

CRS Report for Congress

Climate Change Litigation: A Growing Phenomenon

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Summary

The scientific, economic, and political questions surrounding climate change have long been with us. This report focuses instead on a relative newcomer: the legal debate. Though the first court decision related to climate change appeared 18 years ago, such litigation has proliferated in just the past five.

The court cases, decided and pending, arise in seven contexts. The first is the Clean Air Act (CAA). In April, 2007, the Supreme Court held in *Massachusetts v. EPA* that at least as to mobile sources of emissions (cars, trucks), EPA has authority under the CAA to regulate greenhouse gas (GHG) emissions. This decision puts pressure on EPA to move forward as well with regulation of GHGs from stationary sources (powerplants, factories).

Second, litigation under the Marine Mammal Protection Act, and current and likely litigation under the Endangered Species Act, raise the possibility that the impacts of climate change on wildlife may constrain government and private activities associated with GHG emissions.

Third, what about federal energy statutes? A much-publicized decision held that under the Energy Policy and Conservation Act, the United States must monetize the benefits of reduced carbon emissions as part of setting light-truck fuel economy standards. The Outer Continental Shelf Lands Act also has been invoked.

Fourth, various statutes requiring federal government analysis and information dissemination — the National Environmental Policy Act (NEPA), Global Change Research Act, and Freedom of Information Act — have generated climate-change litigation. NEPA suits make up the most numerous category of climate-change litigation. Courts appear to agree that if a plaintiff can establish standing, NEPA can be used to compel agency consideration of the climate change effects of its actions.

Fifth, can common law tort theories such as nuisance be used to force cutbacks in GHG emissions, or payment of damages? All four decisions thus far have denied relief to plaintiffs on lack of standing or political question grounds.

Sixth are the suits challenging state regulation of GHG emissions from motor vehicles as preempted by the federal corporate average fuel economy standards or federal authority over foreign policy. The two rulings thus far have rejected these challenges. Moreover, these issues will be moot unless EPA's denial of California's request for a waiver of federal preemption under the CAA is overturned in court.

Seventh, chiefly with respect to coal-fired power plants, what role will be played by state utilities laws?

Finally, the report discusses international law aspects of a nation's contributions to climate change, and the few international claims made against the United States to date.

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Climate Change Litigation: A Growing Phenomenon

Introduction

The scientific, economic, and political questions surrounding climate change have long been with us. This report focuses instead on a relative newcomer: the legal debate. Though the first court decision related to climate change appeared 18 years ago, the quantity of such litigation has mushroomed in recent years: more than two dozen cases pursuing multiple legal theories are now pending.

The principal court cases, decided and pending, arise in seven contexts — a number that continues to rise. The first and most important context is the Clean Air Act (CAA). In April, 2007, the Supreme Court held in *Massachusetts v. EPA* that at least as to mobile sources of emissions (cars, trucks), EPA has authority under the CAA to regulate greenhouse gas (GHG) emissions.¹

Second, must global warming effects be considered under the federal wildlife protection statutes, such as the Marine Mammal Protection Act and Endangered Species Act? Third, must they be considered under federal energy statutes, such as the Energy Policy and Conservation Act and Outer Continental Shelf Lands Act? Fourth, may any of several information statutes, particularly the National Environmental Policy Act, be used to compel government analysis of and dissemination of information about climate change? Fifth, can common law tort theories such as nuisance be used by state and private plaintiffs to force cutbacks in GHG emissions, or payment of damages? Sixth, granted that state regulation of GHG emissions from motor vehicles is preempted by the CAA (absent an EPA waiver), is such regulation also preempted by other federal statutory or constitutional law? And seventh, chiefly with respect to coal-fired power plants, what role will be played by state utilities laws?

Sections I through VII of this report address these seven areas of litigation in turn.² Most known cases, decided and pending, are mentioned — omitted cases are

¹ 127 S. Ct. 1438 (2007).

² Similar ground is covered by Justin R. Pidot, GLOBAL WARMING IN THE COURTS: AN OVERVIEW OF CURRENT LITIGATION AND COMMON LEGAL ISSUES (Georgetown Environmental Law and Policy Institute 2006) (available, together with a March, 2007 update, at [<http://www.law.georgetown.edu/gelpi/>]), and Todd O. Madden and Eric McLaughlin, *Climate Change Litigation: Trends and Developments*, BNA Daily Env't Rpt. B-1 (April 3, 2007). A regularly updated chart of climate change cases, prepared by Michael Gerrard of Arnold & Porter, is available at [<http://www.abanet.org/abapubs/globalclimate/>].

(continued...)

those that raise climate change issues in only the most marginal way or only implicitly,³ and some state cases. Looking beyond the domestic lawsuits, Section VIII surveys international-law arguments that might be used to induce GHG emission reductions from the United States and other countries that are major GHG emitters, and the few international-law claims filed against the United States to date. Finally, Section IX offers overall comments.

I. Clean Air Act

Stationary Sources of GHG Emissions

The First EPA General Counsel Memorandum.

Aware that prospects for Senate approval of the Kyoto Protocol were dubious,⁴ some Members of Congress became concerned in the late 1990s that the Clinton Administration EPA might seek to regulate GHG emissions in the absence of approval, under either of two claimed authorities. One authority would derive from an argument that even prior to ratification, the Protocol provided some sort of legal basis for emissions restrictions, perhaps citing past treaties signed by the United States that were provisionally implemented prior to going into effect.⁵ This possibility provoked a series of enactments barring EPA's use of appropriated funds to implement the Kyoto Protocol in the absence of approval and ratification.⁶

² (...continued)

Broader treatments of the legal implications of climate change may be found in Michael Gerrard (ed.), *GLOBAL CLIMATE CHANGE AND U.S. LAW* (ABA 2007), and Symposium Issue, *RESPONSES TO GLOBAL WARMING: THE LAW, ECONOMICS, AND SCIENCE OF CLIMATE CHANGE*, 155 U. Pa. L. Rev. 1353 et seq. (2007).

³ An example of a case that deals with climate change only implicitly (at least so far) is *State of New York v. U.S. Dep't of Energy*, No. 08-0311 (2d Cir. filed January 17, 2008), in which three states (NY, CN, MA) challenge the Department's energy conservation standards for residential furnaces and boilers. Though we are given to understand that the climate change benefits of reducing fossil fuel consumption by such furnaces and boilers was a consideration in filing suit, the petition for review does not mention CO₂ or climate change, and thus we do not include this case in the body of the report.

⁴ Kyoto Protocol to the United Nations Framework Convention on Climate Change, concluded December 10, 1997, U.N. Doc. FCC/CP/1997/L.7 Add. 1, reprinted at 37 I.L.M. 22 (1998). One indication of Senate antipathy to the Kyoto Protocol was its adoption by 95-0 of the so-called Byrd-Hagel resolution urging the President not to sign any international agreement on climate change that would result in serious injury to the U.S. economy or that did not include provisions regarding the GHG emissions of developing countries. S. 98, 105th Congress (1997).

⁵ See generally CRS Report 98-349, *Global Climate Change: Selected Legal Questions About the Kyoto Protocol*, David M. Ackerman. This report concluded that "there does not appear to be any clear legal authority that could be invoked to sustain the provisional application of the Kyoto Protocol." *Id.* at 6.

⁶ P.L. 105-276, 112 Stat. at 2496 (1998) (barring EPA's use of FY1999 funds to implement (continued...))

The rest of this section deals with the second issue: EPA's possible authority to regulate GHG emissions independently of the Protocol, under the CAA. This authority has now been confirmed by the Supreme Court, at least as to mobile sources; nonetheless, this report retains from earlier versions some of the historical evolution of the issue for the sake of a fuller appreciation of its complexity.

During hearings on EPA's FY1999 appropriations, Representative Tom DeLay asked then-EPA Administrator Carol Browner whether the EPA believed it had authority under the CAA to regulate GHG emissions. This led, weeks later, to an EPA General Counsel memorandum,⁷ which concluded that CO₂ satisfies the CAA definition of "air pollutant," but that this is only the first step. Before EPA can regulate CO₂ emissions, it must further conclude that CO₂ meets criteria in other CAA provisions requiring the agency to determine that the substance poses harm to public health, welfare, or the environment. This next step EPA declined to take.

At a House hearing in 1999,⁸ a panel of legal experts argued the question of EPA's authority to regulate CO₂ under the CAA. A new EPA General Counsel endorsed his predecessor's analysis in the 1998 memorandum, but just as his predecessor, stressed that the EPA's legal analysis was "largely theoretical" since "EPA currently has no plans to regulate carbon dioxide...."⁹ This hands-off position was prompted in part by strong congressional opposition based on uncertainties as to the economic impact of regulating a pollutant as widespread as CO₂. In addition, some in Congress argued that CAA implementation of a CO₂ standard was barred by the aforementioned enactments (appropriation riders) prohibiting implementation of the Kyoto Protocol.¹⁰

The EPA General Counsel opinion that "air pollutant" includes GHGs held sway until 2003, when that office reversed itself in the context of a petition asking the agency to regulate GHG emissions from mobile sources. This story picks up below ("Mobile Sources of GHG Emissions").

⁶ (...continued)

Protocol); P.L. 106-74, 113 Stat. at 1080 (1999) (same for FY2000); P.L. 106-377, 114 Stat. at 1141A-41 (2000) (same for FY2001).

⁷ Memorandum from Jonathan Z. Cannon, EPA General Counsel, to Carol M. Browner, EPA Administrator, EPA's Authority to Regulate Pollutants Emitted by Electric Power Generation Sources (April 10, 1998).

⁸ *Is CO₂ A Pollutant and Does EPA Have the Power to Regulate It?*, Joint Hearing Before the Subcomm. on National Environmental Growth, Natural Resources and Regulatory Affairs of the House Comm. on Gov't Reform and the Subcomm. on Energy and Environment of the House Comm. on Science, 106th Cong. (1999).

⁹ Testimony of Gary Guzy, Joint Hearing, *supra* note 8, at 11.

¹⁰ See Veronique Bugnion and David M. Reiner, *A Game of Climate Chicken: Can EPA Regulate Greenhouse Gases Before the U.S. Senate Ratifies the Kyoto Protocol?*, 30 *Env'tl. L.* 491 (2000).

Suits Enforcing the CAA Against EPA.

Two suits have been filed seeking to compel EPA to regulate GHG emissions from stationary sources.

In *Massachusetts v. Whitman*, filed in 2003, three Northeast states (MA, CT, ME) sought to force EPA to list CO₂ as a “criteria pollutant” under the CAA.¹¹ They argued that on various occasions, EPA had indicated its belief that CO₂ emissions contribute to climate change. These EPA statements constituted, in the words of CAA section 108,¹² a “judgment [that GHG emissions] cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare” and, also per section 108, that such emissions “result[] from numerous or diverse mobile or stationary sources.” These prerequisites being satisfied, the suit argued, section 108 required EPA to add CO₂ to its list of “criteria pollutants,” then proceed under section 109¹³ to develop national ambient air quality standards for CO₂. On September 3, 2003, a few days after EPA’s denial of a petition asking the agency to regulate GHG emissions from motor vehicles, the plaintiff states voluntarily dismissed this suit without prejudice, reportedly so as to transfer their energies to a suit challenging the petition denial (leading to the Supreme Court’s *Massachusetts v. EPA* decision).

The second suit is *New York v. EPA*, which seeks to compel EPA to issue a New Source Performance Standard (NSPS) for CO₂. Unlike the first case, however, this one will be litigated in the shadow of *Massachusetts v. EPA*, holding that EPA has authority under the CAA to regulate GHGs from *mobile* sources. The burning question is how this litigation seeking to compel EPA regulation of *stationary-source* GHG emissions will be affected.

New York began with an EPA proposal to revise its NSPSs for electric utility and other steam-generating units. Some commenters on the proposed rule argued that EPA must, in addition to the revisions proposed, set NSPSs for GHGs emitted from steam generating units. The commenters pointed to CAA section 111’s command that EPA promulgate NSPSs to address emissions from new stationary sources that “cause[], or contribute[] significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare.” In promulgating its final rule in February, 2006,¹⁴ however, EPA rejected this demand, saying it lacked authority to set NSPSs for GHGs.

Review of the final rule was sought in the D.C. Circuit.¹⁵ In September, 2006, the court severed the portion of the case dealing with regulation of GHGs, titling it

¹¹ Civ. Action No. 3:03CV984 (PCD) (D. Conn.) (filed June 4, 2003).

¹² 42 U.S.C. § 7408.

¹³ 42 U.S.C. § 7409.

¹⁴ 71 Fed. Reg. 9866 (February 27, 2006).

¹⁵ *Coke Oven Environmental Task Force v. EPA*, No. 06-1131 (D.C. Cir. filed April 7, 2006).

New York v. EPA.¹⁶ In September, 2007, a few months after the Supreme Court decision in *Massachusetts v. EPA*, this severed case was remanded to EPA for further proceedings in light of that decision (this section *infra*).

Suits Enforcing the CAA Against Stationary Sources.

In *Northwest Environmental Defense Center v. Owens Corning Corp.*, environmental groups invoke the CAA citizen suit provision to enforce the act's "new source review" requirement as to GHG emissions.¹⁷ They contend that Owens Corning is constructing a manufacturing plant in Oregon with the potential to emit more than 250 tons per year of harmful gases, without having obtained the required permit.¹⁸ The principal such gas is HCFC-142b, which plaintiffs contend is a potent GHG. In a preliminary ruling, the court held that plaintiffs have standing, notwithstanding that the climate change impacts of the plant's GHG emissions would be "indirect." Anticipating the Supreme Court's rationale for granting standing in *Massachusetts v. EPA*, the court found that standing was not precluded by the fact that the injury to plaintiffs would be shared with many others, nor because the relief sought would not lead to a *complete* elimination of climate change impacts.

In another proceeding, this time before EPA's Environmental Appeals Board, Sierra Club objected to the issuance of a CAA Prevention of Significant Deterioration (PSD) permit by a state agency for construction of a coal-fired electric power plant. *In re Christian County, LLC*, PSD Appeal No. 07-01 (decided January 28, 2008). Sierra Club's argument was that the permit must contain a "best available control technology" (BACT) limit on the plant's CO₂ emissions. The petition was denied because Sierra Club had not raised its argument during the public comment period on the draft permit, but the issue is still alive. Sierra Club is also the petitioner in another case before the Board, *In re Deseret Power Electric Cooperative*, PSD Appeal No. 07-03 (filed October 1, 2007), in which it raised the CO₂ BACT issue during the public comment period and, therefore, preserved the issue for appeal.

In re Deseret involves an EPA-issued PSD permit to construct a new waste-coal-fired utility generating unit at an existing power plant. The PSD BACT issue stems from the fact that the CAA requires a new "major emitting facility" in a PSD area to install BACT "for each pollutant subject to regulation under this act."¹⁹ Sierra Club argues that in light of the *Massachusetts v. EPA* holding that GHGs are "air pollutants" under the act, CO₂ is "subject to regulation" by the CAA. To the contrary, argues EPA, the phrase "subject to regulation" refers only to pollutants that the agency has *specifically* regulated, and since it has yet to issue a regulation limiting CO₂ emissions, BACT for CO₂ is not required here.

¹⁶ No. 06-1322.

¹⁷ 434 F. Supp. 2d 957 (D. Or. 2006).

¹⁸ CAA § 165, 42 U.S.C. § 7475.

¹⁹ CAA § 165(a)(4), 42 U.S.C. § 7475(a)(4); CAA § 169(3), 42 U.S.C. § 7479(3).

Mobile Sources of GHG Emissions

The Section 202 Petition Denial and the Second EPA General Counsel Memorandum.

In 1999, 19 organizations petitioned EPA to regulate emissions of GHGs (CO₂, methane, nitrous oxide, and hydrofluorocarbons) from new motor vehicles. The rulemaking petition cited the agency's alleged mandatory duty to do so under CAA section 202(a)(1).²⁰ That section directs the EPA Administrator to prescribe emission standards for "any air pollutant" from new motor vehicles "which, in his judgment cause[s], or contribute[s] to air pollution which may reasonably be anticipated to endanger public health or welfare."

In 2003, EPA denied the section 202 petition.²¹ Much of the agency's rationale followed a new General Counsel memorandum, issued the same day.²² Contrary to its Clinton Administration precursor, this new OGC memorandum concluded that the CAA does *not* grant EPA authority to regulate CO₂ and other GHG emissions for their climate change impacts.

Massachusetts v. EPA: The Challenge to EPA's Petition Denial.

D.C. Circuit Decision.

EPA's denial of the section 202 petition prompted a suit in the D.C. Circuit by twelve states (CA, CT, IL, MA, ME, NJ, NM, NY, OR, RI, VT, WA) and others. Opposing the challenge, besides EPA, were ten state intervenors (AK, ID, KS, MI, ND, NE, OH, SD, TX, UT), plus several automobile- and truck-related trade groups.

In 2005, a split panel in *Massachusetts v. EPA* rejected the suit.²³ The two judges supporting rejection, however, did so for different reasons. Judge Randolph, *assuming* that EPA had CAA authority to regulate GHG emissions, spoke to whether EPA properly *exercised its discretion* in choosing not to wield that authority. Recall that CAA section 202(a)(1) directs the EPA Administrator to prescribe standards for any motor vehicle emissions that "*in his judgment*"²⁴ cause harmful air pollution. Judge Randolph read "in his judgment" broadly to allow EPA consideration of not only "scientific uncertainty" about the effects of GHGs, but also "policy considerations" that justified not regulating. Thus, EPA in his view was entitled to

²⁰ 42 U.S.C. § 7521(a)(1).

²¹ EPA, Control of Emissions from New Highway Vehicles and Engines, 68 Fed. Reg. 52922 (September 8, 2003). EPA's ruling followed a suit by the original petitioners alleging unreasonable delay. *Center for Technology Assessment v. Whitman*, No. 02-CV-2376 (D.D.C. filed December 5, 2002).

²² Memorandum from Robert E. Fabricant, EPA General Counsel, to Marianne L. Horinko, EPA Acting Administrator, EPA's Authority to Impose Mandatory Controls to Address Global Climate Change Under the Clean Air Act (August 28, 2003).

²³ 415 F.3d 50 (D.C. Cir. 2005).

²⁴ Emphasis added.

rely, as it did, on such factors as the fact that new motor vehicles are but one of many sources of GHG emissions, resulting in an inefficient piecemeal approach to climate change, and efforts to promote fuel cell and hybrid vehicles. He concluded that EPA had properly exercised its 202(a)(1) discretion in denying the petition for rulemaking. By contrast, Judge Sentelle held that petitioners lacked standing.²⁵

In dissent, Judge Tatel asserted that at least one petitioner had standing. Massachusetts, he said, had shown the possibility of injury from global-warming-induced rising sea levels. On the merits, he found first that EPA has the authority under section 202(a)(1) to regulate GHG emissions. Second, he concluded that EPA's 202(a)(1) discretion does not extend to policy considerations, as Judge Randolph held, but relates exclusively to whether the emissions cause harm.

Supreme Court Decision.

In *Massachusetts v. EPA*, the Court ruled 5-4 for petitioners on all three issues in the case — standing, authority, and discretion.²⁶ First, Massachusetts has standing to bring the claim. Second, EPA has authority to regulate motor vehicle GHGs under section 202, since “air pollutant” includes GHG emissions. And third, the phrase “in his judgment” in section 202 does not allow EPA to exercise discretion against regulating based on policy considerations. The ruling in favor of petitioners was forecast early in the majority opinion by its opening sentences: “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.”²⁷ (Nor did the dissenters dispute this.)

Most of the decision is devoted to standing. The Court found that petitioners had two factors in their favor. First, the CAA specifically authorizes challenges to agency action unlawfully withheld, such as here.²⁸ A litigant to whom Congress has accorded such a procedural right, said the Court, “can assert that right without meeting the normal standards for redressability and immediacy”²⁹ — two prerequisites of the standing test. Second, the Court found it “of considerable relevance”³⁰ that the petitioner injury on which it focused — Massachusetts's loss of shore land from global-warming-induced sea level rise — was that of a sovereign state. States are “not normal litigants for the purposes of invoking federal jurisdiction,”³¹ said the Court, noting their quasi-sovereign duty to preserve their territory.

²⁵ The test for whether a plaintiff in federal court has standing is described in greater detail in the following discussion of the Supreme Court's decision on appeal of the D.C. Circuit ruling.

²⁶ 127 S. Ct. 1438 (2007).

²⁷ *Id.* at 1446.

²⁸ CAA § 307(b)(1), 42 U.S.C. § 7607(b)(1).

²⁹ 127 S. Ct. at 1453.

³⁰ *Id.* at 1454.

³¹ *Id.*

Having described petitioners' favored position in establishing standing, it was surprising that the Court then undertook a traditional standing analysis. As to the first prong of the standing test — whether plaintiff has demonstrated actual or imminent “injury in fact” of a concrete and particularized nature — the Court homed in on Massachusetts's status as *owner* of much of the shore land being lost to sea level rise. That this injury may be widely shared with other coastal states does not disqualify this injury, said the Court; it is nonetheless concrete.

The second prong of the standing test is causation, requiring that the injury of which the plaintiff complains is fairly traceable to the defendant. EPA did not dispute the existence of a causal relationship between GHG emissions and climate change. It did argue, however, that any reduction in GHG emissions achieved through the current litigation would be too small a portion of worldwide GHG emissions to make a cognizable difference in climate change. In a ruling that may be of benefit to environmental plaintiffs in many contexts, the Court held that even an agency's refusal to take a “small incremental step”³² that would result in only a modest reduction in worldwide GHG emissions, is enough for standing purposes.

The third and final prong of the standing test is redressability, demanding that the remedy sought by the plaintiff is one that is likely to redress his/her injury. Here, the remedy sought was EPA regulation of GHG emissions from new motor vehicles. The Court found that this remedy satisfied redressability because while it would not by itself reverse climate change, it would nonetheless slow or reduce it. Nor, given the “enormity”³³ of the potential effects of climate change, was it relevant to the Court that the full effectiveness of the remedy would be delayed until existing cars and trucks on the road were largely replaced by new ones.

In contrast with the majority opinion's lengthy discourse on standing, its disposition of the CAA issues in the case is quite brief. On the authority question, the CAA's broad definition of “air pollutant” simply could not, the Court said, be squared with EPA's view that GHGs are not included. The Court rejected EPA's argument that federal laws enacted following enactment of this definition — laws emphasizing interagency collaboration and research — suggest that Congress meant to curtail EPA's power to use mandatory regulations in addressing air pollutants. Nor was the Court impressed with EPA's argument that “air pollutant” in the CAA could not include vehicle GHG emissions because EPA standards for such emissions could be satisfied only by improving fuel economy, a goal assigned to the Department of Transportation under a different statute (the Energy Policy and Conservation Act³⁴).

Finally, on the discretion issue, the majority concluded that “in his judgment” refers only to whether an air pollutant “may reasonably be anticipated to endanger public health or welfare.” Thus, said the Court, EPA can avoid taking further action in response to the section 202 petition “only if it determines that greenhouse gases do not contribute to climate change or if it provides some reasonable explanation as

³² *Id.* at 1457.

³³ *Id.* at 1458.

³⁴ 49 U.S.C. § 32902.

to why it cannot or will not exercise its discretion.” It rejected EPA’s stated policy reasons for refusing to regulate GHG emissions, such as its claim that voluntary executive branch programs already provide an effective response to climate change and that unilateral EPA regulation of vehicle GHG emissions could weaken U.S. efforts to persuade developing countries to reduce the GHG intensity of their economies. Such reasons “have nothing to do with whether greenhouse gas emissions contribute to climate change.”³⁵ In short, said the Court, the only question is whether sufficient information exists to make an endangerment finding under section 202.

Accordingly, the Supreme Court reversed the D.C. Circuit opinion and remanded the case to that court for further proceedings.³⁶ On September 14, 2007, the D.C. Circuit vacated EPA’s denial of the section 202 petition and remanded the matter to the agency.

A four-justice dissent by Chief Justice Roberts in *Massachusetts v. EPA* disputed the majority’s holding of standing. A dissent by Justice Scalia for the same four justices argued that agency policy preferences may appropriately be considered as part of EPA’s decision *whether* to issue a “judgment,” conceding that the judgment, *if made*, must be limited to whether vehicle GHG emissions cause endangerment. Justice Scalia also disputed the majority’s holding that “air pollutant” in section 202 includes GHGs.

Implications of Supreme Court Decision.

The Court’s decision leaves EPA with three options: make a finding that motor vehicle GHG emissions may “endanger public health or welfare” and issue emissions standards; make a finding that such emissions do not satisfy that prerequisite; or decide that climate change science is so uncertain as to preclude making a finding either way (or cite some other “reasonable explanation” why it will not exercise its discretion either way).³⁷ As to the state of climate change science, the Court’s focus on the policy reasons EPA gave as part of exercising its “judgment” obscures the fact that the agency’s rejection of the petition stemmed in part from expressions of scientific uncertainty in a 2001 National Research Council report on the science of climate change. Whether scientific reports since the petition rejection in 2003 have foreclosed the scientific-uncertainty rationale is beyond the scope of this report.

The EPA Administrator did say after the decision that although it bars EPA use of policy considerations as a basis for *denying* the petition, it left open whether the agency can invoke them when actually *writing* the regulations, should the agency

³⁵ 127 S. Ct. at 1463.

³⁶ Three weeks after the decision in *Massachusetts v. EPA*, the Senate held a hearing devoted exclusively to it: *The Implications of the Supreme Court’s Decision Regarding EPA’s Authorities with Respect to Greenhouse Gases Under the Clean Air Act: Hearing Before the Senate Comm. on Env’t and Pub. Works* (April 24, 2007) (hereinafter *Senate hearing*).

³⁷ Justice Scalia’s dissent characterizes EPA’s three options similarly: 127 S. Ct. at 1472.

make an endangerment finding.³⁸ In this regard, it should be noted that CAA section 202 does not explicitly impose any stringency or other criteria on GHG emission standards promulgated under the section. Given the wide latitude EPA has in setting section 202 standards for GHGs, the possibility presents itself that EPA, following an endangerment finding, could set voluntary standards, or standards pegged to the CAFE standards for fuel economy, or standards that must be complied with only after the President certifies that developing nations have put adequate GHG emission limits into effect. We offer no opinion here as to the legal viability of these options.

On May 14, 2007, the President asked EPA to have CAA regulations limiting vehicle GHG emissions in place by the end of 2008 and to use the President's 2007 State of the Union proposal for raising the CAFE standards as a guide.³⁹ As late as early December, 2007, EPA was consistently stating that it intended to issue proposed regulations by the end of 2007. However, the enactment of the Energy Independence and Security Act in December, 2007,⁴⁰ with its increase in CAFE standards, led EPA to back off from any firm deadline for issuance of mobile-source GHG emission standards. In January, 2008, letters from the *Massachusetts v. EPA* petitioners asked the EPA Administrator when he intended to act,⁴¹ prompting EPA to respond that it did not have a specific time line. Most recently, EPA announced by letter that it will issue during spring, 2008, an advance notice of proposed rulemaking (ANPR) addressing the full range of *Massachusetts v. EPA*'s ramifications throughout the CAA, including the section 202 standards⁴² — on the ground that regulation under section 202 could automatically result in other CAA regulations applying to stationary sources and other mobile sources. In response, the *Massachusetts v. EPA* petitioners requested the D.C. Circuit to order EPA to comply with the Supreme Court's remand and the Circuit's mandate within 60 days (choosing one of the three options noted earlier), arguing that the proposed ANPR extended well beyond the narrow section 202 endangerment issue in the case.⁴³

³⁸ *Senate hearing, supra* note 36 (prepared statement of EPA Administrator Stephen Johnson). The EPA Administrator is apparently referring to the Court's statement that "We need not and do not reach the question ... whether policy concerns can inform EPA's actions in the event that it makes [an endangerment finding]." 127 S. Ct. at 1463.

³⁹ *Briefing by Conference Call on the President's Announcement on CAFE and Alternative Fuel Standards*, May 14, 2007 (statement of EPA Administrator Stephen Johnson), available at [whitehouse.gov/news/releases/2007]. *See also* Exec. Order No. 13432, 2007 Westlaw 1405388 (White House), signed May 14, 2007.

⁴⁰ Pub. Law 110-140.

⁴¹ *See* letters to EPA Administrator Stephen Johnson from 17 states and from several environmental groups, both dated January 23, 2008, charging that EPA has unreasonably delayed in responding to the *Massachusetts v. EPA* remand. Both letters charge that the enactment of the Energy Independence and Security Act provides no basis for not moving forward on the remand.

⁴² Letter from EPA Administrator Stephen Johnson to Senators Barbara Boxer and James Inhofe, March 27, 2008; identical letter from Administrator Johnson to Representatives John Dingell and Joe Barton, March 27, 2008.

⁴³ Petition for writ of mandamus to compel compliance with mandate, filed April 2, 2008. The petition argues that the ANPR, a broad request for comments on the role of GHGs (continued...)

As the EPA letter confirms, the Court's ruling in *Massachusetts v. EPA* has many implications beyond its four corners.

On the substantive (non-standing) side, the Court's ruling upholding CAA coverage of GHG emissions from mobile sources likely will improve the prospects of litigation seeking to have EPA restrict GHG emissions from stationary sources as well. The stationary-source provisions of the CAA use terms similar to that of section 202 — in particular, “air pollutant,” “in his judgment,” and “endanger.”⁴⁴ As the above discussion of *New York v. EPA* indicates, such an effort to compel EPA regulation of stationary source GHGs is already underway as to NSPSs. Further, if EPA sets a national ambient air quality standard for CO₂, GHGs would be covered under the CAA's new source review permitting program for major emitting facilities and modifications in Prevention of Significant Deterioration areas.⁴⁵ Presumably, best available control technology for CO₂ emissions would then have to be installed on such facilities.⁴⁶

On the mobile-source side, *Massachusetts v. EPA* is expressly relied upon by California in three rule-making petitions asking EPA to regulate GHG emissions from mobile sources other than those at issue in that decision — in particular (1) ocean-going vessels under CAA section 213(a)(4), which authorizes federal emission standards for “new nonroad engines and new nonroad vehicles” (petition submitted October, 2007);⁴⁷ (2) aircraft under CAA section 231 (submitted December, 2007);⁴⁸ and (3) new nonroad vehicles and engines excluding aircraft, locomotives, and vessels (i.e., farm and construction equipment, lawn and garden equipment, RVs, etc.) under CAA sections 202 and 213(a)(4) (submitted January, 2008).

Non-substantively, the Supreme Court's ruling on standing will likely be pivotal to the fortunes of plaintiffs in other climate change litigation. The question will be

⁴³ (...continued)

throughout the CAA, is similar to one of the policy arguments made by EPA in denying the original 1999 petition, namely that establishing motor vehicle GHG standards now — would result in an inefficient piecemeal approach to addressing the climate change issue.... A sensible regulatory scheme would require that all significant sources and sinks of GHG emissions be considered in deciding how best to achieve any needed emission reductions.

68 Fed. Reg. at 52,391. As noted, the Supreme Court decision held that such policy considerations are irrelevant to the agency's determination on the section 202 petition.

⁴⁴ See, e.g., CAA § 108(a)(1)-(2), 42 U.S.C. § 7408(a)(1)-(2) (requiring the EPA Administrator to maintain a list of each “air pollutant” “emissions of which, in his judgment, cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare,” and then issue air quality criteria and national ambient air quality standards for that air pollutant).

⁴⁵ CAA § 165, 42 U.S.C. § 7475.

⁴⁶ CAA § 165(a)(4), 42 U.S.C. § 7475(a)(4).

⁴⁷ 42 U.S.C. § 7547(a)(4). The petition recognizes that while CAA section 202(a)(1) at issue in *Massachusetts v. EPA* states that EPA “shall” issue standards upon making an endangerment finding, section 213(a)(4) states that EPA “may” do so.

⁴⁸ 42 U.S.C. § 7571.

the extent to which the Court’s finding of standing was contingent, as it obliquely suggested, on the existence of a state-sovereign plaintiff⁴⁹ and the presence in the CAA of an explicit provision allowing the filing of administrative petitions.

Ironically, the “environmental win” in *Massachusetts v. EPA* has thwarted the environmental side in a climate-change-related nuisance case, and may do so in others. One court used the decision as peripheral support for dismissing a nuisance action on “political question” grounds, reasoning that the Supreme Court has now found authority over GHG emissions to reside in the Federal Government.⁵⁰ In the future, the decision may also undermine federal common law claims, on the argument that Congress intended to leave no room for courts to develop overlapping federal common law restricting GHG emissions.

II. Wildlife Protection Statutes

Marine Mammal Protection Act

The Marine Mammal Protection Act (MMPA)⁵¹ bars the taking of marine mammals, with exceptions. One exception is for “incidental takings” by specified activities.⁵² It provides that persons “engage[d] in a specified activity (other than commercial fishing) within a specified geographical region” may request the Secretary of the Interior or Commerce to authorize, for up to five years, the incidental, but not intentional, taking of small numbers of marine mammals. The Secretary must grant the authorization if he/she makes certain findings — including that the effect of the incidental take will be “negligible” — and promulgates rules setting out permissible methods of taking by the specified activity.

In *Center for Biological Diversity v. Kempthorne*, No. 07-CV-00141 (D. Alaska), transferred from No. 07-CV-00894 (N.D. Cal. filed February 13, 2007), environmental groups challenge one such “incidental taking” rule promulgated by the Fish and Wildlife Service (FWS), Department of the Interior. The rule authorizes the incidental take of polar bears and Pacific walrus for five years resulting from oil and gas activities in the Beaufort Sea and adjacent coastal areas of the Alaska north slope.⁵³ Plaintiffs argue that the rule violates the MMPA and thus is arbitrary and capricious by permitting more than a “negligible” impact on the species, based on the

⁴⁹ See Sara Zdeb, *From Georgia v. Tennessee Copper to Massachusetts v. EPA: Parens Patriae Standing for State Global-Warming Plaintiffs*, 96 Geo. L. J. 1059 (2008).

⁵⁰ *California v. General Motors Corp.*, 2007 Westlaw 2726871 (N.D. Cal. September 17, 2007). This case is discussed in Section V.

⁵¹ 16 U.S.C. §§ 1361-1421h.

⁵² 16 U.S.C. § 1371(a)(5). In the MMPA, “take” means “to harass, hunt, capture, or kill” any marine mammal, or attempt to do so. 16 U.S.C. § 1362(13).

⁵³ 71 Fed. Reg. 43,926 (August 2, 2006).

combined impact of oil-and-gas activities and climate change.⁵⁴ (This lawsuit also contains a National Environmental Policy Act claim, discussed in Section IV.)

Endangered Species Act

Under the Endangered Species Act (ESA),⁵⁵ animals (and plants) may be listed as endangered or threatened. As to a listed species, two of the act’s provisions are particularly relevant. Section 9 makes it unlawful to “take” a member of a listed endangered species,⁵⁶ and has been extended by regulation to most threatened species.⁵⁷ Exceptions from the take prohibition are possible, as through incidental take permits. The other provision, section 7, demands that each federal agency “insure that any action authorized, funded, or carried out by such agency ... is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [designated critical habitat] of such species....”⁵⁸ To achieve this goal, section 7 directs a federal agency, upon finding in a biological assessment that a proposed agency action is “likely to affect” a listed species, to consult with the appropriate wildlife agency — the FWS or National Marine Fisheries Service (NMFS). This is called “section 7 consultation.” Then, the FWS or NMFS prepares a “biological opinion” concluding either that the proposed action would not violate the no-jeopardy/adverse-modification mandate, or that it would violate the mandate, in which case FWS or NMFS must suggest “reasonable and prudent alternatives” that would not violate the mandate.

In *Natural Resources Defense Council v. Kempthorne*, 506 F. Supp. 2d 322 (E.D. Cal. 2007), environmental and sport fishing groups attacked the FWS biological opinion prepared for the 2004 Long-Term Central Valley Project and State Water Project Operations Criteria and Plan and certain related future actions. The biological opinion concluded that project operations would not jeopardize the continued existence of the Delta smelt, a threatened species, or adversely modify its

⁵⁴ In a case of the same name, *Center for Biological Diversity v. Kempthorne*, No. 07-5109 (N.D. Cal. filed October 4, 2007), environmental groups challenge the Secretary of the Interior’s alleged failure to issue updated stock assessment reports for marine mammals under its jurisdiction (sea otters, polar bears, walrus, and manatees) within the time frames mandated by the MMPA. The complaint asserts as examples that since the last stock assessment reports on the polar bear and walrus, “global warming has caused the loss of sea ice upon which [those species] depend....”

⁵⁵ 16 U.S.C. §§ 1531-1544. The ESA defines “take” similarly to the MMPA, note 52. 16 U.S.C. § 1532(19).

⁵⁶ 16 U.S.C. § 1538(a)(1)(B)-(C).

⁵⁷ By general rule, the Fish and Wildlife Service has extended all of the endangered species prohibitions to threatened animals. 50 C.F.R. § 17.31. “Special rules,” withdrawing particular threatened species from aspects of the general regime, have been promulgated for those species with atypical management needs, such as grizzly bears. 50 C.F.R. § 17.40(b).

⁵⁸ 16 U.S.C. § 1536(a)(2). Because section 7 is more easily triggered when the species’ habitat receives a formal designation as “critical habitat,” litigation to compel such designation is another aspect of environmental groups’ efforts to use the ESA against global warming. See ESA § 4(a)(3), 16 U.S.C. § 1533(a)(3).

designated critical habitat — that is, would not violate ESA section 7. The court, however, held that the biological opinion was arbitrary and capricious in ignoring data about climate change that may adversely affect the Delta smelt and its habitat. The court observed, for example, that the opinion was based on the assumption that the hydrology of the waters affected by the 2004 plan would follow historical patterns for the next 20 years, an assumption that studies on the potential effects of climate change on water supply reliability did not support.

A companion case pending before the same judge, *Pacific Coast Federation of Fishermen's Associations/Institute for Fisheries Resources v. Gutierrez*, No. 1:06-CV-00245 (E.D.Cal. filed August 9, 2005), challenges the NMFS biological opinion prepared in connection with the same project for various salmon and trout species. (A NEPA claim in this suit was dismissed. 2007 Westlaw 1752289 (E.D. Cal. June 15, 2007).)

It may be only a matter of time before several more ESA cases are filed. In an effort spearheaded by the Center for Biological Diversity, multiple petitions have been filed to have animals listed as endangered or threatened due in various degrees to climate change impacts on their habitat. Should such species then be listed and their critical habitats designated, the Center is likely to test in court whether substantial GHG sources run afoul of protections afforded those species by the ESA.

Only one climate-change-related proposal to list a species has reached the actual listing stage thus far — that by NMFS bestowing threatened status on the staghorn coral and elkhorn coral.⁵⁹ Considerably more attention to ESA implications, however, has been directed at the January, 2007 FWS proposal to list the polar bear as threatened, in fulfillment of a settlement agreement with environmental groups including the Center for Biological Diversity.⁶⁰ The polar bear proposal ties in with widely publicized studies as to the impact of climate change on the Arctic — particularly, the loss of sea ice required by polar bears as habitat.⁶¹ In addition to the coral and polar bear, the Center has petitioned the FWS to list as either endangered or threatened Kittlitz's murrelet, a seabird (2001), 12 species of penguins (2006),⁶²

⁵⁹ 89 Fed. Reg. 26852 (May 9, 2006). The Center for Biological Diversity has also settled a suit requiring NMFS to designate critical habitat for ESA-listed corals. The proposed critical habitat rule is at 73 Fed. Reg. 6895 (February 6, 2008).

⁶⁰ 72 Fed. Reg. 1,064 (January 9, 2007). Under ESA section 4(b)(6)(A), the Secretary of the Interior is required to make his determination for or against listing within one year of the proposed listing — unless a six-month extension is claimed under ESA section 4(b)(6)(B). No extension having been claimed, the polar bear determination was due by January 9, 2008, but had not been made as of the date of this report. On March 10, 2008, environmental groups sued the Secretary of the Interior to compel an up or down determination. *Center for Biological Diversity v. Kempthorne*, No. 08-1339 (N.D. Cal. filed March 10, 2008).

⁶¹ See CRS Report RL33941, *Polar Bears: Proposed Listing Under the Endangered Species Act*, by Eugene H. Buck.

⁶² The Center for Biological Diversity has filed suit over the FWS's delay in making its "12-month finding" regarding 10 species of penguin. *Center for Biological Diversity v. Hall*, No. 1:08-cv-00335 (D.D.C. filed February 27, 2008). Under ESA section 4(b)(3)(B), the

(continued...)

the American pika, an alpine mammal (2007), the ashy storm-petrel, another seabird (2007), the ribbon seal (2007), and the Pacific walrus (2008). In each instance, the Center asserts global warming to be a cause, principal or otherwise, of the species' plight.

If the polar bear, for example, is listed, would starting up a new fossil-fuel-fired power plant violate section 9 — cause a “take” — through the effects of its GHG emissions, via climate change, on polar bear habitat?⁶³ Notable here is that “take” is statutorily defined to include “harm” to a member of a listed species, and “harm,” in turn, is defined by regulation to include certain “significant habitat modification[s] or degradation[s].”⁶⁴ The crux, presumably, is whether the causal link between the power plant's GHG emissions and the effect on the species habitat is sufficiently direct and substantial to constitute a “take,” a question beyond the scope of this report. If a take is found, the power plant would require an incidental take permit to operate, such permit likely containing restrictions on the amount of GHGs that could be emitted. Likewise, would a federal agency issuing a permit for powerplant construction have to initiate section 7 consultation?

To be sure, the ESA and its regulations do contain mechanisms — e.g., incidental take permits, “reasonable and prudent alternatives,” and “special rules” for threatened species — that can ease the act's constraints on human activities affecting listed species.

III. Energy Statutes

Energy Policy and Conservation Act

In *Center for Biological Diversity v. National Highway Traffic Safety Administration*, 508 F.3d 508 (9th Cir. 2007), 11 states (CA, CT, ME, MA, NJ, NM, NY, OR, RI, VT, MN), four environmental groups, and others attacked a 2006 rule promulgated by the National Highway Traffic Safety Administration (NHTSA) under the Energy Policy and Conservation Act (EPCA). The rule established corporate average fuel economy (CAFE) standards for light-duty trucks — defined by NHTSA to include many SUVs, vans, and pickup trucks — in model years 2008 through 2011.

⁶² (...continued)

Secretary of the Interior has 12 months after receiving a petition indicating that action may be warranted to either propose listing or find that no action is warranted.

⁶³ See generally Brendan R. Cummings and Kassie R. Siegel, *Ursus maritimus: Polar Bears on Thin Ice*, *Natural Res. & Env't* (ABA) 3 (Fall 2007) (discussing how “the listing process for the polar bear highlights the possibilities and limitations of using the ESA to address otherwise unregulated GHG emissions”).

⁶⁴ 50 C.F.R. §§ 17.3 (Fish and Wildlife Service), 222.102 (NOAA Fisheries).

EPCA says that the light-truck CAFE standard shall be the “maximum feasible” standard that manufacturers can achieve in a given model year.⁶⁵ The court found that even assuming NHTSA may use a cost-benefit analysis to determine the “maximum feasible” standard, it was arbitrary and capricious not to include in the analysis the benefit of carbon emissions reduction — calling this “the most significant benefit of more stringent CAFE standards.”⁶⁶ NHTSA had argued, for example, that the wide range of values put forward in studies as to how the benefits of reduced GHG emissions should be monetized justified placing no value on that benefit in its cost-benefit analysis. The court countered that while there is indeed a range of values in the studies, they are all greater than zero. Accordingly, the court remanded the CAFE standard to NHTSA for the agency to include a monetized value for carbon emission reduction in its analysis of the proper CAFE standard. (There was also a climate-change-related NEPA claim in this lawsuit, discussed in Section IV.)

Outer Continental Shelf Lands Act

In a petition for review filed with the D.C. Circuit, the Center for Biological Diversity challenges the June, 2007 approval by the Secretary of the Interior of the Outer Continental Shelf Oil and Gas Leasing Program 2007-2012. *Center for Biological Diversity v. U.S. Dep’t of Interior* [sic], No. 07-1247 (D.C. Cir. filed July 2, 2007). Plaintiff alleges that the Secretary violated the Outer Continental Shelf Lands Act⁶⁷ by failing to disclose or analyze the environmental and economic impacts from “the greenhouse gas emissions that would result from use of oil and gas produced as a result of the [Program].”⁶⁸ This language indicates that it is not the GHG emissions from the oil and gas production itself that is at issue, but rather the GHG emissions resulting from the “use” of that oil and gas in cars, powerplants, or wherever. (There was also a climate-change-related NEPA claim in this lawsuit, discussed in Section IV.)

IV. Information Statutes

Much of the climate change litigation is based on statutory requirements that the government generate, compile, or disclose information.

National Environmental Policy Act

To be sure, the National Environmental Policy Act (NEPA) is more than just an information statute, declaring as it does a sweeping policy that the federal government must consider the environmental impacts of its actions. However, NEPA ensures that such environmental consideration will occur chiefly through the

⁶⁵ 49 U.S.C. § 32902(a).

⁶⁶ 2007 Westlaw 3378240, *16.

⁶⁷ 43 U.S.C. § 1331 et seq.

⁶⁸ Taken from Petitioner Center for Biological Diversity’s Non-Binding Statement of Issues, filed August 3, 2007.

production of information, in the form of environmental assessments and environmental impact statements, and does not require that an agency choose from among its options the one with the least environmental impact.

The NEPA cases involving climate change represent the oldest and most numerous category of climate change litigation. Again, not all cases are mentioned in this report.⁶⁹

The dominant issue has been whether plaintiffs have standing to sue — as mentioned, an issue on which plaintiffs may be helped by the 2007 Supreme Court decision in *Massachusetts v. EPA*. Thus, all the standing issues discussed here should be viewed through the prism of that decision. The standing determination has been particularly difficult in the context of NEPA, which confers only a *procedural* right (having a federal agency prepare an adequate environmental impact statement (EIS)), not a *substantive* right (having the agency select a particular course of action after preparing the EIS). Where courts have found standing and reached the merits, they have usually accepted that climate change impacts in the proper circumstances are a required consideration in an EIS.⁷⁰

District of Columbia Circuit.

Standing barriers have proved particularly daunting in the D.C. Circuit, thus it is here that *Massachusetts v. EPA* may have its greatest effect. In the first significant climate change case, *City of Los Angeles v. National Highway Traffic Safety Admin.*, 912 F.3d 478 (D.C. Cir. 1990), the city attacked a NHTSA decision not to prepare an EIS when it set the corporate average fuel economy standard at 26.5 mpg for model year 1989 passenger cars — below the statutory default setting of 27.5 mpg.⁷¹ A majority of the D.C. Circuit panel concluded that petitioners had standing based on their argument that had NHTSA done an EIS considering the climate change impacts of its one mpg rollback, the agency might have rejected it. This provided the requisite causal nexus, said the majority, between NHTSA’s decision not to do an EIS and climate change. In dissent, however, one judge argued that Article III demanded a more precise causal showing, with clear proof of a nexus between the agency action and harm to the petitioners. On the merits, one judge in the majority concluded that NHTSA had “inadequately explained why the admitted increase in carbon dioxide is insignificant within the context of the environmental harm posed

⁶⁹ An apparently exhaustive survey of the NEPA/climate change cases, decided and pending, is Joseph Mendelson III (Legal Director, Center for Food Safety and International Center for Technology Assessment), *Surveying the National Environmental Policy Act and the Emerging Issues of Climate Change, Genetic Engineering and Nanotechnology* (October 30, 2007) (copy on file with author).

⁷⁰ See also International Center for Technology Assessment et al., *Petition requesting that the Council on Environmental Quality amend its regulations to clarify that climate change analyses be included in environmental review documents* (filed February 28, 2008).

⁷¹ Other model years were involved, too, but only the challenge to the model year 1989 CAFE standard involved a climate change argument.

by global warming.”⁷² She would have remanded NHTSA’s NEPA decision but left the rollback in place in the meantime. Because the other majority judge ruled for the agency, however, the petition was denied.

The plaintiff-friendly *City of Los Angeles* standard for finding global-warming-based standing was to prove short-lived. Six years later, a divided D.C. Circuit declared *en banc* that to obtain standing, a procedural-rights plaintiff must show not only that the government omitted a required procedure, but that it is substantially probable that the procedural omission *will cause a particularized injury to the plaintiff*⁷³ — adopting the dissenter’s position in that case. To the extent *City of Los Angeles* dispensed with the second, causation-of-a-particularized-plaintiff-injury requirement, it was expressly overruled. Still later court decisions, however, have cast doubt on this strict standard.⁷⁴

In *Foundation on Economic Trends v. Watkins*, 794 F. Supp. 395 (D.D.C. 1992), the standing bar was raised during, rather than after, the litigation. Plaintiffs claimed that NEPA required the Secretaries of Energy, Agriculture and the Interior to evaluate the effect on climate change of 42 actions and programs under their authority. Plaintiffs’ standing argument was based on “informational standing,” under which failure to do an EIS discussing possible climate change impacts satisfies the injury requirement of standing merely by harming plaintiffs’ programs for disseminating information about climate change to the public. In so arguing, plaintiffs relied on a line of D.C. Circuit decisions going back two decades. Unfortunately for them, however, informational standing was limited by the D.C. Circuit during the pendency of their suit. An amended complaint by the individual plaintiff, arguing that his expected use of his oceanfront cottage may be curtailed if oceans rise from climate change, was also rejected. Among other things, said the court, the plaintiff had not met the causation requirement of standing in that he had not related the environmental harm he predicted to any of the 42 challenged agency actions. “[T]here is no ‘global warming’ exception to the standing requirements of Article III or the [Administrative Procedure Act],”⁷⁵ it asserted.

In a suit described in Section III, *Center for Biological Diversity v. U.S. Dep’t of Interior* [sic], No. 07-1247 (D.C. Cir. filed July 2, 2007), plaintiff charges that the Secretary of the Interior failed to analyze in the EIS for his five-year Outer Continental Shelf leasing program (1) the GHG emissions resulting from the use of the oil and gas produced under the program, and (2) the effects of global warming on the resources affected by the program “including, but not limited to, polar bears, walrus, and corals.”

⁷² 912 F.2d at 501.

⁷³ *Florida Audubon Society v. Bentsen*, 94 F.3d 658 (D.C. Cir. 1996). The four dissenting judges argued that the majority had “misapplied the doctrine of standing to the assertion of a procedural right, such as the preparation of an EIS, with the consequence that it will be effectively impossible for anyone to bring a NEPA claim in the context of a rulemaking with diffuse impact.” *Id.* at 673.

⁷⁴ *See, e.g., Friends of the Earth v. Laidlaw Environmental Services*, 528 U.S. 167 (2000).

⁷⁵ 794 F.2d at 401.

In *Montana Environmental Information Center v. Johanns*, No. 07-CV-01331 (D.D.C. filed July 23, 2007), challenge is made to the Department of Agriculture's Rural Utility Service's use of low-interest loans to help finance the construction of at least eight new coal-fired powerplants. The charge is that the EIS for one plant is deficient because it fails to consider the cumulative impacts of GHG emissions from the eight new plants.

Ninth Circuit.

The standing barriers in the D.C. Circuit seem to be attenuated in the Ninth Circuit where, as far as research reveals, plaintiffs raising climate change claims in NEPA suits have yet to encounter standing problems.

In 2002, environmental groups sued the Overseas Private Investment Corp. (OPIC) and Export-Import Bank of the United States alleging continued failure to comply with NEPA. These federal agencies provide insurance, loans, and loan guarantees for overseas projects, or to U.S. companies that invest in overseas projects. Plaintiffs alleged that these overseas projects include oil and gas extraction and refining, and power plants, which together result in the annual emission of billions of tons of GHGs, causing climate change in the United States.

In 2005, the district court held that plaintiffs had standing, given what it saw to be the relaxed standards in the Ninth Circuit for showing standing in cases alleging procedural violations — here, failure to prepare an EIS.⁷⁶ *Friends of the Earth v. Mosbacher*, 2005 Westlaw 2035596 (N.D. Cal. 2005). It is “reasonably probable,” said the court, that emissions from projects supported by the defendants will threaten plaintiffs’ concrete interests. In 2007, the court reached the merits, holding on summary judgment motions that defendants need not prepare a programmatic EIS for the energy projects they finance, and that neither side had shown, as a matter of law, that energy projects specifically listed in the complaint are or are not “major Federal actions” requiring an EIS. 488 F. Supp. 2d 889 (N.D. Cal. 2007).

In *Border Power Plant Working Group v. Dep’t of Energy*, 260 F. Supp. 2d 997 (S.D. Cal. 2003), plaintiff challenged the environmental assessment accompanying applications for permits and federal rights of way to build electricity transmission lines connecting new power plants in Mexico with the power grid in Southern California. In part because four of its members were seen to have procedural

⁷⁶ In finding standing, the judge repudiated an earlier climate change/standing decision of the same court. In *Center for Biological Diversity v. Abraham*, 218 F. Supp. 2d 1143 (N.D. Cal. 2002), plaintiffs had sought enforcement of the Energy Policy Act as it related to the acquisition of alternative fuel vehicles by the United States. In rejecting standing, this decision spurned plaintiffs’ climate change concerns as “too general, too unsubstantiated, too unlikely to be caused by defendant’s conduct, and/or too unlikely to be redressed by the relief sought to confer standing.” In *Friends of the Earth*, the court neutralized this pronouncement by noting that “*Center for Biological Diversity* was decided before the Ninth Circuit clarified in [*Citizens for Better Forestry v. U.S. Dep’t of Agriculture*, 341 F.3d 961, 972 (9th Cir. 2003)] that environmental plaintiffs raising procedural concerns need not present proof that the challenged federal project will have particular environmental effects.”

standing, the plaintiff organization was held to have organizational standing.⁷⁷ The court’s standing discussion made no mention of climate change, however, perhaps because climate change was only a small part of plaintiff’s case. On the merits, the court agreed with plaintiff that the environmental assessment was legally inadequate because, among other things, it failed to discuss CO₂ emissions from the powerplants and “[t]he record shows that carbon dioxide ... is a greenhouse gas.”⁷⁸

The most recent NEPA/climate change decision by the Ninth Circuit, *Center for Biological Diversity v. NHTSA*, 508 F.3d 508 (9th Cir. 2007), offers a *deja vu* to *City of Los Angeles*, discussed earlier in this section. Both cases involve a NHTSA rule setting a corporate average fuel economy (CAFE) standard — this time, for light-duty trucks (model years 2008-2011)⁷⁹ — and in both cases, the agency did no EIS. Petitioners include 11 states (CA, CT, ME, MA, NJ, NM, NY, OR, RI, VT, MN) and four environmental groups. In sharp contrast with earlier NEPA/climate-change decisions, the United States in this case did not contest standing and the court decision does not mention it.

On the merits, the court held that NHTSA’s environmental assessment for its CAFE rule, finding no significant impact, was inadequate owing to, among other things, its analysis of the rule’s cumulative impacts from GHG emissions. Said the court: “The impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct.”⁸⁰ Nor did the Energy Policy and Conservation Act, the statute authorizing CAFE standards, limit NHTSA’s duty to assess environmental impacts such as climate change. More specifically, while NHTSA’s assessment indicated the expected amount of CO₂ emitted by light-duty trucks under the new CAFE standard, it failed to “evaluate the ‘incremental impact’ that these emissions will have on climate change ... in light of other past, present, and reasonably foreseeable actions such as other light truck and passenger automobile CAFE standards.”⁸¹ Finally, the court invoked the well-settled principle that an EIS must be prepared if substantial questions are raised as to whether a proposed project *may* have significant environmental impact, and held that petitioners’ evidence raised the necessary level of doubt. Thus, the court ordered preparation of a full EIS. (There was also a climate change-related Energy Policy and Conservation Act claim, discussed in Section III.)

In *Center for Biological Diversity v. Kempthorne*, No. 07-CV-00141 (D. Alaska), transferred from No. 07-CV-00894 (N.D. Cal. filed February 13, 2007), environmental groups challenge a Fish and Wildlife Service “incidental taking” rule. As described in Section II, the rule authorizes the incidental take of polar bears and

⁷⁷ An organization has standing to bring suit on behalf of its members when “(a) its members would otherwise have standing to sue in their own right; (b) the interests it seeks to protect are germane to the organization’s purpose; and (c) neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit.” *Hunt v. Washington State Apple Advertising Comm’n*, 432 U.S. 333, 343 (1977).

⁷⁸ 260 F. Supp. 2d at 1028.

⁷⁹ 71 Fed. Reg. 17, 566 (April 6, 2006).

⁸⁰ 508 F.3d at 550.

⁸¹ *Id.*

Pacific walrus by oil and gas activities in the Beaufort Sea and adjacent coastal areas of the Alaska north slope.⁸² Plaintiffs challenge the environmental assessment and finding of no significant impact, charging that the Service put out the rule “without seriously analyzing the effects of climate change on them or their habitat.” The accusation is not that the oil and gas activities themselves contribute to climate change, but that direct harms to polar bears and walruses from those activities will be exacerbated by climate change impacts on the Arctic that are already stressing those species.

Eighth Circuit.

In *Mid States Coalition for Progress v. Surface Transportation Bd.*, 345 F.3d 520 (8th Cir. 2003), petitioners disputed the adequacy of an EIS prepared by the Surface Transportation Board to accompany its approval of a railroad’s proposal to construct new rail and upgrade existing rail. The proposed rail line was to provide a less expensive route by which low-sulfur coal in Wyoming’s Powder River Basin could reach powerplants, and thus might be expected to increase coal consumption and its attendant effects. In this regard, the court noted that CEQ’s NEPA regulations require that EISs cover both direct and indirect effects of proposed actions.⁸³ It concluded by finding it “irresponsible” for the Board to approve such a large project without first examining the possible effects of an increase in coal consumption — apparently, the opinion suggests (but does not explicitly say), including climate change.⁸⁴

In *Ranchers Cattlemen Action Legal Fund v. Conner*, No. 07-CV-01023 (D.S.D. filed October 24, 2007), plaintiffs challenge Department of Agriculture regulations easing restrictions on the import of live cattle and edible bovine products from “minimal risk” Mad Cow Disease regions (Canada). Plaintiffs assert that the environmental assessment was inadequate because it did not analyze the increased GHG emissions from the transportation of the cattle into the United States.

State NEPAs.

A few GHG-related suits also have been filed under state “little NEPAs” — state laws requiring state (and sometimes local) agencies to consider the environmental impacts of their proposed actions, just as the federal NEPA does for federal agencies.⁸⁵ For example, in *General Motors Corp. v. California Air Resources Bd.*, No. 05-02787 (Cal. Sup. Ct. filed September 2, 2005), two car manufacturers claimed that the Board’s adoption of California’s GHG emission standards involved delayed and inadequate compliance with the state’s NEPA-type law. This suit offers as a prime reason for environmental analysis the argument that GHG emissions regulation has, in addition to a possible benefit, some environmental downsides. In particular, it contends that restriction of GHG emissions may cause

⁸² 71 Fed. Reg. 43,926 (August 2, 2006).

⁸³ 40 C.F.R. § 1508.8.

⁸⁴ See 345 F.3d at 550.

⁸⁵ See Dave Owen, *Climate Change and Environmental Assessment Law*, 33 Colum. J. Env’t L. 57 (2008).

an increase in new-vehicle sticker prices and a consequent decrease in the rate at which old, higher-emissions vehicles are retired from use.

State-NEPA cases were filed in April, 2007 by conservation groups and the California attorney general to require San Bernardino County, the largest county in the United States by area, to address climate change in its General Plan update.⁸⁶ In August, 2007, California settled its lawsuit, the County agreeing to prepare a Greenhouse Gas Emissions Reduction Plan and adopt other measures, but the conservation groups' suit remains. In broaching the vast realm of local land use plans, these cases portend a major new front in climate change litigation, particularly in states that require environmental impact analysis.

Global Change Research Act

The Global Change Research Act of 1990 (GCRA)⁸⁷ commands the President to create an interagency United States Global Change Research Program to improve understanding of "global change." Global change is defined broadly by the GCRA to include all changes in the global environment "that may alter the capacity of the Earth to sustain life." Thus, the statute includes, but goes beyond, climate change.⁸⁸ The Program is to be implemented by a National Global Change Research Plan, with regular scientific assessments that evaluate the findings of the Program. The GCRA demands that revised Research Plans be submitted to the Congress at least every three years,⁸⁹ with the last one having been submitted July, 2003. The statute further demands that scientific assessments be submitted to the President and Congress not less often than every four years,⁹⁰ with the only assessment to date submitted October, 2000.

On these undisputed facts, the district court in *Center for Biological Diversity v. Brennan*, 2007 Westlaw 2408901 (N.D. Cal. August 21, 2007), had little difficulty finding that the Administration had unlawfully withheld action it was required to take. It ordered defendants to publish a summary of the revised proposed Research Plan no later than March, 2008, with submission to Congress no later than 90 days thereafter.⁹¹ The court further ordered the scientific assessment to be produced by May, 2008. It should be noted in passing that the large bulk of this opinion is devoted not to the foregoing violation and remedy, but to threshold matters: standing (finding procedural rights injury and informational injury, associational standing, and Administrative Procedure Act standing) and a motion to intervene by two Members of Congress (denied).

⁸⁶ The attorney general lawsuit is *State of California v. County of San Bernardino*, No. CIV-SS07-00329 (Cal. Super. Ct. filed April 12, 2007).

⁸⁷ 15 U.S.C. §§ 2921-2961.

⁸⁸ See 15 U.S.C. § 2931(a) (congressional findings suggestive of the act's scope).

⁸⁹ 15 U.S.C. § 2934(a).

⁹⁰ 15 U.S.C. § 2936.

⁹¹ The summary was published at 72 Fed. Reg. 73771 (December 28, 2007).

Freedom of Information Act

The Freedom of Information Act (FOIA)⁹² mandates that documents in the possession of federal executive branch agencies are to be disclosed to the public upon request, unless covered by a FOIA exemption.

In May, 2006, Citizens for Responsibility and Ethics in Washington (CREW) invoked FOIA to request from the Council on Environmental Quality (CEQ) all of its records relating to the causes of climate change, from January 20, 2001, to October 26, 2006. Though CEQ produced many documents, CREW sued under FOIA seeking a court order that CEQ release all records responsive to its request. *Citizens for Responsibility and Ethics in Washington v. Council on Environmental Quality*, No. 1:07CV00365 (D.D.C. filed February 20, 2007). In a fall 2007 filing with the court, the parties noted that CEQ had produced 16,000 pages of documents to CREW by May, 2007, and was about halfway through processing the remaining 27,000 pages.⁹³

This lawsuit parallels allegations that political appointees at CEQ have edited many of the agency's reports to minimize the danger and human causes of climate change. In July, 2006, the House Committee on Government Reform⁹⁴ requested that CEQ provide documents and communications relating to the agency's edits of climate change materials, its efforts to influence the statements of government scientists, its communications with federal agencies and nongovernmental parties regarding climate change, and so on.

V. Common Law Tort

The widely diverse injuries predicted from climate change mean that a comparably diverse spectrum of plaintiffs and defendants could become involved in common law tort litigation based on such injuries. Possible plaintiffs include property owners (farmers dealing with reduced rainfall, owners of oceanfront homes dealing with rising sea level or increased storm activity), nonowner users of natural resources (ski resort operators, commercial fishermen), and state attorneys general bringing private or public nuisance claims (the former for injury to state-owned land, the latter on behalf of the state's citizenry to protect public health and well-being). Possible defendants include the companies that produce the fossil fuels whose combustion produces GHG emissions, entities that emit GHGs (chiefly fossil-fuel-fired powerplants, but many other sources also), and companies that manufacture or market products whose use creates GHG emissions (chiefly the automakers).⁹⁵

⁹² 5 U.S.C. § 552.

⁹³ Revised Joint Briefing Schedule Statement, dated August 1, 2007.

⁹⁴ Renamed the House Committee on Oversight and Government Reform early in the 110th Congress.

⁹⁵ This nutshell on possible plaintiffs and defendants is adapted from David Hunter and James Salzman, *Negligence in the Air: The Duty of Care in Climate Change Litigation*, 155 (continued...)

Several of these potential plaintiff and defendant categories are represented in the five climate-change-related tort cases known to be filed thus far (four discussed in the following text, one in footnote 105). Thus far, all of those tort actions that have produced court decisions have failed, either due to lack of standing or the political question doctrine, or both. Three are on appeal, however.

Nuisance

In 2004, eight states (CA, CT, IA, NJ, NY, RI, VT, WI) and New York City sued five electric utility companies.⁹⁶ *Connecticut v. American Electric Power Co.*, Civ. No. 04 CV 05669 (S.D.N.Y. filed July 21, 2004). These defendants were chosen as allegedly the five largest CO₂ emitters in the United States, through their fossil-fuel-fired electric powerplants. Invoking the federal and state common law of public nuisance,⁹⁷ plaintiffs seek an injunction requiring defendants to abate their contribution to the nuisance of climate change by capping CO₂ emissions and then reducing them. Plaintiffs sue both on their own behalf to protect state-owned property (e.g., the hardwood forests of the Adirondack Park in New York), and as *parens patriae* on behalf of their citizens and residents to protect public health and well-being.

On the same day, three nongovernmental organizations filed a similar suit against the same defendants, in the same court, adding a private nuisance claim.⁹⁸ *Open Space Institute v. American Electric Power Co.*, No. 04 CV 05670 (S.D.N.Y. filed July 21, 2004). They seek to protect land owned and preserved by them in the state of New York.⁹⁹ This suit was consolidated with the state suit.

In a series of motions, defendants sought to have these actions dismissed on a wide spectrum of threshold grounds. Though the case has now been decided by the trial court on a single threshold issue, it is worth reviewing the grounds advanced in these motions because they may reappear later, in this or other private GHG

⁹⁵ (...continued)

U. Pa. L. Rev. 1741, 1750-1752 (2007).

⁹⁶ American Electric Power Co., Inc., The Southern Co., Cinergy Corp., Tennessee Valley Authority, and Xcel Energy, Inc.

⁹⁷ An activity is a public nuisance if it creates an unreasonable interference with a right common to the general public. Unreasonableness may rest on the fact that the activity significantly interferes with public health and safety, or has produced a permanent or long-lasting effect and, as the actor knows or has reason to know, has a significant effect on the public right. Restatement (Second) of Torts § 821B (1979).

⁹⁸ An activity is a private nuisance if it is a nontrespassory invasion of another's interest in the private use and enjoyment of land. *Id.* at § 821D.

⁹⁹ See Vincent S. Oleskiewicz and Douglas B. Sanders, *The Advent of Climate Change Litigation Against Corporate Defendants*, BNA Daily Env't Rpt. B-1 (November 15, 2004). The authors review the *State of Connecticut* and *Open Space Institute* suits in some detail, assess the defenses available in tort-based climate change suits generally, and extract clues as to the potential success of such litigation from the history of litigation against tobacco companies.

litigation.¹⁰⁰ To reiterate, many of these grounds typify the difficulties encountered when one seeks to address through private litigation a ubiquitous, long-term environmental problem to which countless parties contribute.

In a dismissal motion, some defendants argued there is no federal common law cause of action for climate change. Creating such federal common law, they argued, runs afoul of Supreme Court directives that federal courts do so only in limited areas — especially where, as with climate change, the problem at issue has sweeping implications. Even assuming a viable federal common-law nuisance theory, they continued, Congress’s enactment of a comprehensive scheme of air pollution regulation in the CAA displaces federal court authority in this area. Defendants also challenge plaintiffs’ standing to sue. Plaintiffs, they argued, have not demonstrated the “injury in fact” requisite of standing because they allege only injuries from climate change in the indefinite future. Nor, said these defendants, have plaintiffs shown “causation” because they do not allege that defendants’ conduct will directly cause the consequences of climate change — especially since defendants’ collective emissions are admitted to be less than 2-1/2% of the global total from human activities.¹⁰¹ As mentioned, the viability of these federal common law of nuisance and no-standing arguments by defendants may be significantly affected — the displacement argument helped, the others hurt — by *Massachusetts v. EPA*.

A second motion sought dismissal for lack of personal jurisdiction. These movants alleged that although their powerplants are located in 20 states, none is in New York (where the case was filed) or any other plaintiff state except Wisconsin.

A final motion to dismiss asserted that to the limited extent a federal common law claim to abate an interstate nuisance has been recognized, it has been limited to actions brought by state entities. Nor, said defendants, can plaintiffs assert public nuisance, because they have not alleged special injury to their properties, or private nuisance, because they have not alleged substantial harm.

As indicated, the dismissal motions in *Connecticut* and *Open Space Institute* have now been ruled on by the district court,¹⁰² which dismissed the cases on political question grounds. This judicial doctrine requires a court to look into “the appropriateness under our system of government of attributing finality to the action of the political departments [i.e., the legislative and executive branches] and also the lack of satisfactory criteria for a judicial determination....”¹⁰³ One situation judicially recognized as pointing to a political question, hence dismissal of the action, is “the impossibility of deciding [the case] without an initial policy determination of a kind

¹⁰⁰ See generally Thomas W. Merrill, *Global Warming as a Public Nuisance*, 30 Colum. J. Envtl. L. 293 (2005) (discussing threshold hurdles of standing, the applicability of federal common law, and foreign policy preemption).

¹⁰¹ An interesting question raised by the Prof. Merrill article, *supra* note 100, is whether these general standing requirements, developed in the context of private lawsuits, should apply in a suit such as *State of Connecticut* — that is, in a *parens patriae* suit brought by state attorneys general under public nuisance law.

¹⁰² *Connecticut v. American Elec. Power*, 406 F. Supp. 2d 265 (S.D.N.Y. 2005).

¹⁰³ *Baker v. Carr*, 369 U.S. 186, 210 (1962).

clearly for nonjudicial discretion.”¹⁰⁴ This situation, said the court, perfectly fit the GHG cases, touching as they do on so many areas of national and international policy. As a political question, the court believed the climate change issue in these suits to be for the legislature, not the courts, to resolve. Very possibly, the amorphousness of nuisance law, giving the court little guidance in resolving these cases, may have hurt the plaintiffs’ cause. (These cases are now on appeal to the Second Circuit.¹⁰⁵)

A second nuisance action was filed in 2006 by California against several automobile manufacturers based on the alleged contributions of their vehicles to climate change impacts in the state. The suit alleges that these impacts constitute a public nuisance under federal or state common law, and seeks monetary damages (plaintiffs in *Connecticut* seek injunctive relief). The district court dismissed the suit on the same political-question rationale as in *Connecticut* — namely, “the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion.” *California v. General Motors Corp.*, 2007 Westlaw 2726871 (N.D. Cal. September 17, 2007). The need for an “initial policy determination” by the political branches was supported, in the court’s view, by the complexity of the climate change issue, the need for political guidance in divining what is an “unreasonable” interference with the public’s rights (the definition of a public nuisance), and the existing debate over global warming in the political branches. Ironically, the environmental “win” in *Massachusetts v. EPA* was cited by the court against the state, both because that decision found authority over GHG emissions to lie with the federal government and because it recognized a state’s standing to press its grievances at the federal level. (An appeal to the Ninth Circuit is pending.)

Most recently, a native village on the Alaska coast sued certain oil and energy companies, claiming that climate change is destroying the village through the melting of Arctic sea ice that formerly protected it from winter storms. *Native Village of Kivalina v. Exxonmobil Corp.*, No. 08-cv-01138 (N.D. Cal. filed February 26, 2008). Indeed, the complaint asserts, “[t]he U.S. Army Corps of Engineers and U.S. Government Accountability Office have both concluded that the village must be relocated due to global warming....” The village invokes the federal common law of public nuisance, state statutory or common law of private and public nuisance, and a civil conspiracy claim. The conspiracy claim asserts that some of the defendants have engaged in agreements to participate in the intentional creation or maintenance of a public nuisance — that is, global warming — by misleading the public as to the science of global warming.

¹⁰⁴ *Id.* at 217.

¹⁰⁵ Presumably two of the plaintiffs, New York State and New York City, have been able to support their standing to sue by arguments not contrary to those they made *against* plaintiff standing in another public-nuisance climate change case in which they were the defendants. Avoiding contradictory arguments was presumably facilitated by the idiosyncratic nature of the global-warming harms alleged by the *pro se* plaintiff — e.g., those based on plaintiff’s enhanced vulnerability to disease-causing pollution as compared to the general population. According to the court, plaintiff appeared to be requesting an injunction ordering the defendants to stop polluting and use his invention for reducing carbon dioxide emissions. *Korsinsky v. U.S. EPA*, 192 Fed. Appx. 171 (2d Cir. 2006) (affirming district court dismissal based on lack of standing).

Negligence, etc.

Owners of Mississippi property damaged by Hurricane Katrina sued certain oil, coal, and chemical companies, alleging a multistep chain of causation: the companies emitted GHGs, which contributed to global warming, which made the waters of the Gulf of Mexico warmer, which caused Hurricane Katrina to become more intense as it passed over the Gulf than it would otherwise have been, which increased the harm to plaintiffs' property caused by the hurricane. Plaintiffs asserted various state-law tort claims, including negligence, nuisance (public and private), and trespass, and seek compensatory damages; they request punitive damages for gross negligence. Further, they claimed fraud and conspiracy to commit fraud, alleging that the oil and coal companies disseminated misinformation about global warming. Finally, plaintiffs made claims against their home insurance companies (e.g., breach of fiduciary duty claim for misrepresenting policy coverage, and violation of a state consumer-protection act) and their mortgage companies (arguing that they may not claim sums owed by plaintiffs for the value of the mortgaged property that was uninsured).

The district court, sitting in diversity, dismissed the action for lack of plaintiff standing. *Comer v. Murphy Oil USA, Inc.*, Civ. Action No. 1:05-CV-436-LG-RHW (S.D. Miss. August 30, 2007). With regard to certain defendants, the court also found plaintiffs' claims nonjusticiable under the political question doctrine — as in the decisions above where nuisance was the sole legal theory advanced. (An appeal to the Fifth Circuit is pending.)

VI. Federal Preemption

Stationary Sources of GHG Emissions

The question of whether federal law preempts state regulation of GHG emissions arises chiefly in connection with *mobile* sources. With limited exceptions, the CAA disclaims any intention to preempt state air pollution controls on *stationary* sources.¹⁰⁶ And the Energy Policy and Conservation Act does not set fuel economy standards for other than mobile sources, so it too would be unlikely to preempt state regulation of stationary sources. However, some have asserted that state regulation of stationary-source GHGs is preempted as contrary to the federal government's authority over foreign policy — an argument being pressed, so far unsuccessfully, in litigation attacking state regulation of *mobile-source* GHG emissions (see below). The most prominent state enactment limiting GHG emissions from stationary sources is that of California, which so far has not been challenged.¹⁰⁷

¹⁰⁶ CAA § 116, 42 U.S.C. § 7416. The exceptions in this nonpreemption provision say that states may not adopt emission limitations for stationary sources that are *less* stringent than those in state implementation plans, new source performance standards, or national emission standards for hazardous air pollutants.

¹⁰⁷ See Global Warming Solutions Act of 2006, A.B. 32, Cal. Health & Safety Code § 38500 et seq. This law requires that GHG emission limits be in effect in California by 2012 (continued...)

Mobile Sources of GHG Emissions: CAA Preemption

The picture is quite different for mobile sources, where preemption is the general rule. The CAA preempts states from adopting any “standard relating to the control of emissions from new motor vehicles ...”¹⁰⁸ and the act defines “emission standard” as certain limits on “emissions of *air pollutants*.”¹⁰⁹ The Supreme Court has now held that at least for purposes of mobile sources, “air pollutants” includes GHGs. Thus, CAA preemption of state regulation of car and truck GHG emissions is clear, whether or not EPA proceeds to regulate a particular mobile-source GHG. It would seem, then, that states are preempted from setting emission standards for CO₂, methane, and hydrofluorocarbons — three substances said to enhance climate change — even though EPA has not set mobile-source emission standards for them.

An exception to the general CAA rule preempting state mobile-source emission regulation is that EPA may waive CAA preemption for one particular state, California, if that state requests a waiver.¹¹⁰ Further, when EPA does grant California a waiver, the act automatically extends it to almost all states with mobile-source emission limits identical to California’s.¹¹¹

Under this “California waiver” authority, California requested a preemption waiver for its GHG emissions regulations on December 21, 2005. These regulations had been promulgated under a 2002 California enactment that was the first in the nation to call for limits on GHG emissions from mobile sources. Assembly Bill 1493¹¹² instructs the California Air Resources Board (CARB) to adopt regulations that achieve the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty trucks. The CARB adopted the required regulations in 2004. The regulations target CO₂, methane, nitrous oxide, and hydrofluorocarbon emissions, setting “fleet average greenhouse gas exhaust mass emission requirements for

¹⁰⁷ (...continued)

to reduce statewide GHG emissions to the 1990 level by 2020. Note, however, that although A.B. 32 applies chiefly to stationary sources, it provides that if the mobile source GHG emission limits imposed by an earlier state enactment are struck down, “alternative regulations” to restrict mobile-source GHG emissions shall be imposed under A.B. 32. As the following paragraphs of the text discuss, this earlier enactment is now the subject of a preemption challenge.

¹⁰⁸ CAA § 209(a), 42 U.S.C. § 7543(a).

¹⁰⁹ CAA § 302(k), 42 U.S.C. § 7602(k). Emphasis added.

¹¹⁰ CAA § 209(b), 42 U.S.C. § 7543(b). Under section 209(b), EPA “shall” grant the waiver “if the State determines that the State standards will be, in the aggregate, at least as protective of public health and welfare as applicable federal standards.” However, no waiver shall be granted if EPA finds that the state’s determination is arbitrary and capricious, the state does not need the standards to meet “compelling and extraordinary conditions,” or the state standards and accompanying enforcement procedures are inconsistent with CAA section 202(a).

¹¹¹ CAA § 177, 42 U.S.C. § 7507. Section 177 limits its extension of the section 209 waiver to those states that have approved nonattainment-area plans. This includes all states except North Dakota, South Dakota, and Hawaii.

¹¹² Cal. Health & Safety Code § 43018.5.

passenger car, light-duty truck, and medium-duty passenger vehicle weight classes.” The first model year to which the fleet averages apply is 2009. The averages are reduced for each subsequent model year through 2016.

On December 19, 2007, almost two years after California requested the waiver, the EPA Administrator wrote the California governor that he intended to deny the state’s request. On January 3, 2008, two petitions for review of this letter, arguing that it constituted final agency action on the waiver request, were filed in the Ninth Circuit. One suit was filed by California, with 18 other states intervening on California’s side. The other suit was filed by environmental groups, and was consolidated with the first. However, since then, on February 29, 2008, the EPA Administrator signed a decision document formally announcing the waiver denial,¹¹³ rendering unclear what will happen to the January 3 filings, which, again, are based on an argument that the *letter* is the reviewable agency action.¹¹⁴ Presumably a new petition for review will be filed by the same or similar parties in connection with the formal decision document.¹¹⁵

Mobile Sources of GHG Emissions: Non-CAA Preemption

That the CAA preempts state GHG regulation of mobile sources cannot be seriously questioned, absent a California waiver. The following preemption litigation is significant for the *non-CAA* preemption claims being pressed. If successful, these claims would prevent California and other states from implementing the California mobile-source standards *even if EPA’s denial of the waiver is judicially reversed*.

Non-CAA preemption suits, brought by auto interests, are pending in four of the federal judicial circuits containing a state that has adopted GHG controls on vehicles. Two decisions have been handed down, from Vermont (First Circuit) and California (Ninth Circuit). Both reject the non-CAA preemption theories presented.

In the first to be decided, *Green Mountain Chrysler Plymouth Dodge v. Crombie*, 508 F. Supp. 2d 295 (D. Vt. 2007), the court ruled that the relationship between Vermont’s (California-identical) GHG standards and EPCA was better analyzed as an interplay between two federal statutes, rather than as a federal preemption question. So viewed, the court pointed out that the National Highway Traffic Safety Administration (NHTSA) has consistently treated EPA-approved California mobile source emissions standards as constituting “other motor vehicle standards of the Government,” which EPCA says NHTSA must consider when setting CAFE standards.¹¹⁶ Moreover, in a related context the *Massachusetts v. EPA*

¹¹³ 73 Fed. Reg. 12156 (March 6, 2008).

¹¹⁴ It is *not* unclear, however, what will happen to California’s November, 2007, suit asking the court to order EPA to issue its waiver decision forthwith. This suit is plainly moot now.

¹¹⁵ See generally *California’s Waiver Request to Control Greenhouse Gases Under the Clean Air Act*, CRS Report RL34099, by James E. McCarthy and Robert Meltz.

¹¹⁶ 49 U.S.C. § 32902(f).

decision saw the EPCA CAFE provisions as harmonious with the CAA.¹¹⁷ Thus, the court found the relationship between the CAA waiver authority and the EPCA CAFE provisions to be one of overlap, but not conflict. Despite its conclusion that preemption doctrine did not apply, the court did a preemption analysis anyway, finding that Vermont’s GHG standards were preempted neither by EPCA nor as an intrusion upon the foreign policy authority of the United States.¹¹⁸

In the second decision, *Central Valley Chrysler-Jeep, Inc. v. Goldstene*, 529 F. Supp. 2d 1151 (E.D. Cal. 2007), a district court similarly rejected claims that California’s first-in-the-nation GHG emission regulations were precluded by EPCA, preempted by EPCA, or preempted as an intrusion of state law on federal authority to conduct foreign affairs.

The legal theories pressed in the *Crombie* and *Goldstene* litigation are replicated in two Rhode Island suits — *Lincoln Dodge, Inc. v. Sullivan*, No. 1:06-CV-00070 (D.R.I. filed February 13, 2006), and *Association of International Automobile Manufacturers v. Sullivan*, No. 1:06-CV-00069 (D.R.I. filed February 13, 2006) — challenging that state’s adoption of the California standards. Most recently, New Mexico’s adoption of the California GHG standards has been challenged as preempted under EPCA in *Zangara Dodge, Inc. v. Curry*, No. 1:07-CV-01305 (D.N.M. filed December 27, 2007).

VII. State Utility Laws

In 2000, the City of Seattle adopted a goal of meeting its electricity needs with “no net greenhouse gas emissions.” To achieve this goal, the city ordered the city-owned electric utility to offset its GHG emissions by paying others to reduce their GHG emissions. The utility did so, largely through agreements paying other entities to use cleaner fuels. This made the utility (according to its press release) “the first large electric utility in the country to effectively eliminate its contribution of harmful greenhouse gas emissions.” In *Okeson v. City of Seattle*, 150 P.3d 556 (Wash. 2007) (en banc), however, the utility’s ratepayers argued that this offset arrangement was not authorized by the state’s utility enabling act. The Washington Supreme Court agreed, explaining that the purchase of GHG offsets was not impliedly authorized by the enabling act in that the offset contracts were not proprietary because they were not part of the services for which ratepayers are billed, nor were they within the enabling act’s purposes.

In another case, *In re Otter Tail Power Co.*, 744 N.W.2d 594 (S.D. 2008), environmental intervenors urged the state public utilities commission to deny a permit to build a coal-fired energy conversion facility, in light of the substantial CO₂ it would emit. Notwithstanding, the commission granted the permit, and the state supreme court sustained. The commission, it held, was not clearly erroneous in finding that the added CO₂ threatened no “serious” injury to the environment, the state’s statutory standard. Deference to the commission was particularly appropriate,

¹¹⁷ 127 S. Ct. at 1462.

¹¹⁸ See, e.g., *American Ins. Ass’n v. Garamendi*, 539 U.S. 396 (2003).

it said, because the CO₂ from the plant would increase national CO₂ emissions by only .07%, and neither Congress nor the state had chosen to regulate CO₂ emissions.

VIII. International Law

Could the United States, as a major GHG emitter that has declined to participate in the Kyoto Protocol, be sued in international forums for the adverse effects of climate change? Gauging the viability of such claims against the United States involves a good deal of guesswork, as they lie on the frontiers of international law. This report, concerned primarily with actually filed claims, notes only a few highlights, taken mostly from what appears to be the most pertinent article in the area.¹¹⁹ The article suggests that the International Court of Justice (ICJ) might be one forum for resolution of climate change claims, with jurisdiction established through treaties that specifically provide for dispute resolution before the court. A problem with the ICJ approach is that the treaties most likely to be invoked are Friendship, Commerce, and Navigation or similar treaties, which focus on how each party *within its own country* treats the other country's nationals and property. A climate change suit, by contrast, likely would have an extraterritorial focus. Another ICJ possibility would be for the court to render an advisory opinion, at the request of a body authorized under the U.N. Charter to request one.

Other possibilities include voluntary submission of a climate change dispute to any of several international arbitral forums or resort to the specialized dispute resolution systems created under various treaties. An example of the latter, reportedly being actively considered, is a fisheries conservation agreement under the UN Law of the Sea Convention, presumably on the argument that increased ocean temperatures from climate change imperil certain fish stocks.¹²⁰

Some principles that might be applied to a claim alleging GHG-caused injury might be taken from the international law of transboundary pollution. For example, the Restatement (Third) of Foreign Relations Law describes an international law principle under which a nation must “take such measures as may be necessary, to the extent practicable under the circumstances, to ensure that activities within its jurisdiction or control ... are conducted so as not to cause significant injury to the environment of another state...”¹²¹ Similarly, the *Trail Smelter* arbitration decision,

¹¹⁹ Andrew L. Strauss, *The Legal Option: Suing the United States in International Forums for Global Warming Emissions*, 33 *Env'tl. L. Rptr.* 10185 (2003).

¹²⁰ Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, 34 *Int'l Legal Materials* 1547. The United States is a party to this agreement and, by reference to the Law of the Sea Convention, it incorporates binding dispute-resolution mechanisms.

¹²¹ Restatement (Third) of Foreign Relations Law § 601(1). *See also* Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 ICJ Reports 226, 241-242 (July 8, 1996) (“the existence of the general obligation of states to ensure that activities within their jurisdiction and control respect the environment of other states or of areas beyond national (continued...)”).

probably the seminal ruling on state liability for transboundary pollution, declared that “[a] State owes at all times a duty to protect other States against injurious acts by individuals from within its jurisdiction.”¹²² Of course, as with the domestic common law litigation described in Section V, daunting hurdles confront the claimant in making the link between climate change in general and specific environmental harms, and in apportioning how much of such harms are attributable to the charged party or parties, in this instance the United States.

A widely noted international-law action was filed by a group based in the Arctic, where the temperature rise from climate change has been among the fastest. In 2005, the Chair of the Inuit Circumpolar Conference, on behalf of herself and all affected Inuit of the arctic regions of the United States and Canada, filed a petition against the United States with the Inter-American Commission on Human Rights, the investigative arm of the Organization of American States (OAS).¹²³ The petition alleged that the United States, through its failure to restrict its GHG emissions and the resultant climate change, has violated the Inuit’s human rights — including their rights to their culture, to property, to the preservation of health, life, and physical integrity, and so on.¹²⁴ Inuit culture is described in the petition as “inseparable from the condition of [its] physical surroundings.” Generally, the Inter-American Commission on Human Rights is empowered to recommend measures that contribute to human rights protection, request states in urgent cases to adopt specific precautionary measures to avoid serious harm to human rights, or submit cases to the Inter-American Court of Human Rights. The United States, however, has not accepted the jurisdiction of this court, so the Inuit petition sought only to have the Commission prepare a report declaring the responsibilities of the United States and recommending corrective measures.

In 2006, the Inuit petition was rejected, with no reasons given (as is customary for the Commission). However, at the request of petitioners the Commission held a hearing on March 1, 2007 on the generic issue of climate change and human rights. One may speculate that the Commission felt more comfortable with the hearing format than the petition because the former did not single out the United States. Or that the Commission was concerned the petition took it into a realm of global scale, orders of magnitude vaster than the typical human rights petition it receives.

In 2005/2006, five petitions were submitted to the Intergovernmental Committee for the Protection of the Cultural and Natural Heritage of Outstanding Universal Value (World Heritage Committee), part of UNESCO.¹²⁵ The petitions request that various designated World Heritage Sites be placed on the List of World Heritage in

¹²¹ (...continued)

control is now part of the corpus of international law relating to the environment”).

¹²² *Trail Smelter (U.S. v. Canada)*, 3 R.I.A.A. 1938, 1965 (March 11, 1941).

¹²³ For an eight-page summary of the 176-page petition, go to [http://earthjustice.org/library/legal_docs/summary-of-inuit-petition-to-inter-american-council-on-human-rights.pdf].

¹²⁴ *See generally* Sara C. Aminzadeh, Note, *A Moral Imperative: The Human Rights Implications of Climate Change*, 30 *Hastings Int’l & Comp. L. Rev.* 231 (2007).

¹²⁵ Convention Concerning the Protection of the World Cultural and Natural Heritage, art. 8, signed November 23, 1972, entered into force December 17, 1975, 27 U.S.T. 37.

Danger¹²⁶ owing to alleged impacts of climate change. The sites covered by the petitions are Waterton-Glacier International Peace Park (U.S./Canada), Sagarmatha National Park (Nepal), Belize Barrier Reef Reserve System (Belize), Huascarán National Park (Peru), and the Great Barrier Reef (Australia). Only the Waterton-Glacier petition was filed by entities within the United States (12 environmental groups) and involves a natural resource within the United States. As a party to the World Heritage Convention, the United States is obligated to “do all it can ... to the utmost of its own resources and, where appropriate, with any international assistance and cooperation” to protect its cultural and natural heritage.¹²⁷

In 2006, the World Heritage Committee acknowledged the five petitions but appeared desirous of shifting the debate toward the use of existing committee mechanisms at individual sites to adapt to the threat of climate change.¹²⁸

IX. Comments

Gauging the prospects of the pending climate change lawsuits is a precarious venture; for many of the suits, there is little precedent. It is clear, however, that success in the conventional sense — obtaining a judgment for the environmental plaintiff — is not the only objective of many of these suits. Some of the climate change litigation almost certainly has a long-range strategic purpose — to keep climate change on the political front burner and make it difficult for government and GHG emitters to ignore the problem.

In the conventional sense of the term, plaintiffs’ successes have been rare in cases seeking relief *directly from GHG emitters*. A court may be reluctant to impose expensive measures to address a global problem on a defendant that is a proportionately minor contributor (which almost all defendants are, given the vast number of GHG emitters), using statutory provisions or common law principles that were not formulated with global problems in mind, against a backdrop of scientific uncertainty as to the precise consequences (if not the general cause) of climate change. By contrast, the environmental side recently has scored major wins where *governmental* remedies were sought. In a much-publicized string of 2007 decisions under the Clean Air Act,¹²⁹ Energy Policy and Conservation Act of 1975,¹³⁰ foreign

¹²⁶ *Id.* at art.11, par. 4.

¹²⁷ *Id.* at art. 4.

¹²⁸ World Heritage Comm. Decision 30 COM 7.1, adopted July 10, 2006, available at [<http://law.lclark.edu/org/ielp>].

¹²⁹ *Massachusetts v. EPA*, 127 S. Ct. 1438 (2007) (see Section I of this report).

¹³⁰ *Green Mountain Chrysler Plymouth Dodge Jeep v. Crombie*, 508 F. Supp. 2d 295 (D. Vt. 2007), and *Central Valley Chrysler-Jeep, Inc. v. Goldstene*, 529 F. Supp. 2d 1151 (E.D. Cal. 2007) (both described in section VI of this report); *Center for Biological Diversity v. National Highway Traffic Safety Administration*, 508 F.3d 508 (9th Cir. 2007) (described in sections III and IV of this report).

policy authority of the United States,¹³¹ and NEPA,¹³² courts have shown increased willingness to authorize or require government consideration of climate change.

As this report shows, standing has been a persistent issue for environmental plaintiffs, though of late the tide appears to be shifting in their favor. And at least for states, the Supreme Court decision in *Massachusetts v. EPA* is likely to work a sea change in improving plaintiffs' prospects. As noted earlier, the big question is the extent to which the Supreme Court decision finding standing will be seen by the lower courts to generalize to nonstate plaintiffs, other statutory and common law contexts, and injuries (as from weather events) not as clearly attributable to climate change as Massachusetts's loss of shore land.

Causation is not only a component of the threshold standing test but a component of the plaintiff's case on the merits. Several writers have identified proof of causation as a key obstacle to a tort action seeking relief from climate change injury.¹³³ And at the remedy stage, allocation of damages among specific defendants will likely present both factual and legal challenges.

In either the standing or case-in-chief contexts, the climate change issues in private-remedy actions reprise an intractable problem in environmental law: imposing liability for harms that are remote in time and place from the pollution sought to be abated, particularly where the pollution comes from multiple sources.¹³⁴ Lawmakers of yesteryear encountered this same redistributive conundrum in tackling the problem of acid rain, where pollution cause and effect are separated by hundreds of miles and weeks or months. Imposing liability for harm from exposure to toxic chemicals is of the same ilk: exposure to contamination from multiple sources may result in ill effects manifested only a decade or two later.

Perhaps because of these hurdles under existing law, and the resistance of the current Administration to regulatory approaches to climate change, new directions are now being explored.¹³⁵ Within the United States, several states have adopted their own GHG emission controls, citing, among other things, inaction at the federal level.¹³⁶ Twenty-three states have joined one of the three regional GHG reduction initiatives (Western Climate Initiative, Midwestern Regional Greenhouse Gas

¹³¹ *Green Mountain*, *supra* note 130.

¹³² *Center for Biological Diversity*, *supra* note 130.

¹³³ Myles R. Allen and Richard Lord, *The Blame Game: Who Will Pay for the Damaging Consequences of Climate Change?*, 432 *Nature* 551 (December 2004); David A Grossman, *Warming Up to a Not-So-Radical Idea: Tort-Based Climate Change Litigation*, 28 *Colum. J. Envtl. L.* 1 (2003); Eduardo M. Penalver, *Acts of God or Toxic Torts? Applying Tort Principles to the Problem of Climate Change*, 38 *Nat. Res. J.* 563, 569 (1998).

¹³⁴ *See generally* Richard J. Lazarus, *THE MAKING OF ENVIRONMENTAL LAW* ch. 1 (2004).

¹³⁵ *See, e.g.*, Kristin Marburg, *Combating the Impacts of Global Warming: A Novel Legal Strategy*, 2001 *Colo. J. Int'l L. & Pol'y* 171 (2001).

¹³⁶ *See, e.g.*, California's A.B. 32, the Global Warming Solutions Act of 2006, *supra* note 107. *See generally* CRS Report RL33812, *Climate Change: Action by States to Address Greenhouse Gas Emissions*, by Jonathan L. Ramseur.

Reduction Accord, and in the eastern states, Regional Greenhouse Gas Initiative). Some states have explored the idea of emissions trading with Europe.¹³⁷ Use of the shareholder proposal process and SEC disclosure requirements have been suggested as ways of forcing the issue in the corporate world.¹³⁸ More loosely, 31 states and two Canadian provinces announced in May 2007 the formation of a Climate Registry to track greenhouse gas emissions from major industries, with independent verification of data. California and the United Kingdom signed an agreement on July 31, 2006, committing both parties to implement market-based mechanisms, to share results from studies to quantify the economic impacts of climate change, collaborate on research, etc.¹³⁹ Also internationally, this report noted the unsuccessful Inuit petition filed with the Inter-American Commission on Human Rights and the pending petitions before the World Heritage Committee. Reportedly, the low-lying Pacific nation of Tuvalu threatened to sue the United States and Australia four years ago in the ICJ, but held off for unspecified reasons.¹⁴⁰

Whether these new paths will yield results, only time will tell. It is clear, however, that if there is to be a government response to climate change at all, a solution from the political branches is more likely to be comprehensive and fully reflective of societal priorities than the typically narrowly targeted results of litigation. Many proponents of litigation or unilateral state action freely concede that such initiatives are make-do efforts that, while making a small contribution to mitigating climate change, are also aimed at prodding the national government to act.

¹³⁷ Congressional Green Sheets Newsroom, December 17, 2004. The same source reports that Rep. Joe Barton (R-Texas), then-chairman of the House Energy and Commerce Committee, said that any international compact involving state governments would have to be approved by Congress and that “we would tend to look at it with a lot of skepticism.” Kenneth Colburn, who is helping to coordinate the states’ effort, was said to question the need for federal authorization, on the theory that any transatlantic trades would be commercial transactions, not government-to-government.

¹³⁸ See, e.g., Sung Ho (Danny) Choi, Note, *It’s Getting Hot in Here: The SEC’s Regulation of Climate Change Shareholder Proposals Under the Ordinary Business Exception*, 17 Duke Envtl. L. & Pol’y Forum 165 (2006); California Public Employees’ Retirement System et al., *Petition for interpretive guidance on climate change disclosure*, SEC No. 4-547 (submitted September 18, 2007); Free Enterprise Action Fund, *Petition for interpretive guidance under the Securities Act of 1933 that would require registrants to disclose to shareholders the business risks of laws and regulations intended to address global warming concerns*, SEC No. 4-549 (submitted October 22, 2007).

¹³⁹ United Kingdom and California Announcement on Climate Change and Clean Energy Collaboration.

¹⁴⁰ See [<http://www.tuvaluislands.com>]. Tuvalu alleged that Australia is the biggest per capita producer of GHGs, and that the United States is the biggest single emitter. See also Aurelie Lopez, *The Protection of Environmentally Displaced Persons in International Law*, 37 Envtl. L. 365, 372-373 (2007). Residents of the Alaskan village of Shishmaref on the Bering Strait, who are now being relocated, are apparently the first American climate change refugees.