An Environmentalist’s Unlikely Foe: The Use of Hypothetical Jurisdiction in Massachusetts v. EPA

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INTRODUCTION

States, local governments, and environmental organizations are taking action to address the inadequacies of the federal government’s climate change solutions. Among other things, they are turning to the courts. But before the courts will hear their cases, plaintiffs must establish that they have standing.

Plaintiffs have standing when they demonstrate a legally sufficient interest in the lawsuit. Standing often presents a legal obstacle to those trying to protect the environment. Plaintiffs seeking judicial redress for environmental problems frequently lose cases because they lack standing. Therefore, hypothetical

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1 Critics of the Bush Administration’s global warming plan, which involves mostly voluntary measures, describe it as “a total charade.” Elizabeth Kolbert, The Climate of Man III, NEW YORKER, May 9, 2005, at 60 (citing president of Washington-based National Environmental Trust, Philip Clapp). Over one-third of states have enacted some sort of regulation on greenhouse gas emissions. See generally BARRY G. RABE, GREENHOUSE & STATEHOUSE, THE EVOLVING STATE GOVERNMENT ROLE IN CLIMATE CHANGE 7 (2002) (examining efforts of nine states in reducing greenhouse gas emissions). Mayors and governors are working together to establish leadership where it is lacking and develop regional plans to regulate global warming. Anthony DePalma, Mayors Seek Regional Plan on Power Plant Gas Emissions, N.Y. TIMES, Aug. 25, 2005, at B3 (citing Carolyn K. Peterson, mayor of Ithaca, New York who stated, “We have to have leadership and if it is not coming from the federal government, we need it from the states and we need it from the cities.”). Climate Action Network, a worldwide collection of non-governmental organizations working on global warming, has seen its membership double over the past two years. Jennifer Lee, The Warming Is Global but the Legislating, in the U.S., Is All Local, N.Y. TIMES, Oct. 29, 2003, at A20.


4 See Raines v. Byrd, 521 U.S. 811, 830 (1997) (holding that plaintiffs did not demonstrate “sufficient stake in the controversy” in order to afford them standing); Sierra Club v. Morton, 405 U.S. 727, 731-32 (1972) (defining standing as the question of “whether a party has a sufficient stake in an otherwise justiciable controversy to obtain judicial resolution of that controversy”). Courts have also defined the question of standing as “whether the litigant is entitled to have the court decide the merits.” Warth v. Seldin, 422 U.S. 490, 498 (1975).


6 Steel Co., 523 U.S. at 103-09 (denying standing to enforce polluter’s compliance with law due to lack of redressability); Lujan v. Defenders of Wildlife, 504 U.S. 555, 562-63 (1992) (denying standing to challenge agency’s decision that Endangered Species Act does not apply to acts in foreign countries due to lack of “injury in fact”); Lujan v. Nat’l Wildlife Fed’n, 497 U.S. 871, 886-
jurisdiction, a doctrine whereby the judge decides a case on the merits without ruling on standing, would seem to benefit plaintiffs. This Note, however, argues that hypothetical jurisdiction does not benefit plaintiffs. Establishing the right to sue can encourage the government to take preventative action to avoid future lawsuits and garner public support for an environmental cause. In such cases, a finding of standing will benefit plaintiffs even if they lose on the merits.

This Note examines the adverse effects hypothetical jurisdiction has on plaintiffs in the context of global warming. Part I provides background about standing, hypothetical jurisdiction and global warming. Part II outlines the D.C. Circuit Court’s decision in Massachusetts v. EPA and discusses how it significantly expands the doctrine of hypothetical jurisdiction. Part III analyses three reasons the Massachusetts court should not have invoked hypothetical jurisdiction. This Note ultimately argues that the Massachusetts Court should have adopted a “generally accepted” standard of evidence for standing.

I. BACKGROUND

Before courts hear cases, they must first establish that they have jurisdiction. Courts do not have jurisdiction until they decide that the plaintiff has standing.
Standing, however, is one of the most convoluted issues in U.S. law. Thus, inquiries into whether plaintiffs have standing can tax judicial resources as well as contribute to this complex and inconsistent body of law. Hypothetical jurisdiction allows a court to pass over a difficult standing question and proceed directly to the merits of a case. Global warming is a prime example of the sort of issue that raises difficult standing questions because it involves complicated and sometimes equivocal scientific evidence. Therefore, courts may find hypothetical jurisdiction an appealing option when faced with a dispute about global warming.

A. Examining the Fundamentals of Standing

Courts consider constitutional and prudential principles when determining whether a litigant has standing. First, courts apply a three-part test to determine whether plaintiffs have standing under Article III of the Constitution. Then, many courts will use established prudential principles to impose further limits on standing. Once a plaintiff satisfies these standing

jurisdiction of the court must establish requisite standing to sue.”); Valley Forge Christian Coll. v. Am. United for Separation of Church & State, Inc., 454 U.S. 464, 471 (1982) (“This Court has always required that a litigant have “standing” to challenge the action sought to be adjudicated in the lawsuit.”).


Steel Co., 523 U.S. at 93; SEC v. Am. Capital Invs., Inc., 98 F.3d 1133, 1139 (9th Cir. 1996); Idleman, supra note 19, at 236.

See infra Part I.C (discussing the complexities of global warming science).

The court in Massachusetts v. EPA chose to assume standing and decide the case on the merits due to scientific uncertainty. Massachusetts v. EPA, 415 F.3d 50, 53 (D.C. Cir. 2005).

See Bennett v. Spear, 520 U.S. 154, 161-71 (1997) (using constitutional and prudential principles to determine whether plaintiffs had standing to seek judicial review of biological opinion under Endangered Species Act); Allen v. Write, 468 U.S. 737, 750-53 (1984) (holding that parents of black school children did not have standing to sue Internal Revenue Service based on constitutional and prudential principles of standing); Gladstone Realtors v. Vill. of Bellwood, 441 U.S. 91, 99-100 (1979) (analyzing constitutional and prudential components of standing and determining that village had standing to sue real estate brokers and sales personnel for “steering” potential home buyers on the basis of race).

See Steel Co., 523 U.S. at 102 (stating that constitutional test for standing contains three elements); Lujan v. Defenders of Wildlife, 504 U.S. 555, 560 (1992) (discussing three elements required for Article III standing); Massachusetts v. EPA, 415 F.3d 50, 54 (listing three requirements of Article III standing).

See Bennett, 520 U.S. at 162 (discussing prudential principles of standing); Gladstone Realtors, 441 U.S. at 99-100 (noting that prudential principles also limit plaintiff’s ability to bring suit); Warth v. Seldin, 422 U.S. 490, 500 (1975) (explaining that prudential principles limit plaintiffs
requirements, the case proceeds to the merits.\textsuperscript{26} If several plaintiffs bring suit, only one plaintiff must demonstrate standing for the case to proceed.\textsuperscript{27}

Article III, Section 2 of the Constitution extends judicial power of the federal courts only to "cases" and "controversies."\textsuperscript{28} Courts interpret this provision to mean cases and controversies that are traditionally and properly decided through the judicial process.\textsuperscript{29} Standing is one way for a court to determine whether a case is appropriate for judicial resolution.\textsuperscript{30} Thus, courts use Article III standing to limit their jurisdiction.\textsuperscript{31} Placing limits on jurisdiction defines the role of the judiciary branch in a democratic society.\textsuperscript{32} Article III standing is therefore intimately related to the principles of the separation of powers.\textsuperscript{33}

\textsuperscript{26} See Adarand Constructors, Inc. v. Mineta, 534 U.S. 103, 109 (2001) (explaining that court must determine whether plaintiff has standing to challenge federal statute before examining merits); Steel Co., 523 U.S. at 88-89 (stating that standing is "normally ... a threshold question that must be resolved in respondent's favor before proceeding to the merits."); Nat'l Org. for Women v. Scheidler, 510 U.S. 249, 255 (1994) (resolving standing prior to getting to merits of case).

\textsuperscript{27} Nuclear Energy Inst., Inc. v. EPA, 373 F.3d 1251, 1266 (D.C. Cir. 2004) (explaining that only one petitioner requires standing); Military Toxics Project v. EPA, 146 F.3d 948, 954 (D.C. Cir. 1998) (explaining that because one plaintiff has standing, court is not required to decide whether other plaintiffs have standing as well); Ry. Labor Executives' Ass'n v. United States, 987 F.2d 806, 810 (D.C. Cir. 1993) (explaining that once court determines one plaintiff has standing, standing for all plaintiffs is satisfied).

\textsuperscript{28} U.S. CONST. art. III, § 2, cl. 1 ("The judicial Power shall extend to all Cases, in Law and Equity ... [and] to Controversies to which the United States shall be a Party ... "). The meaning of "case and controversy" under this provision is not entirely clear. JAMES E. RADCLIFFE, THE CASE-OR-CONTROVERSY PROVISION 21 (1978). The judiciary, however, explains that courts must establish certain factors before a conflict will be deemed a "case or controversy." Id. These factors include: "adversity, parties with an interest in a disputed legal right, the existence of an actual justiciable controversy, and a federal court's ability to render a final and binding judgment." Id. at 45. The two seminal cases for the provision are Muskrat v. United States and Aetna Life Insurance Co. v. Haworth. Id. See Muskrat v. United States, 219 U.S. 346, 356 (1902) (holding that there was no "case" or "controversy" under an act of Congress that gave federal courts jurisdiction to hear suits against U.S. challenging validity of certain acts of Congress); Aetna Life Ins. Co. of Hartford, Conn. v. Haworth, 300 U.S. 227, 244 (1937) (holding that case presented justiciable controversy).

\textsuperscript{29} Steel Co., 523 U.S. at 102; see also Defenders of Wildlife, 504 U.S. at 560 (explaining that courts interpret Art. III to mean cases and controversy commonly decided by judiciary, not those arising in other branches of government).

\textsuperscript{30} Steel Co., 523 U.S. at 102.

\textsuperscript{31} Allen v. Write, 468 U.S. 737, 751 (1984) ("Standing doctrine embraces several judicially self-imposed limits on the exercise of federal jurisdiction ... ").

\textsuperscript{32} Warth v. Seldin, 422 U.S. 490, 497 (1975) ("...[Standing] is founded in concern about the proper - and properly limited - role of the courts in a democratic society."); see also Schlesinger v. Reservists to Stop the War, 418 U.S. 208, 215 (1974) (discussing how standing constrains power of courts so that they do not supersede their role as defined by Constitution); United States v. Richardson, 418 U.S. 166, 188 (1974) (arguing that by relaxing standing requirements, court effectively expands its own power).

\textsuperscript{33} Steel Co., 523 U.S. at 101 ("The statutory and (especially) constitutional elements of jurisdiction are an essential ingredient of separation and equilibration of powers, restraining the courts from acting at certain times, and even restraining them from acting permanently regarding certain subjects."); Richardson, 418 U.S. at 179 (1974) (explaining that when court finds that
separation of powers is so adamantly protected by the courts, standing is a crucial aspect of the plaintiff's case.\textsuperscript{34} In order to establish Article III standing, plaintiffs must prove three elements.\textsuperscript{35} First, they must show they sustained actual or threatened injuries.\textsuperscript{36} These injuries must be distinct and palpable and not abstract, conjectural or hypothetical.\textsuperscript{37} Second, plaintiffs must prove that their injuries are "fairly traceable" to the defendant's conduct.\textsuperscript{38} Finally, plaintiffs must convince the court that the requested relief will, in all likelihood, redress their injuries.\textsuperscript{39} Each of these elements contains ambiguous concepts.\textsuperscript{40} Therefore, determining whether or not plaintiffs have Article III standing is not a "mechanical exercise" but a more in-depth analysis of legal principles applied to specific facts.\textsuperscript{41}

In addition to this three part test, courts often use prudential principles of standing to determine whether they should hear a case.\textsuperscript{42} Courts created the plaintiff lacks standing, he should seek redress in Congress or at polls); \textit{Schlesinger}, 418 U.S. at 227 (1974) (rejecting argument that court should find standing because if this citizen does not have standing then no one will, and stating that people can instead go to political process to address issue).

\textsuperscript{34} \textit{Ex Parte} McCord, 7 U.S. (1 Wall.) 506, 514 (1868) (explaining that court cannot proceed to merits without first establishing that it has jurisdiction to do so).

\textsuperscript{35} \textit{Lujan v. Defenders of Wildlife}, 504 U.S. 555, 560 (1992) (explaining that courts have developed three elements that plaintiffs must prove in order to establish Art. III standing).

\textsuperscript{36} \textit{Gladstone Realtors v. Vill. of Bellwood}, 441 U.S. 91, 99 (1979); \textit{see also} \textit{Sierra Club v. Morton}, 405 U.S. 727, 734-35 (1972) ("[T]he 'injury in fact' test requires more than an injury to a cognizable interest. It requires that the party seeking review be himself among the injured."); \textit{Am. Petroleum Inst. v. EPA}, 216 F.3d 50, 63 (D.C. Cir. 2000) (stating that defendants must show they have suffered "concrete and particularized" harm that is "actual or imminent").

\textsuperscript{37} \textit{Defenders of Wildlife}, 504 U.S. at 555 (defining injury in fact requirement as "a concrete and particularized, actual or imminent invasion of a legally protected interest"); \textit{Los Angeles v. Lyons}, 461 U.S. 95, 102 (1983) (stating that plaintiff's "injury or threat of injury must be both 'real and immediate,' not 'conjectural' or 'hypothetical.'"); \textit{Warth v. Seldin}, 422 U.S. 490, 501 (1975) (stating that "the plaintiff still must allege a distinct and palpable injury to himself, even if it is an injury shared by a class of other possible litigants.").

\textsuperscript{38} \textit{Steel Co.}, 523 U.S. 83, 103 ("[T]here must be causation—a fairly traceable connection between the plaintiff's injury and the complained-of conduct of the defendant."); \textit{Defenders of Wildlife}, 504 U.S. at 560 (describing causal link that must exist between injury and conduct complained of); \textit{Sierra Club v. EPA}, 292 F.3d 895, 899 (D.C. Cir. 2002) (stating that plaintiff must show "substantial probability" that defendant caused its injury).

\textsuperscript{39} \textit{Steel Co.}, 523 U.S. at 103 (explaining that plaintiffs must demonstrate that requested relief will likely redress alleged injury).

\textsuperscript{40} \textit{Allen v. Write}, 468 U.S. 737, 751 (1984) ("[T]he constitutional component of standing doctrine incorporates concepts concededly not susceptible of precise definition.").


\textsuperscript{42} \textit{Gladstone Realtors v. Vill. of Bellwood}, 441 U.S. 91, 99-100 (1979) ("Even when a case falls within these constitutional boundaries, a plaintiff may still lack standing under the prudential principles . . . .")
prudential principles of standing. They are not based on Article III of the Constitution, and Congress may override them by passing legislation. One such principle requires plaintiffs to assert their own rights, and not the rights of third parties. Another assurance is that the plaintiffs' injuries are not "too generalized" or common to most people. Yet another principle demands that plaintiffs' injuries fall within the "zone of interest" that the governing law aims to protect or regulate. Courts have used the term "statutory standing" to describe this prudential principle. Statutory standing requires courts to determine whether Congress intended the law to protect a particular plaintiff from a particular harm.

B. Hypothetical Jurisdiction

A substantial number of federal circuit courts have adopted the doctrine of hypothetical jurisdiction. Courts use this doctrine when confronted with a case that presents a difficult standing issue but is easily resolved on the merits. If the court determines that the plaintiff will lose on the merits, it simply rules in favor of the defendant. This allows the court to avoid wasting time...
adjudicating the standing issue. Thus, hypothetical jurisdiction enables the court to decide the merits prior to establishing jurisdiction.

Though numerous federal circuit courts had adopted the doctrine, the Supreme Court expressly disapproved of hypothetical jurisdiction in *Steel Co. v. Citizens for a Better Environment*. Steel Co. presented two distinct issues: whether the respondent had standing and the proper interpretation of the Emergency Planning and Community Right-To-Know Act. The Justices disagreed as to which question they needed to address first.

Justice Stevens argued that the Court could answer the statutory interpretation question before addressing standing. The statutory interpretation question presented the issue of whether or not the respondent had a cause of action under the statute. Justice Stevens asserted that precedent allowed the Court to decide whether or not a cause of action exists before addressing standing.

The majority opinion, written by Justice Scalia, argued that Justice Stevens’s assertion invoked the doctrine of hypothetical jurisdiction. Justice Scalia then seized the opportunity to repudiate the doctrine. He declared that hypothetical jurisdiction takes the courts beyond their constitutionally defined boundaries and thus offends the principle of separation of powers. He also pointed to the long history of Supreme Court precedent that requires courts to establish jurisdiction before proceeding to any other questions.

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plaintiff had standing to bring void for vagueness claim against curfew mandated by natural disaster; *Clow*, 948 F.2d at 619 (holding that defendant housing department did not violate plaintiffs rights without determining that plaintiffs had standing); *Parcel of Land*, 928 F.2d at 4 (explaining that because “government easily prevails” there is no need to determine whether plaintiff has standing).

See *Idleman*, supra note 19, at 247 (noting that judicial economy is common rationale courts give for utilizing hypothetical jurisdiction); *Simpson-Wood*, supra note 19, at 303 (stating that main reason for circumventing jurisdiction is judicial economy).

*Idleman*, supra note 19, at 245.


Id. at 88.

See generally id. (providing different judicial opinions as which issue court was required to address first).

*Id.* at 116-17 (Stevens, J., concurring). In addition to the use of hypothetical jurisdiction, Justice Stevens offered a second reason why the court could decide the statutory question before the Article III question. He asserted that the statutory issue could have been characterized as a matter of “jurisdiction.” *Id.* at 112. Thus, in his view, the court faced two jurisdictional issues, rather than one jurisdictional issue and one merits issue. *Id.* at 114-15. Stevens then declared that the Court had routinely held that it may choose which issue to address first when faced with two jurisdictional issues. *Id.* Therefore, the court could address the statutory question first. *Id.*

*Id.* at 118-19.

*Id.*

*Id.* at 94 (majority opinion).

*Id.*

*Id.*

*Id.* (citing *Ex Parte McCordile*, 7 U.S. (1 Wall.) 506, 514 (1868); *Great S. Fire Proof Hotel*
Justice Scalia, however, did not completely reject hypothetical jurisdiction. He defended a variety of Supreme Court cases that appeared to assume jurisdiction for the purposes of deciding a case on the merits. For instance, one case involved an issue that Justice Stevens interpreted as jurisdictional, which according to Justice Scalia was not. Therefore, while it may have appeared that the Court decided the merits question before the jurisdictional question, the Court really just decided one merits question before deciding another merits question. Other cases Justice Scalia distinguished were cases wherein the Court declined to address the jurisdictional question because of the case's "extraordinary procedural posture."

One of the decisions Justice Scalia endorsed as an exception to his general denunciation of hypothetical jurisdiction was *National Railroad Passenger Corp. v. National Ass'n of Railroad Passengers*. In *National Railroad Passenger Corp.*, the Supreme Court held that a merits question can have priority over a statutory standing question. In *Steel Co.*, Justice Scalia approved of the holding, distinguishing the assumption of statutory standing from the assumption of Article III standing. He reasoned that because a merits inquiry and a statutory standing inquiry often overlap, one should not draw a distinction between the two. He then explained that because merits inquiries do not overlap with Article III inquiries, courts must address Article III inquiries prior to deciding the merits. Thus, he asserted that the Court could only apply hypothetical jurisdiction where the Court faced an issue of statutory standing.

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65 *Steel Co.*, 523 U.S. at 96 (discussing Bell v. Hood, 327 U.S. 678 (1946) (holding that "the non-existence of a cause of action was no proper basis for a jurisdictional dismissal."); Norton v. Mathews, 427 U.S. 524 (1976) (declining to decide jurisdictional question because merits question was decided in companion case so there was no reason to decide jurisdictional question); Nat'l R.R. Passenger Corp. v. Nat'l Assn. of R.R. Passengers, 414 U.S. 453 (1974) (holding that statutory standing questions may be assumed and merits question decided); Sec'y of Navy v. Avrech, 418 U.S. 676 (1974) (declining to decide jurisdictional issue because merits question was resolved against plaintiffs in another case).

66 *Steel Co.*, 523 U.S. at 95-96 (citing Bell, 327 U.S. 678).

67 *Id.* (refuting Justice Stevens' assertion that Bell presented Article III redressability issue, and asserting that it was really question of whether cause of action existed at all).

68 *Id.* at 98 (discussing Norton, 427 U.S. 524 (1976) (declining to decide jurisdictional question because merits question was decided in companion case so there was no reason to decide jurisdictional question); Sec'y of Navy, 418 U.S. 676 (1974) (declining to decide jurisdictional issue because merits question was resolved against plaintiffs in another case)).


70 Nat'l R.R. Passenger Corp., 414 U.S. at 469 (deciding whether cause of action existed before deciding whether plaintiff's injury was in "zone of interests" statute meant to protect).

71 *Steel Co.*, 523 U.S. at 96-97.

72 *Id.* at 97 n.2.

73 *Id.*

74 *Id.* at 97.
C. Some Key Facts About Global Warming

The complex science of global warming may persuade a court to invoke hypothetical jurisdiction when faced with a case concerning climate change. The term "global warming" refers to the rising temperature of the earth's surface. This phenomenon is largely due to human activities that are changing the chemical composition of the earth's atmosphere and intensifying the earth's natural "greenhouse effect." Most scientists expect global warming to result in rising sea levels, increased storms and drought, and a general disruption in the earth's ecosystems. Such a scenario implicates environmental and economic damage as well as public health issues. The effects of global warming on certain populations will most likely be catastrophic. Rising sea levels threaten coastal territories and have already resulted in the evacuation of small islands. This impact will in turn affect other parts of the world as displaced people will seek refuge in land already occupied. Furthermore, disrupting the planet's delicate ecosystems may cause unpredictable harm, and many argue the risk is not one worth taking.

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75 See Massachusetts v. EPA, 415 F.3d 50, 56 (2005) (declining to decide standing due to scientific uncertainty).
77 Id. ("There is new and stronger evidence that most of the warming over the last 50 years is attributable to human activities. Human activities have altered the chemical composition of the atmosphere through the build-up of greenhouse gases . . . ."). The term "greenhouse effect" refers to the phenomenon wherein energy from the sun rebounds off the earth and into the atmosphere. Id. The name comes from the idea that the earth's atmosphere traps heat like the glass roof of a greenhouse. Id.
79 See PERCIVAL, supra note 78, at 1055 (noting environmental and economic consequences of global warming).
80 See id. at 1060 (noting that less developed countries with less advanced public health systems are likely to feel effects of global warming more acutely); John Carey, Global Warming, BUS. WK., Aug. 16, 2004, at 63 (noting that some regions will experience increase in flooding and significant reductions in crop yields as earth's surface temperature rises).
81 See Elizabeth Kolbert, Comment, Global Warming, NEW YORKER, Dec. 12, 2005, at 39 [hereinafter Kolbert Comment] (discussing evacuation of Kilinailau Islands due to global warming's effect on sea levels).
82 See Kolbert, supra note 1, at 63 ("A disruption in Monsoon patterns, a shift in ocean currents, a major drought - any one of these could easily produce streams of refugees numbering in the millions.").
83 See Carey, supra note 80, at 66 (noting that advocates of immediate action to address global warming ask why take even small risk of catastrophic changes when steps can be taken now to
Despite strong evidence in support of the theory, some scientists refuse to recognize that anthropogenic greenhouse gases cause global warming absent unequivocal proof. Predicting the Earth’s environment a century in the future is complicated and imprecise. Scientists must consider factors such as economic growth, advanced technology, and energy supplies. They use climate simulators and models to take these factors into account, but their results inevitably vary as to the extent of warming. Scientists do not disagree, however, that human activity is a likely cause of the earth’s rising temperature.

The unpredictability of climate change and the economic consequences of reducing emissions impede efforts to address the problem of global warming by diminishing public support. Public opinion can drive environmental regulation by putting pressure on politicians. The public will not likely support a remedy for a problem they do not believe exists. The public also tends to oppose actions that impose a financial burden on them personally. Taken together,

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84 See NAT’L RESEARCH COUNCIL, CLIMATE CHANGE SCIENCE: AN ANALYSIS OF SOME OF THE KEY QUESTIONS 17 (2001) [hereinafter NRC REPORT] (asserting that variability in climate record and contributing factors make causation difficult to determine with absolute certainty). Webster’s Collegiate Dictionary defines “anthropogenic” as “of, relating to, or resulting from the influence of human beings on nature.” MERRIAM WEBSTER’S COLLEGIATE DICTIONARY 49 (10th ed. 1998).

85 BJORN LOMBORG, THE SKEPTICAL ENVIRONMENTALIST 278 (2001) (discussing reports from U.N. Climate Panel ("IPCC") that examine different "scenarios," each of which contain different calculations for issues like population, energy supplies, deforestation rates, etc.).

86 Id.

87 Id.

88 See id. at 266 (noting that evidence suggests human generated greenhouse gases are causing global warming); Carey, supra note 80, at 60 (quoting editor in chief of Science, Donald Kennedy, as saying “[t]here is no dispute that the temperature will rise. It will. The disagreement is how much.”); EPA: Global Warming webpage, supra note 76 (“[S]cientists think rising levels of greenhouse gases in the atmosphere are contributing to global warming . . . but to what extent is difficult to determine at the present time.”).

89 See infra notes 90-94 and accompanying text (discussing how public opinion affects efforts to address global warming).

90 PERCIVAL, supra note 78, at 1048 (noting that publicity of aerosol’s potential harm to ozone led to significant drop in market for products with such sprays and eventually led to state ban of such products). The Chief Negotiator of the U.S., Richard Benedick, asserts that having a public that was informed and concerned about the issue was one of the factors that enabled the U.S. to be so successful in its negotiations for a world wide ban on aerosols. Id. at 1049 (citing R. BENEDICK, OZONE DIPLOMACY 5-7 (1991)).

91 See Carey, supra note 80, at 69 (noting that lack of public knowledge about global warming rather than economic consequence of reducing emissions is reason for political inaction); Kolbert, supra note 1, at 61 (quoting Winning the Global Warming Debate memo composed by Frank Lutz, Republican political consultant) (“The scientific debate is closing (against us) but not yet closed. There is still a window of opportunity to challenge the science. Voters believe that there is no consensus about global warming in the scientific community. Should the public come to believe that the scientific issues are settled, their views about global warming will change accordingly.”).

92 See Carey, supra note 80, at 53 (explaining that issues like slavery and child labor were initially condoned due to high cost of their abolition).
these are formidable obstacles for groups seeking solutions to curb global warming. To overcome this, environmental organizations endeavor to shift the public's awareness about global warming from "abstract threat to pressing reality." Thus, a change in how the public perceives the issue is crucial to the efforts of those working to address global warming.

II. Massachusetts v. Environmental Protection Agency

Massachusetts v. EPA presented the issue of whether plaintiffs asserting injuries caused by global warming had standing to sue. This raised questions about the role of courts in large scale environmental problems, sound science, and the proper procedure for difficult standing issues. The panel of three judges hearing the case splintered on this complex question of standing.

A. Facts and Procedure

On October 20, 1999, the International Center for Technology Assessment ("ICTA") petitioned the EPA to regulate greenhouse gas emissions from new motor vehicles under the Clean Air Act. Eighteen organizations joined ICTA in its petition. On August 28, 2003, the EPA issued the Fabricant Opinion, which effectively denied the petition to regulate greenhouse gas emissions from new motor vehicles. The Fabricant Opinion states that the Clean Air Act "does not authorize [the] EPA to regulate for global climate change..."
purposes.¹⁰¹ Twelve states, three cities, an American territory, and many environmental organizations filed suit in the D.C. circuit court to challenge the Fabricant Opinion.¹⁰² These petitioners asserted that the Clean Air Act authorizes the EPA to regulate greenhouse gases and that the EPA unlawfully refused to do so. The petitioners claimed to meet all three elements of Article III standing to bring this claim.¹⁰³ They filed affidavits describing the injuries they faced due to global warming.¹⁰⁴ They maintained that scientific evidence proves that greenhouse gas emissions from motor vehicles contribute to global warming.¹⁰⁵ Therefore, they argued, in failing to regulate greenhouse gas emissions, the EPA caused their injuries.¹⁰⁶ Finally, they argued that the EPA’s regulation of greenhouse gas emissions from new motor vehicles would reduce the effects of global warming, thereby redressing their injuries.¹⁰⁷

The EPA responded that the petitioners lacked Article III standing because they failed to prove the causation and redressability elements of standing.¹⁰⁸ The EPA did not challenge the petitioners’ claim as to the injury element of standing.¹⁰⁹ The EPA argued that its decision not to regulate greenhouse gas emissions from new motor vehicles did not cause the petitioners’ injuries.¹¹⁰ It further argued that a court decision in their favor would not redress petitioners’ injuries because of the lack of proof that emissions cause global warming.¹¹¹

B. Holding and Rationale

A three judge panel decided Massachusetts v. EPA.¹¹² Each judge handled

¹⁰¹ Id. at 1.
¹⁰² Massachusetts, 415 F.3d at 53. The petitioners include Massachusetts, California, Connecticut, New Jersey, Oregon, Illinois, New Mexico, Rhode Island, Maine, New York, Vermont, Washington, the American Somoa, the Cities of New York, Baltimore and the District of Columbia and numerous environmental organizations. Id. at 51-53. A trial court did not hear this case prior to its emergence at the appellate level. Id. at 53. The D.C. circuit court has exclusive jurisdiction over “nationally applicable regulations promulgated, or final action taken, by the administrator” of the EPA.¹⁰³Id. at 53 (quoting 42 U.S.C. § 7607(b)(1) (1990)). Therefore, petitioners properly filed suit in the D.C circuit court directly. Id. at 53-54
¹⁰³ Brief of Petitioners, supra note 98, at 2 (“Petitioners have standing to challenge both the 202 Denial and the Fabricant Opinion.”).
¹⁰⁴ Massachusetts, 415 F.3d at 54.
¹⁰⁶ Id. at 2.
¹⁰⁷ Id.
¹⁰⁸ Massachusetts, 415 F.3d at 54.
¹⁰⁹ Id.
¹¹⁰ Id. at 54-58.
¹¹¹ Id.
¹¹² Id. at 53.
the issue of petitioners’ Article III standing differently. Judge Randolph bypassed the standing issue and decided the case on the merits. Judge Sentelle found that the plaintiffs lacked standing. Judge Tatel decided that Massachusetts at least had established Article III standing. Because only one plaintiff must demonstrate standing for a suit to proceed, Tatel maintained that the petitioners had satisfied the elements of standing. Judge Randolph wrote the majority opinion; therefore, the holding of Massachusetts v. EPA did not address the standing issue.

1. Judge Randolph’s Opinion

Judge Randolph found that the issues of standing and the reasons why the EPA refused to regulate were interrelated. In order to have Article III standing, the petitioners needed to prove causation. Some evidence in the administrative record contradicted the petitioners’ evidence that greenhouse gas emissions contribute to global climate change and thereby cause the petitioners’ injuries. Therefore, he thought the standing inquiry required an in-depth analysis of the evidence in the record to determine whether the EPA’s in-action caused the Petitioner’s injuries. But the evidence concerning the uncertainty about global warming was also part of the EPA’s decision not to regulate. Thus, the standing inquiry and the issue of whether or not the EPA properly declined to exercise its authority involved analyzing the same evidence.

Judge Randolph posed three options for the court to consider in this unusual situation. First, the court could have a special master do a factual determination on the standing issue. He deemed this approach duplicative and therefore unwise. The second option he presented, remanding the issue to

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113 See generally Massachusetts, 415 F.3d. 50 (conveying opinions of each of three judges on issue of standing).
114 Id. at 56 (majority opinion).
115 Id. at 59 (Sentelle, J., concurring).
116 Id. at 64 (Tatel, J., dissenting).
117 Id.
118 Id. at 53 (majority opinion).
119 Id. at 55.
120 Steel Co. v. Citizens for a Better Env’t, 523 U.S. 83, 1016-17 (1998) ("There must be causation—a fairly traceable connection between the plaintiff’s injury and the complained-of conduct of the defendant.").
121 Massachusetts, 415 F.3d. at 55.
122 Id.
123 Id.
124 Id.
125 Id. at 55-56 (stating that case presented "highly unusual circumstance-encountered for the first time in this court").
126 Id. at 55.
127 Id.
the EPA to address the causation and redressability elements, he also quickly rejected. He reasoned that the Fabricant Opinion already expressed the EPA's conclusion as to the effects of greenhouse gases on the global climate. Therefore, he found it illogical to have the EPA reevaluate the same evidence a second time. Furthermore, he believed that asking the EPA to address causation and redressability in effect requires the EPA to decide the standing issue. This approach fails because courts, not the EPA, should rule on standing. Finally, Judge Randolph settled on a third course; he chose to decide the case on the merits and avoid the standing inquiry all together.

Judge Randolph did not explicitly use the term "hypothetical jurisdiction," but he invoked the doctrine. He decided the case on the merits without establishing jurisdiction. Judge Randolph conceded that the Supreme Court refused to accept hypothetical jurisdiction in Steel Co. He justified his action by noting the National Railroad exception to the rule against hypothetical jurisdiction that the Steel Co. Court endorsed. National Railroad created an exception which allowed courts to apply hypothetical jurisdiction only to statutory standing. The Steel Co. Court reasoned that because Article III inquiries and merits inquiries do not overlap, courts cannot extend the exception Article III standing. Judge Randolph argued that because the Article III and merits inquiries overlapped, the National Railroad exception for statutory standing should extend to Article III standing.

2. Judge Sentelle's Opinion

Judge Sentelle wrote a concurring opinion, because he found that the plaintiffs lacked standing. He stated that the petitioners had not met the injury element of Article III standing. He concluded that the injuries described in the plaintiffs' briefs were not personal and individual enough to satisfy the strict
demands of Article III standing. He erroneously claimed to agree with the EPA in this assertion, when in reality he raised the issue on his own. The EPA had not challenged the injury element of standing. Judge Sentelle did not address Judge Randolph’s argument that the Article III issue and the merits issue overlap.

Judge Sentelle’s reasoning is akin to the prudential principles of standing. He explained that the petitioners’ affidavits did not show that the petitioners’ injuries were “particularized to themselves.” Global warming, he wrote, harms “humanity at large.” Judge Sentelle then declared that the executive and legislative branches are more equipped than the judiciary branch to address environmental problems so massive in scope.

3. Judge Tatel’s Opinion

Judge Tatel also wrote separately on the issue of standing. He stressed that only one of the petitioners needs to demonstrate standing in order for the case to proceed to the merits. He found that Massachusetts had adequately established Article III standing. In response to Judge Sentelle’s opinion, Judge Tatel argued that Massachusetts claimed particularized harm. He explained that Massachusetts will lose land as a result of global warming and that this leads to personal and individual injury to that state. Though other states may similarly experience injuries due to global warming, their injuries will not be the same as those that Massachusetts will suffer. Thus, in Judge Tatel’s opinion, Massachusetts met the injury requirement of standing.

143 Id.
144 Id.
145 Id.
146 Id. at 59-61.
147 See supra notes 42-49 and accompanying text (explaining prudential principles of standing).
148 Massachusetts, 415 F.3d at 59-60.
149 Id. at 60.
150 Id. at 59-60.
151 Id. at 64 (Tatel, J., dissenting).
152 Id. (referencing Nuclear Energy Inst., Inc. v. EPA, 373 F.3d 1251, 1266 (D.C. Cir. 2004)).
153 Id.
154 Id. at 65.
155 Id. (quoting Lujan v. Defenders of Wildlife, 504 U.S. 555, 560 n.1 (1992)).
156 Id. Judge Tatel wrote that “Maine may suffer from loss of Maine coastal land and New Mexico may suffer from reduced water supply – but these problems are different from the injuries Massachusetts faces.” Id. Thus, even though global warming will result in injury to other states, those other states will not suffer from exactly the same injury as Massachusetts. Id. They will have their own injuries. Id. Therefore, Massachusetts’ injury is distinct. Id.
157 Id. (explaining that Massachusetts’s harm is not sort of generalized harm that courts find insufficient for standing purposes).
Judge Tatel then considered the causation element of standing. He quoted a declaration submitted by Dr. Michael MacCracken, the senior scientist on global change at the Office of the U.S. Global Change Research Program. In his declaration, Dr. MacCracken stated that anthropogenic greenhouse gas emissions are the primary cause of global warming. Dr. MacCracken also stated that the U.S. transportation industry, particularly U.S. cars, causes roughly seven percent of the world’s fossil fuel emissions. Thus, greenhouse gas emissions from new motor vehicles in the U.S. contribute to the threat of Massachusetts’s land loss. Judge Tatel also noted the EPA’s efforts to address global warming by encouraging businesses and individuals to voluntarily reduce their greenhouse gas emissions. He argued that such efforts contradict the EPA’s claim that greenhouse gas emissions do not cause global warming.

Finally, Judge Tatel addressed the third requirement of Article III standing: redressability. Again, he quoted Dr. MacCracken’s declaration. Dr. MacCracken stated that vehicle emissions reductions in the U.S. would have a significant positive effect on global warming. The EPA claimed that Dr. MacCracken’s assertion rested on the assumption that if the U.S. regulates emissions, other countries will follow suit. But Judge Tatel found two weaknesses in this argument. First, Dr. MacCracken’s declaration focused primarily on U.S. emissions reductions, not on the effects of global emission reductions. Secondly, Judge Tatel noted that the EPA did not contest a declaration that contradicted its critique of Dr. MacCracken’s assertion. Michael Wash, former director of the EPA’s motor vehicle pollution control efforts, declared that other countries would follow the U.S.’s lead in emission reductions. Judge Tatel, therefore, found that the petitioner’s satisfied each

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158 Id.
159 Id.
160 Id. (quoting MacCracken Decl. ¶¶ 5(a)-(b), 12-19).
161 Id.
162 See Massachusetts, 415 F.3d at 65 (Tatel, J., dissenting) (arguing that MacCracken declaration satisfies causation element of standing).
163 Id. at 66.
164 Id.
165 Id.
166 Id.
167 MacCracken Decl., supra note 160, ¶ 5(e) (“Achievable reductions in emissions of CO2 and other [GHGs] from U.S. motor vehicles would ... delay and moderate many of the adverse impacts of global warming.”).
168 Brief of Respondent at 16, Massachusetts, 415 F.3d 50, No. 03-1361.
169 Massachusetts, 415 F.3d at 65-66 (Tatel, J., dissenting).
170 Id.
171 Id. at 66 (quoting Walsh Decl. ¶¶7-8, 10) (“I have no doubt that establishing emissions standards for pollutants that contribute to global warming would lead to investment in developing
III. ANALYSIS

The Massachusetts Court should not have invoked the doctrine of hypothetical jurisdiction for two reasons. First, it violated Supreme Court precedent. Second, it resulted in the court's failure to shift to the EPA the burden of disproving standing. In doing so, it denied the petitioners the opportunity to prove they had the right to sue. To avoid this, the court should have adopted a standard whereby "generally accepted" scientific proof rather than unequivocal scientific proof satisfies standing.

A. The Use of Hypothetical Jurisdiction in Massachusetts v. EPA Violated Supreme Court Precedent

The National Railroad exception to the Supreme Court's express repudiation of hypothetical jurisdiction only applies to statutory standing issues. Judge Randolph erroneously invoked the exception in a case demanding Article III analysis. Article III standing and statutory standing are two different concepts that warrant different treatment. Thus, courts cannot extend an exception for statutory standing to include Article III standing.

The difference in authoritative weight of the two doctrines makes it inappropriate to extend an exception for statutory standing to Article III standing. Statutory standing, a judicially derived principle, compels courts to
determine whether Congress sought to allow a particular plaintiff to sue under a particular statute.\textsuperscript{181} To do this, courts must examine legislative intent.\textsuperscript{182} But courts view legislative intent with skepticism and often find it difficult to accurately determine.\textsuperscript{183} Therefore, courts may sometimes properly bypass a statutory standing inquiry\textsuperscript{184} Conversely, courts consider Article III standing the “constitutional minima” of all cases.\textsuperscript{185} Article III standing requires courts to examine the constitutional boundaries of their power.\textsuperscript{186} Courts consider the Constitution the most important text to the judicial branch and thereby strictly adhere to constitutional mandates.\textsuperscript{187} Courts therefore may not invoke hypothetical jurisdiction in cases warranting Article III analysis because it takes the courts beyond the limits of the Constitution.\textsuperscript{188}

\textsuperscript{181} Steel Co. v. Citizens for a Better Env’t, 523 U.S. 83, 97 n.2 (1998) (describing statutory standing as whether or not court meant for plaintiff to have cause of action under particular statute).

\textsuperscript{182} See Air Courier Conference of Am. v. Am. Postal Workers Union, 498 U.S. 517, 523-524 (1991) (asserting that Court must inquire into congressional intent to determine whether plaintiff falls in zone of interest of statute); Siegel, supra note 48, at 341 (“[T]he zone of interests test must ultimately turn on congressional intent.”).

\textsuperscript{183} See Wis. Pub. Intervenor v. Mortier, 501 U.S. 597, 616-17 (1991) (Scalia, J., concurring) (explaining that courts should not rely on legislative intent because committee reports are unreliable); 16 C.J.S. Constitutional Law § 339 (2005) (“The courts generally cannot inquire into the motive, policy, wisdom, or expediency of legislation.”). See generally United States v. Darby, 312 U.S. 657 (1941) (examining statute only on its face and constitution, not legislative intent, when determining whether law was constitutional); Champion v. Ames, 188 U.S. 321 (1903) (refusing to consider legislative purpose for enacting bill when asked to do so by defendant).

\textsuperscript{184} See Whitmore, 495 U.S. at 161 n.2 (1990) (explaining that courts will sometimes relax prudential principles of standing).


\textsuperscript{186} CHEMERINSKY PRINCIPLES, supra note 180, at 34 (“Article III of the Constitution, a substantial departure from the Articles of Confederation, created the federal judiciary and defines its powers.”).

\textsuperscript{187} See Cooper v. Aaron, 358 U.S. 1, 17-18 (1958) (explaining that Article VI of Constitution makes Constitution “supreme law of the land”); King v. Mullins, 171 U.S. 404, 422 (1898) (describing Articles of Constitution as supreme law that must be given full effect); Marbury v. Madison, 5 U.S. (1 Cranch) 137, 177 (1803) (stating that Constitution is “fundamental and paramount law of the nation”); see also 16 AM. JUR. 2D Constitutional Law § 51 (2005) (“The Constitution as the supreme law is without qualification and is absolute . . . .”); CHEMERINSKY PRINCIPLES, supra note 180, at 8 (quoting Professor Thomas Grey saying, “the Constitution ‘has been, virtually from the moment of its ratification, a sacred symbol, the potent emblem . . . of the nation itself.’”)

\textsuperscript{188} See Steel Co. v. Citizens for a Better Env’t, 523 U.S. 83, 94 (1998) (declining to endorse hypothetical jurisdiction in cases calling for Article III analysis because it takes courts beyond their power as authorized by Constitution).
One might argue that this particular case warranted an expansion of the statutory standing exception to hypothetical jurisdiction due to the extraordinary overlap of issues. The Massachusetts Court would have had to analyze the same evidence to determine whether petitioners had standing as it did to decide the merits. Therefore, the court sensibly declined to draw an artificial distinction between the two and simply decided the merits.

The importance of stare decisis outweighs such a proposition. Stare decisis requires courts to abide by precedent. This principle maintains consistent, predictable and fair rulings. In Steel Co., the Supreme Court clearly held that courts cannot employ hypothetical jurisdiction in cases warranting Article III analysis. This is evident from the plain language of the case itself and from the appellate court decisions that apply Steel Co. Therefore, the overlap of the Article III standing issues and the merits issue is simply irrelevant. All circuit courts must strictly adhere to the Supreme Court’s precedent regardless of the specific factual circumstances before them.

189 In Steel Co., Justice O’Connor expressed reservations about creating an exhaustive list of circumstances in which jurisdiction can be assumed. Steel Co., 523 U.S. at 110 (O’Connor, J., concurring). She explained that courts should have discretion in deciding when difficult jurisdictional questions can be reserved in favor of deciding a case on the merits. Id.

190 See Massachusetts v. EPA, 415 F.3d 50, 55 (2005) (noting that a court would have to examine evidence in the administrative record for both standing question and merits question).


193 JOHNS, supra note 192, at 92.

194 Id. at 163 (“Stare decisis protects us from discrimination, arbitrariness, and chaos.”).

195 See Steel Co. v. Citizens for a Better Env’t, 523 U.S. 83, 94 (1998) (asserting that hypothetical jurisdiction in cases warranting Article III analysis takes courts beyond power granted to them by constitution and is therefore improper).

196 See Malaysia Intern. Shipping Corp. v. Sinochem Intern. Co. Ltd., No. 04-1815, 2006 WL 278876, at *8 (3d Cir. Feb. 7, 2006) (explaining that Steel Co. disallows courts to use hypothetical jurisdiction when faced with Article III standing issue); Zagre v. Dept. of Homeland Sec., No. 05-2040-PR, 2005 WL 2536578, at *1 (2d Cir. Oct. 12, 2005) (stating that courts may invoke hypothetical jurisdiction when faced with a statutory standing question but not an Article III standing question); Fama v. Comm’t of Corr. Servs., 235 F.3d 804, 817 (2d Cir. 2000) (explaining that the Supreme Court only barred hypothetical jurisdiction for Article III standing, not statutory standing); Hardemon v. Boston, 144 F.3d 24, 26 (1st Cir. 1998) (explaining that court would have invoked hypothetical jurisdiction because case was easily resolved on merits, but because of Steel Co. decision could no longer do so).

197 See Massachusetts v. EPA, 415 F.3d 50, 55-56 (2005) (asserting that overlap of Article III and merits issues warrants use of hypothetical jurisdiction).

198 JOHNS, supra note 192, at 163 (“[L]ower courts are bound the [sic] follow the applicable holdings of higher courts.”).
B. Hypothetical Jurisdiction Negated the EPA’s Duty to Bear the Burden of Disproving Standing

In addition to violating precedent, the Massachusetts Court unjustly failed to shift to the EPA the burden of challenging standing. Once the petitioners proved each element of Article III standing through affidavits, the burden of proof should have shifted to the defendants to disprove standing.\(^{199}\)

Instead of shifting the burden of proof, Judge Randolph invoked hypothetical jurisdiction.\(^{200}\) The court thereby demanded that the petitioners prove the merits of the case without first requiring the EPA to disprove standing.\(^{201}\) If Judge Randolph had required the EPA to bear the burden of disproving standing, it likely would have failed.\(^{202}\)

The EPA’s effort to address global warming through voluntary reductions in greenhouse gas emissions contradicts its claim that regulation would not affect global warming.\(^{203}\) Petitioners therefore may well have succeeded in their standing claim had the court shifted the burden of proof to the EPA.

Some courts argue that if a plaintiff will not win on the merits, there is no need to engage in a complex inquiry into standing.\(^{204}\) Difficult standing issues require significant judicial resources.\(^{205}\) This causes courts, already overwhelmed by their caseloads, further docket congestion and more costs.\(^{206}\)

Plaintiffs, however, will often benefit from a finding of standing even if they

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199 See Massachusetts, 415 F.3d at 66-67 (Tatel, J., dissenting) (stating that petitioners established standing, and burden rested with EPA to challenge it); CHARLES A. WRIGHT ET. AL., 13A FEDERAL PRACTICE AND PROCEDURE 2D § 3531.15, at 99 (1984) (stating that if defendant contests standing through summary judgment, it carries burden of showing absence of standing).

200 See Massachusetts, 415 F.3d at 56 (invoking hypothetical jurisdiction by bypassing standing in order to decide merits).

201 See id. (stating that court will proceed to merits before deciding standing because Article III standing issue and merits overlap).

202 See id. at 66-67 (Tatel, J., dissenting) (arguing that EPA’s administrative record actually supports petitioner’s standing).

203 See id. at 66 (asserting that EPA’s voluntary emission reductions program contradicts its claim that emissions reductions would have no effect on global warming).

204 Ass’n of Am. R.R. v. I.C.C., 600 F.2d 989, 999 n.34 (D.C. Cir. 1979) (holding that because issue was clear on merits, court may bypass difficult standing issue); Spinkellink v. Wainwright, 578 F.2d 582, 609 n.31 (5th Cir. 1978) (noting that it was unnecessary to decide whether prisoner had standing because his claim was meritless); Chinese Am. Civic Council v. Attorney Gen., 566 F.2d 321, 325 n.9 (D.C. Cir. 1977) (asserting that difficult standing questions need not be decided when case is simply resolvable on merits).

205 See Steel Co. v. Citizens for a Better Env’t, 523 U.S. 83, 111 (1998) (“Whom does it help to have appellate judges spend their time and energy puzzling over the correct answer to an intractable jurisdictional matter, when (assuming an easy answer on the substantive merits) the same party would win or lose regardless?”); Switlik v. Hardwicke Co., 651 F.2d 852, 856 n.3 (3d Cir. 1981) (citing “considerations of judicial economy” as reason for hypothetical jurisdiction); Idleman, supra note 19, at 247 (citing judicial economy as one of primary rationales for hypothetical jurisdiction).

206 Steel Co., 523 U.S. at 111 (“To insist upon a rigid “order of operations” in today’s world of federal-court caseloads that have grown enormously over a generation means unnecessary delay and consequent added cost.”).
lose on the merits. A finding of standing may encourage the government and private companies to act preemptively to avoid lawsuits in the future. Additionally, a finding of standing may garner public support for the petitioner's cause. Thus, hypothetical jurisdiction robs the plaintiffs of their opportunity to prove they have the right to sue, a valuable asset to many environmental movements.

207 See infra notes 209-11 and accompanying text (discussing benefits of standing to plaintiffs seeking environmental redress).

208 Nicola Pain, Courts and Citizen Action, in ENVIRONMENTAL POLICY IN SEARCH OF NEW INSTRUMENTS 73, 82 (Bruno Dente ed., 1995) ("The threat of court action alone can provide a powerful voice to citizen groups. Court action may not have to be proceeded with as the threat of this alone may cause a citizen group to be taken seriously enough for meaningful negotiations to occur with governments and private companies."). For example, in Friends of the Earth v. Watson, plaintiffs sued two finance and insurance companies for assisting projects that contribute to global warming. Friends of the Earth v. Watson, No. C 02-4106 JSW, 2005 WL 2035596, at *1 (N.D. Cal. Aug. 23, 2005). When the federal district court held that the plaintiffs had standing, environmentalists declared it a huge victory. Global Warming Suit Highlights Appeals Courts' Split on Standing, CLEAN AIR REP., Sept. 8, 2005, available at 2005 WLNR 14069184. The case marked the first time that a federal court held that plaintiffs had standing to sue for injuries caused by global warming. David Kravets, Global Warming Suit Clears Hurdle, CONTRA COSTA TIMES, Aug. 25, 2005, at F4. The attorney representing Friends of the Earth asserted that the decision "open[ed] the courthouse door" to plaintiffs seeking redress of injuries caused by global warming. Kravets, supra, at F4 (quoting Ronald Shems, Vermont Attorney representing Friends of the Earth in suit against OPIC).

209 Because the public largely perceives the threat of global warming as abstract, a finding of standing in Massachusetts v. EPA would have been significant. See supra Part I.C for a discussion on public opinion about global warming. Had the court held that the petitioners had standing, this may have given credibility to the science of global warming. Natural Res. Def. Council: Global Warming website, supra note 94 (noting that NRDC is trying to prevent harmful effects that will result from global warming by changing public's attitude towards it from theoretical problem to real and significant threat). This in turn may have resulted in the public perceiving the threat of global warming as real. For instance, when the public became aware of the fact that there was an actual hole in the ozone layer, it immediately responded by putting pressure on government to act. See PERCIVAL, supra note 77, at 1048. Furthermore, a finding of standing may have spread awareness about global warming because the media would have informed the public of the holding. For example, after the court decided Friends of the Earth v. Watson, newspapers carried articles about the success of the plaintiffs in establishing standing. Bob Egelko, San Francisco U.S. Judge OKs Suit on Global Warming: Agencies' Financing of Overseas Energy Projects Challenged, S.F. CHRON., Aug. 25, 2005, at B1 ("The evidence 'is sufficient to demonstrate it is reasonably probable that emissions from projects supported by (the two agencies) will threaten plaintiffs' concrete interests,' said White, a Bush appointee"); Kravets, supra note 208 ("A federal judge here said environmental groups and four U.S. cities can sue federal development agencies on allegations the overseas projects they financially back contribute to global warming."); ClimateLawsuit.org, In Landmark Decision Against Bush Administration, Federal Court Recognizes Harm Caused by Global Warming (Aug. 24, 2005), http://www.climatelawsuit.org ("A federal judge in California ruled yesterday against the federal government and allowed the groundbreaking climate change lawsuit to proceed.").

210 Because the Massachusetts Court invoked hypothetical jurisdiction, it did not resolve whether petitioners in that case has standing. See generally Massachusetts v. EPA, 415 F.3d 50 (2005).
C. The Court Should Not Have Required Unequivocal Proof of Causation to Establish Standing

Apart from following precedent and requiring the EPA to disprove standing, the Massachusetts Court should have adopted a lower standard of proof for standing. The irreversibility of environmental harm and the inadequacies of modern science justify a lower standard of proof for causation than unequivocal proof.211 Currently, plaintiffs must prove that there is a "substantial likelihood" that an action will result in their personal harm to establish Article III standing.212 The third and fourth circuits interpret this standard to fall short of requiring plaintiffs to prove causation with scientific certainty at the summary judgment stage.213 At the "final stage" of litigation the burden raises to unequivocal proof.214 The third and fourth circuits' interpretation should extend even to the "final stage" of litigation in cases where unequivocal scientific proof of causation is unavailable.215

Judge Randolph's main standing concern was the "scientific uncertainty" about whether or not greenhouse gases cause global warming.216 Even though scientists cannot unequivocally prove that anthropogenic greenhouse gases cause global warming, most scientists agree they are the most likely cause.217 In

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211 See Cent. Delta Water Agency v. United States, 306 F.3d 938, 950 (9th Cir. 2002) ("The extinction of a species, the destruction of a wilderness habitat, or the fouling of air and water are harms that are frequently difficult or impossible to remedy."); CHRISTOPHER D. STONE, THE GNAT IS OLDER THAN MAN: GLOBAL ENVIRONMENT AND HUMAN AGENDA 24 (1993) ("We are only beginning to learn how the world works.").

212 Duke Power Co. v. Carolina Envt'l Study Group, 438 U.S. 59, 77 (1978) (holding that district court's finding of substantial likelihood that nuclear power plants would not be built but for Price-Anderson Act was sufficient to meet requirements of Article III standing.); Fla. Audubon Soc'y v. Bentsen, 94 F.3d 658, 666 (D.C. Cir. 1996) (explaining that plaintiffs must show that "challenged act is substantially probable to cause the demonstrated particularized injury"); Kurtz v. Baker, 829 F.2d 1133, 1144 (D.C. Cir. 1987) (holding that plaintiff failed to show substantial probability that but for defendants' acts, he would have been able to achieve his desired effect).

213 See Friends of the Earth, Inc. v. Gaston Copper Recycling Corp., 204 F.3d 149, 161 (4th Cir. 2000) (noting that "traceability" does not require scientific certainty of causation); Pub. Int. Res. Group of N.J. v. Magnesium Elektron, Inc., 123 F.3d 111, 121-22 (3rd Cir. 1997) ("[P]laintiffs can link an environmental injury to the defendant's pollution when the plaintiff is unable to prove 'to a scientific certainty' that the defendant's discharges caused that injury."); Nat. Res. Def. Council v. Watkins, 954 F.2d 974, 980 n.7 (4th Cir. 1992) (asserting that traceability (causation) does not require strict standards of scientific proof).

214 See Massachusetts, 415 F.3d at 55 (holding that petitioners must establish unequivocally that defendants caused or will cause their injuries).

215 See id. ("[O]ne might say that in this case we are at the 'final stage'.").

216 Id. (deciding not to rule on standing because of conflicting evidence about effects that greenhouse gas emissions from new motor vehicles will have on global warming).

217 See NRC REPORT, supra note 84, at 17 ("[B]ecause of the large and still uncertain level of natural variability inherent in the climate record and the uncertainties in the time histories of the various forcing agents . . ., a causal linkage between the buildup of greenhouse gases in the atmosphere and . . . climate change . . . cannot be unequivocally established."). But see LOMBORG,
fact, the EPA itself acknowledges: "[t]here is new and stronger evidence that most of the warming over the last 50 years is attributable to human activities."\textsuperscript{218}

This virtual consensus should suffice for the causation element of Article III standing in environmental cases.\textsuperscript{219} If the scientific community generally accepts that an environmental harm has a particular cause, this should satisfy the court for the purposes of standing.\textsuperscript{220} This serves as a prudent standard for environmental cases given the irreversibility of environmental harm.\textsuperscript{221} If the public has no recourse until every scientist agrees as to the cause of the environmental harm, preventative action will often be impossible.\textsuperscript{222}

CONCLUSION

In\textit{ Massachusetts v. EPA}, the court erred in using hypothetical jurisdiction to avoid deciding an Article III standing issue.\textsuperscript{223} By violating Supreme Court precedent and settled procedural rules, it unjustly disadvantaged the plaintiffs.\textsuperscript{224} The court should have avoided these problems adopting a "generally accepted" standard of proof rather than requiring unequivocal proof for standing.\textsuperscript{225} Requiring unequivocal proof to establish standing will delay judicial action until

\textsuperscript{218} EPA: Global Warming webpage, supra note 76.

\textsuperscript{219} See Kolbert, supra note 1, at 61 (noting that recent study examined over nine hundred academic articles on climate change and discovered that none disputed theory that anthropogenic greenhouse gases cause global warming).

\textsuperscript{220} This standard is similar to that of the "Frye test" wherein new scientific proof is admissible if it is generally accepted by the scientific community. Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 584-85 (1993).

\textsuperscript{221} Cent. Delta Water Agency v. United States, 306 F.3d 938, 950 (9th Cir. 2002) ("The extinction of a species, the destruction of a wilderness habitat, or the fouling of air and water are harms that are frequently difficult or impossible to remedy. Thus ... plaintiffs need not wait until the natural resources are despoiled before challenging the government action leading to the potential destruction.").

\textsuperscript{222} See supra Part II.B.1 (discussing Judge Randolph's use of hypothetical jurisdiction).

\textsuperscript{223} See supra Parts III.A-B (discussing how court violated Supreme Court precedent and failed to shift burden of disproving standing to EPA, thereby disadvantaging petitioners).

\textsuperscript{224} See supra Part III.C (discussing "generally accepted" standard of proof as opposed to unequivocal proof).
an environmental catastrophe is upon us.\textsuperscript{226}

\textsuperscript{226} See Part III.C (discussing problem with delaying action too long in environmental cases).