MASSACHUSETTS v. ENVIRONMENTAL PROTECTION AGENCY

127 S. Ct. 1438 (2007)

Justice STEVENS delivered the opinion of the Court.

A well-documented rise in global temperatures has coincided with a significant increase in the concentration of carbon dioxide in the atmosphere. Respected scientists believe the two trends are related. For when carbon dioxide is released into the atmosphere, it acts like the ceiling of a greenhouse, trapping solar energy and retarding the escape of reflected heat. It is therefore a species — the most important species — of a "greenhouse gas."

Calling global warming "the most pressing environmental challenge of our time," a group of States, local governments, and private organizations, alleged in a petition for certiorari that the Environmental Protection Agency (EPA) has abdicated its responsibility under the Clean Air Act to regulate the emissions of four greenhouse gases, including carbon dioxide. Specifically, petitioners asked us to answer two questions concerning the meaning of § 202(a)(1) of the Act: whether EPA has the statutory authority to regulate greenhouse gas emissions from new motor vehicles; and if so, whether its stated reasons for refusing to do so are consistent with the statute.

In response, EPA, supported by 10 intervening States and six trade associations, correctly argued that we may not address those two questions unless at least one petitioner has standing to invoke our jurisdiction under Article III of the Constitution.

Article III of the Constitution limits federal-court jurisdiction to "Cases" and "Controversies." Those two words confine "the business of federal courts to questions presented in an adversary context and in a form historically viewed as capable of resolution through the judicial process." The parties' dispute turns on the proper construction of a congressional statute, a question eminently suitable to resolution in federal court. Congress has moreover authorized this type of challenge to EPA action. See 42 U.S.C. § 7607(b)(1). That authorization is of critical importance to the standing inquiry: "Congress has the power to define injuries and articulate chains of causation that will give rise to a case or controversy where none existed before." "In exercising this power, however, Congress must at the very least identify the injury it seeks to vindicate and relate the injury to the class of persons entitled to bring suit." Ibid. We will not,

therefore, "entertain citizen suits to vindicate the public's nonconcrete interest in the proper administration of the laws."

EPA maintains that because greenhouse gas emissions inflict widespread harm, the doctrine of standing presents an insuperable jurisdictional obstacle. We do not agree. At bottom, "the gist of the question of standing" is whether petitioners have "such a personal stake in the outcome of the controversy as to assure that concrete adverseness which sharpens the presentation of issues upon which the court so largely depends for illumination." *Baker v. Carr* (1962).

To ensure the proper adversarial presentation, *Lujan v. Defenders of Wildlife* (1992) holds that a litigant must demonstrate that it has suffered a concrete and particularized injury that is either actual or imminent, that the injury is fairly traceable to the defendant, and that it is likely that a favorable decision will redress that injury. However, a litigant to whom Congress has "accorded a procedural right to protect his concrete interests,"—here, the right to challenge agency action unlawfully withheld, § 7607(b)(1)—"can assert that right without meeting all the normal standards for redressability and immediacy." When a litigant is vested with a procedural right, that litigant has standing if there is some possibility that the requested relief will prompt the injury-causing party to reconsider the decision that allegedly harmed the litigant.

Only one of the petitioners needs to have standing to permit us to consider the petition for review. We stress here, the special position and interest of Massachusetts. It is of considerable relevance that the party seeking review here is a sovereign State and not, as it was in *Lujan*, a private individual.

Well before the creation of the modern administrative state, we recognized that States are not normal litigants for the purposes of invoking federal jurisdiction. That Massachusetts does in fact own a great deal of the "territory alleged to be affected" only reinforces the conclusion that its stake in the outcome of this case is sufficiently concrete to warrant the exercise of federal judicial power.

When a State enters the Union, it surrenders certain sovereign prerogatives. Massachusetts cannot invade Rhode Island to force reductions in greenhouse gas emissions, it cannot negotiate an emissions treaty with China or India, and in some circumstances the exercise of its police powers to reduce in-state motor-vehicle emissions might well be pre-empted.

These sovereign prerogatives are now lodged in the Federal Government, and Congress has ordered EPA to protect Massachusetts (among others) by prescribing standards applicable to the "emission of any air pollutant from any class or classes of new motor vehicle engines, which in [the Administrator's] judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." Congress has moreover recognized a concomitant procedural right to challenge the rejection of its rulemaking petition as arbitrary and capricious. Given that procedural right and Massachusetts' stake in protecting its quasi-sovereign interests, the Commonwealth is entitled to special solicitude in our standing analysis.

With that in mind, it is clear that petitioners' submissions as they pertain to Massachusetts have satisfied the most demanding standards of the adversarial process. EPA's steadfast refusal to regulate greenhouse gas emissions presents a risk of harm to Massachusetts that is both "actual" and "imminent." There is, moreover, a "substantial likelihood that the judicial relief requested" will prompt EPA to take steps to reduce that risk.

The Injury

The harms associated with climate change are serious and well recognized. Indeed, the NRC Report itself—which EPA regards as an "objective and independent assessment of the relevant science[],"—identifies a number of environmental changes that have already inflicted significant harms, including "the global retreat of mountain glaciers, reduction in snow-cover extent, the earlier spring melting of rivers and lakes, [and] the accelerated rate of rise of sea levels during the 20th century relative to the past few thousand years. . . ."

Petitioners allege that this only hints at the environmental damage yet to come. According to the climate scientist Michael MacCracken, "qualified scientific experts involved in climate change research" have reached a "strong consensus" that global warming threatens (among other things) a precipitate rise in sea levels by the end of the century, "severe and irreversible changes to natural ecosystems," a "significant reduction in water storage in winter snowpack in mountainous regions with direct and important economic consequences," and an increase in the spread of disease. He also observes that rising ocean temperatures may contribute to the ferocity of hurricanes.

That these climate-change risks are "widely shared" does not minimize Massachusetts' interest in the outcome of this litigation. The severity of that injury will only increase over the course of the next century: If sea levels continue to rise as predicted, one Massachusetts official believes that a significant fraction of coastal property will be "either permanently lost through inundation or temporarily lost through periodic storm surge and flooding events." Remediation costs alone, petitioners allege, could run well into the hundreds of millions of dollars.

Causation

EPA does not dispute the existence of a causal connection between man-made greenhouse gas emissions and global warming. At a minimum, therefore, EPA's refusal to regulate such emissions "contributes" to Massachusetts' injuries.

EPA nevertheless maintains that its decision not to regulate greenhouse gas emissions from new motor vehicles contributes so insignificantly to petitioners' injuries that the agency cannot be haled into federal court to answer for them. For the same reason, EPA does not believe that any realistic possibility exists that the relief petitioners seek would mitigate global climate change and remedy their injuries. That is especially so because predicted increases in greenhouse gas emissions from developing nations, particularly China and India, are likely to offset any marginal domestic decrease.

But EPA overstates its case. Its argument rests on the erroneous assumption that a small incremental step, because it is incremental, can never be attacked in a federal judicial forum. Yet accepting that premise would doom most challenges to regulatory action. Agencies, like legislatures, do not generally resolve massive problems in one fell regulatory swoop. They instead whittle away at them over time, refining their preferred approach as circumstances change and as they develop a more-nuanced understanding of how best to proceed. That a first step might be tentative does not by itself support the notion that federal courts lack jurisdiction to determine whether that step conforms to law.

And reducing domestic automobile emissions is hardly a tentative step. Even leaving aside the other greenhouse gases, the United States transportation

sector emits an enormous quantity of carbon dioxide into the atmosphere—according to the MacCracken affidavit, more than 1.7 billion metric tons in 1999 alone. That accounts for more than 6% of worldwide carbon dioxide emissions. To put this in perspective: Considering just emissions from the transportation sector, which represent less than one-third of this country's total carbon dioxide emissions, the United States would still rank as the third-largest emitter of carbon dioxide in the world, outpaced only by the European Union and China. Judged by any standard, U.S. motor-vehicle emissions make a meaningful contribution to greenhouse gas concentrations and hence, according to petitioners, to global warming.

The Remedy

While it may be true that regulating motor-vehicle emissions will not by itself reverse global warming, it by no means follows that we lack jurisdiction to decide whether EPA has a duty to take steps to slow or reduce it. Because of the enormity of the potential consequences associated with man-made climate change, the fact that the effectiveness of a remedy might be delayed during the (relatively short) time it takes for a new motor-vehicle fleet to replace an older one is essentially irrelevant. Nor is it dispositive that developing countries such as China and India are poised to increase greenhouse gas emissions substantially over the next century: A reduction in domestic emissions would slow the pace of global emissions increases, no matter what happens elsewhere.

[Justice Stevens then went on to hold that the EPA had statutory authority to promulgate regulations dealing with global warming and either had to do so or justify not doing so.]

Chief Justice ROBERTS, with whom Justice SCALIA, Justice THOMAS, and Justice ALITO join, dissenting.

Global warming may be a "crisis," even "the most pressing environmental problem of our time." Indeed, it may ultimately affect nearly everyone on the planet in some potentially adverse way, and it may be that governments have done too little to address it. It is not a problem, however, that has escaped the attention of policymakers in the Executive and Legislative Branches of our Government, who continue to consider regulatory, legislative, and treaty-based means of addressing global climate change.

Apparently dissatisfied with the pace of progress on this issue in the elected branches, petitioners have come to the courts claiming broad-ranging injury, and attempting to tie that injury to the Government's alleged failure to comply with a rather narrow statutory provision. I would reject these challenges as nonjusticiable. Such a conclusion involves no judgment on whether global warming exists, what causes it, or the extent of the problem. Nor does it render petitioners without recourse. This Court's standing jurisprudence simply recognizes that redress of grievances of the sort at issue here "is the function of Congress and the Chief Executive," not the federal courts.

I

Our modern framework for addressing standing is familiar: "A plaintiff must allege personal injury fairly traceable to the defendant's allegedly unlawful

conduct and likely to be redressed by the requested relief." Applying that standard here, petitioners bear the burden of alleging an injury that is fairly traceable to the Environmental Protection Agency's failure to promulgate new motor vehicle greenhouse gas emission standards, and that is likely to be redressed by the prospective issuance of such standards.

Before determining whether petitioners can meet this familiar test, however, the Court changes the rules. It asserts that "States are not normal litigants for the purposes of invoking federal jurisdiction," and that given "Massachusetts' stake in protecting its quasi-sovereign interests, the Commonwealth is entitled to special solicitude in our standing analysis."

Relaxing Article III standing requirements because asserted injuries are pressed by a State, however, has no basis in our jurisprudence, and support for any such "special solicitude" is conspicuously absent from the Court's opinion. The general judicial review provision cited by the Court, 42 U.S.C. § 7607(b)(1), affords States no special rights or status. The Court states that "Congress has ordered EPA to protect Massachusetts (among others)" through the statutory provision at issue, and that "Congress has . . . recognized a concomitant procedural right to challenge the rejection of its rulemaking petition as arbitrary and capricious." The reader might think from this unfortunate phrasing that Congress said something about the rights of States in this particular provision of the statute. Congress knows how to do that when it wants to, see, e.g., § 7426(b) (affording States the right to petition EPA to directly regulate certain sources of pollution), but it has done nothing of the sort here. Under the law on which petitioners rely, Congress treated public and private litigants exactly the same.

Nor does the case law cited by the Court provide any support for the notion that Article III somehow implicitly treats public and private litigants differently. What is more, the Court's reasoning falters on its own terms. The Court asserts that Massachusetts is entitled to "special solicitude" due to its "quasi-sovereign interests," but then applies our Article III standing test to the asserted injury of the State's loss of coastal property. In the context of parens patriae standing, however, we have characterized state ownership of land as a "nonsovereign interes[t]" because a State "is likely to have the same interests as other similarly situated proprietors."

II

It is not at all clear how the Court's "special solicitude" for Massachusetts plays out in the standing analysis, except as an implicit concession that petitioners cannot establish standing on traditional terms. But the status of Massachusetts as a State cannot compensate for petitioners' failure to demonstrate injury in fact, causation, and redressability.

When the Court actually applies the three-part test, it focuses on the State's asserted loss of coastal land as the injury in fact. If petitioners rely on loss of land as the Article III injury, however, they must ground the rest of the standing analysis in that specific injury. That alleged injury must be "concrete and particularized," and "distinct and palpable." Central to this concept of "particularized" injury is the requirement that a plaintiff be affected in a "personal and individual way," and seek relief that "directly and tangibly benefits him" in a manner distinct from its impact on "the public at large."

The very concept of global warming seems inconsistent with this particularization requirement. Global warming is a phenomenon "harmful to humanity at large," and the redress petitioners seek is focused no more on them than on the public generally—it is literally to change the atmosphere around the world.

If petitioners' particularized injury is loss of coastal land, it is also that injury that must be "actual or imminent, not conjectural or hypothetical," "real and immediate," and "certainly impending."

As to "actual" injury, the Court observes that "global sea levels rose somewhere between 10 and 20 centimeters over the 20th century as a result of global warming" and that "[t]hese rising seas have already begun to swallow Massachusetts' coastal land." But none of petitioners' declarations supports that connection. One declaration states that "a rise in sea level due to climate change is occurring on the coast of Massachusetts, in the metropolitan Boston area," but there is no elaboration. And the declarant goes on to identify a "significan[t]" non-global-warming cause of Boston's rising sea level: land subsidence. Thus, aside from a single conclusory statement, there is nothing in petitioners' 43 standing declarations and accompanying exhibits to support an inference of actual loss of Massachusetts coastal land from 20th century global sea level increases. It is pure conjecture.

The Court's attempts to identify "imminent" or "certainly impending" loss of Massachusetts coastal land fares no better. One of petitioners' declarants predicts global warming will cause sea level to rise by 20 to 70 centimeters *by the year 2100*. Another uses a computer modeling program to map the Commonwealth's coastal land and its current elevation, and calculates that the high-end estimate of sea level rise would result in the loss of significant state-owned coastal land. But the computer modeling program has a conceded average error of about 30 centimeters and a maximum observed error of 70 centimeters. As an initial matter, if it is possible that the model underrepresents the elevation of coastal land to an extent equal to or in excess of the projected sea level rise, it is difficult to put much stock in the predicted loss of land. But even placing that problem to the side, accepting a century-long time horizon and a series of compounded estimates renders requirements of imminence and immediacy utterly toothless. "Allegations of possible future injury do not satisfy the requirements of Art. III. A threatened injury must be certainly impending to constitute injury in fact."

III

Petitioners' reliance on Massachusetts's loss of coastal land as their injury in fact for standing purposes creates insurmountable problems for them with respect to causation and redressability. To establish standing, petitioners must show a causal connection between that specific injury and the lack of new motor vehicle greenhouse gas emission standards, and that the promulgation of such standards would likely redress that injury. As is often the case, the questions of causation and redressability overlap. And importantly, when a party is challenging the Government's allegedly unlawful regulation, or lack of regulation, of a third party, satisfying the causation and redressability requirements becomes "substantially more difficult."

Petitioners view the relationship between their injuries and EPA's failure to promulgate new motor vehicle greenhouse gas emission standards as simple and

direct: Domestic motor vehicles emit carbon dioxide and other greenhouse gases. Worldwide emissions of greenhouse gases contribute to global warming and therefore also to petitioners' alleged injuries. Without the new vehicle standards, greenhouse gas emissions—and therefore global warming and its attendant harms—have been higher than they otherwise would have been; once EPA changes course, the trend will be reversed.

The Court ignores the complexities of global warming, and does so by now disregarding the "particularized" injury it relied on in step one, and using the dire nature of global warming itself as a bootstrap for finding causation and redressability. First, it is important to recognize the extent of the emissions at issue here. Because local greenhouse gas emissions disperse throughout the atmosphere and remain there for anywhere from 50 to 200 years, it is global emissions data that are relevant. According to one of petitioners' declarations, domestic motor vehicles contribute about 6 percent of global carbon dioxide emissions and 4 percent of global greenhouse gas emissions. The amount of global emissions at issue here is smaller still; § 202(a)(1) of the Clean Air Act covers only *new* motor vehicles and *new* motor vehicle engines, so petitioners' desired emission standards might reduce only a fraction of 4 percent of global emissions.

This gets us only to the relevant greenhouse gas emissions; linking them to global warming and ultimately to petitioners' alleged injuries next requires consideration of further complexities. As EPA explained in its denial of petitioners' request for rulemaking,

> "predicting future climate change necessarily involves a complex web of economic and physical factors including: our ability to predict future global anthropogenic emissions of [greenhouse gases] and aerosols; the fate of these emissions once they enter the atmosphere (e.g., what percentage are absorbed by vegetation or are taken up by the oceans); the impact of those emissions that remain in the atmosphere on the radiative properties of the atmosphere; changes in critically important climate feedbacks (e.g., changes in cloud cover and ocean circulation); changes in temperature characteristics (e.g., average temperatures, shifts in daytime and evening temperatures); changes in other climatic parameters (e.g., shifts in precipitation, storms); and ultimately the impact of such changes on human health and welfare (e.g., increases or decreases in agricultural productivity, human health impacts)."

Petitioners are never able to trace their alleged injuries back through this complex web to the fractional amount of global emissions that might have been limited with EPA standards. In light of the bit-part domestic new motor vehicle greenhouse gas emissions have played in what petitioners describe as a 150-year global phenomenon, and the myriad additional factors bearing on petitioners' alleged injury—the loss of Massachusetts coastal land—the connection is far too speculative to establish causation.

IV

Redressability is even more problematic. To the tenuous link between petitioners' alleged injury and the indeterminate fractional domestic emissions at issue here, add the fact that petitioners cannot meaningfully predict what will come of the 80 percent of global greenhouse gas emissions that originate

outside the United States. As the Court acknowledges, "developing countries such as China and India are poised to increase greenhouse gas emissions substantially over the next century," so the domestic emissions at issue here may become an increasingly marginal portion of global emissions, and any decreases produced by petitioners' desired standards are likely to be overwhelmed many times over by emissions increases elsewhere in the world.

The Court's sleight-of-hand is in failing to link up the different elements of the three-part standing test. What must be likely to be redressed is the particular injury in fact. The injury the Court looks to is the asserted loss of land. The Court contends that regulating domestic motor vehicle emissions will reduce carbon dioxide in the atmosphere, and therefore redress Massachusetts's injury. But even if regulation does reduce emissions—to some indeterminate degree, given events elsewhere in the world—the Court never explains why that makes it likely that the injury in fact—the loss of land—will be redressed. School-children know that a kingdom might be lost "all for the want of a horseshoe nail," but "likely" redressability is a different matter. The realities make it pure conjecture to suppose that EPA regulation of new automobile emissions will likely prevent the loss of Massachusetts coastal land.

The good news is that the Court's "special solicitude" for Massachusetts limits the future applicability of the diluted standing requirements applied in this case. The bad news is that the Court's self-professed relaxation of these Article III requirements has caused us to transgress "the proper—and properly limited—role of the courts in a democratic society."

I respectfully dissent.