injury, is to separate cases that are “truly probabilistic” from those that are not. This exercise follows the same logic by which *Summers* and *NRDC II* were distinguished in Part IV.B, *supra*. Injuries that are uncertain because of one party’s lack of knowledge of another party’s intentions should not be permitted as increased-risk injuries, whereas injuries based on the unknowable future should be considered legitimate increased-risk injuries.²⁵²

As an example, consider a plaintiff challenging a local government’s takings policy. Such a plaintiff could claim that his injury consisted in his increased risk of losing his property without just compensation. However, the court could decline to grant standing in such a case by noting that the alleged “probabilistic” injury was not inherently probabilistic. If the government attempted to take his property, the plaintiff would not be in a state of uncertainty of whether he had been injured or not. Such a plaintiff’s “uncertainty” stems not from the inherently probabilistic nature of the government’s policy, but from the plaintiff’s own lack of knowledge of what the government intends to do. By contrast, a plaintiff that alleged a higher risk of developing illness due to lax water quality regulation might be allowed standing, because the injury would be inherently probabilistic: once the agency implemented the regulation, it still would be uncertain whether or not the individual would become ill, but the risk would be increased. By the time a water quality plaintiff could know for certain whether she would suffer harm, it would be too late for an injunction.

3. *Guidance from Market Responses, Laidlaw, and Prudential Standing*

Other guidelines are available to help courts ensure that risk-as-injury theories do not provide a back door for plaintiffs with general grievances but no personal stake in the litigation. After dismissing non-probabilistic cases that are inappropriately masquerading as increased-risk-as-injury cases, the courts can also look to *Laidlaw* for guidance for its gate-keeping functions.

If increased-risk-as-injury is an acceptable theory of injury, the obvious question is which risks will be cognizable. The Second Circuit and the D.C. Circuit have attempted to limit increased risk as injury with reference to the subject of the dispute: the Second Circuit’s holding is

252. See *supra* Part IV.B.

limited to food and drug safety suits²⁵³ and the D.C. Circuit's to environmental disputes.²⁵⁴ This approach is unsatisfying, because although environmental and food and drug safety issues are uniquely concerned with risk, there are risks outside of these categories that one would consider cognizable enough to create personal stakes in litigation—including, as Justice Scalia suggested, risks associated with workplace regulations.²⁵⁵

As Professor Daniel Farber has noted, there is a blurry line between present harms and future risks.²⁵⁶ An entire industry of insurers translates future risks into present costs.²⁵⁷ While risk markets do not cover all risks that might be significant enough to be recognized by the courts, Professor Farber suggests that at a minimum, “[w]hen the market takes a risk seriously, there is every reason for courts to do the same.”²⁵⁸ Thus, rather than restrict risk-as-injury claims to certain contexts, as the Second Circuit and D.C. Circuit do, courts can use information about how society and markets perceive the risks to decide which risks they consider to be valid sources of true adversity and personal stakes. A risk that *could* prompt a reasonable reaction or whose avoidance *could* incur costs should be recognized as a cognizable injury for standing purposes.

Laidlaw also provides guidance. In *Laidlaw*, the Court held that where plaintiffs curtailed their own recreational activities out of a *reasonable concern* about upstream pollution, they suffered a cognizable harm.²⁵⁹ If the concern had not been reasonable, presumably the court would not have found any injury in fact.²⁶⁰ The Court is, therefore, already in the business of determining which risks it believes are worthy of recognition. In the risk-as-injury context, therefore, a workable test would be: if an increased risk would have given rise to standing in a *Laidlaw*-type situation, where the injury arises from plaintiffs' reactions to risk, then it should also be a cognizable injury in the increased-risk-as-injury context.

Finally, prudential standing requirements would prevent risk-as-injury theories from opening standing too broadly. A plaintiff who has demonstrated a real risk to a cognizable interest would still need to demonstrate that the statute in question was intended to protect the cognizable interest. Thus, there is no danger that increased risk theories

253. See *Baur v. Veneman*, 352 F.3d 623, 634 (2d Cir. 2003).

254. See *Va. State Corp. Comm'n v. Fed. Energy Regulatory Comm'n*, 468 F.3d 845, 848 (D.C. Cir. 2006).

255. See Scalia, *supra* note 12, at 895.

256. Farber, *supra* note 200, at 1123.

257. See *id.* at 1126.

258. *Id.*

259. *Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc.*, 528 U.S. 167, 183–84 (2000).

260. See, e.g., *Friends of the Earth, Inc. v. Gaston Copper Recycling Corp.*, 204 F.3d 149, 157 (4th Cir. 2000).

would open any agency action to challenge for the slightest increment in risk, by any person, for any reason.

C. Preserving Access to the Courts for Meritorious Claims

Shutting the door on increased-risk-as-injury claims is not only not constitutionally compelled, but it also would prevent plaintiffs with meritorious claims from even entering the courtroom. Challenges to agency policy that pose health and safety dangers theoretically could be barred by a standing analysis that did not recognize risk as injury. For example, plaintiffs injured by increased risk of future disease based on carcinogenic emissions into their environment would have no basis for standing without an increased-risk theory. Some courts might permit them to survive as uncertain injury plaintiffs, but many could bar them for raising claims that were insufficiently certain or imminent. As a result, unlawful agency behavior, leading to irreversible and concrete harms, would be insulated from any sort of challenge. For such injuries, plaintiffs cannot simply return to court at a later time when the injury has materialized with more specificity: by the time the plaintiff demonstrates that she is specifically injured by an actual cancer, the time for an injunction on unlawful agency practice is long past, and damages at a later date may be a poor substitute for a timely injunction.

CONCLUSION

Summers confirms that speculative uncertain injury claims are insufficient. *Summers* also likely rules out all uncertain plaintiff claims by organizations. Meanwhile, increased-risk theories of injury survive, for the moment, as viable theories of injury in fact. The Court should recognize these theories: not only are they constitutionally permissible and capable of limitation, but a categorical rejection of these cases would contribute to the confusion of standing doctrine and ongoing criticism of the Court's standing jurisprudence.

The Supreme Court has long been criticized for the inconsistency and opacity of its standing decisions, and is sometimes accused of manipulating the standing doctrine to favor certain interests over others.²⁶¹ Categorically denying increased-risk cases would likely create further inconsistency and expose the Court to further criticism and allegations of using the standing doctrine for ulterior motives. Were

261. See Gene R. Nichol, Jr., *Standing for Privilege: The Failure of Injury Analysis*, 82 B.U.L. REV. 301, 304 (2002) ("Standing cases, taken as a whole, reveal inadequate patterns of decision-making. When patterns do exist, however, they are disturbing ones [T]he injury standard is not only unstable and inconsistent, but . . . it also systematically favors the powerful over the powerless."); Fletcher, *supra* note 8, at 223 (describing standing doctrine as leading to "wildly vacillating results").

increased-risk injuries categorically declared not to be injuries in fact, we would see an end to the environmental and consumer safety suits that allege toxic exposure, risk of harm from climate change, or pollution that could potentially cause—but have not yet actually caused—aesthetic and recreational harms. Such claims have formed the bulk of cases that explicitly promote the increased-risk-as-injury theory, and would be directly affected if risk-as-injury was denied. Meanwhile, however, courts have intuitively recognized certain increased-risk injuries, sometimes without explicitly labeling them as such.²⁶² There is a back door for such cases: the murky middle ground of uncertain injury. *Summers* may insist on “imminent” injuries, but similar exhortations in the past have not prevented courts from finding future injuries in fact that were not close in time but still not wholly speculative.²⁶³ Plaintiffs like those in *Dimarzo v. Cahill*, where a plaintiff inmate was granted standing based on a fire hazard in the prison,²⁶⁴ might still find their way into court, as might other intuitively appealing cases such as those concerned with second-hand smoke in prisons,²⁶⁵ workplace safety,²⁶⁶ or the increased risk of having one’s pension plan unfairly amended.²⁶⁷

The increased risk of harm from toxic exposure and the increased risk of fire in a prison are not different in kind in a way that is relevant to the standing question. Both essentially involve injury in the form of increased risk. Coherent reasons may evolve to explain why courts should view one of these risks to be sufficient to show injury in fact, while denying the sufficiency of the other. However, denying certain claims because they represent increased risk while letting in other increased risk claims through another route is likely to be seen by litigants as unfair.

Evaluating whether plaintiffs bring claims that are “truly probabilistic” and using guidance from *Laidlaw* to consider which increased-risk injuries could reasonably constitute concrete injury giving rise to adversity of the parties provides an alternative to the heavy-handed approach of eliminating risk-as-injury theories. This alternative gives us a consistent and relatively transparent way to deal with the cases that survive *Summers*.

262. See *Helling v. McKinney*, 509 U.S. 25, 35 (1993) (recognizing exposure to second hand smoke as a present injury).

263. See *supra* note 39.

264. *Dimarzo v. Cahill*, 575 F.2d 15, 18 (1st Cir. 1978).

265. See *Helling*, 509 U.S. at 35.

266. See *Scalia, supra* note 12, at 895.

267. See *Johnson v. Allsteel, Inc.*, 259 F.3d 885, 890 (7th Cir. 2001).

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