

## CLI BACKGROUND PAPER NO. 6

### The Recognition of Intergenerational Ecological Rights and Duties in U.S. Law

by Tracy Bach\*

Although well grounded in systems of morals and ethics, the notion of intergenerational justice is not equally well incorporated in U.S. law. While some sources of U.S. law explicitly acknowledge a sense of legal obligation to future generations, most references to principles of intergenerational equity are implicit, at best. This background paper systematically explores the landscape of current U.S. law, as it emanates from the legislative, executive, and judicial branches of both the federal and state governments. Through this survey, one observes a tradition, albeit modest, of intergenerational equity in the U.S. that could provide the starting point and legal scaffolding for climate change lawmaking that explicitly supports future generations.

#### Threshold procedural issues

Article III of the United States Constitution limits federal court jurisdiction to “cases” or “controversies.”<sup>1</sup> From these words, the Supreme Court has developed a set of justiciability doctrines which seek to place boundaries on the judiciary’s powers by keeping it from intruding on the enumerated powers of the legislative and executive branches.

Embodied in the words ‘cases’ and ‘controversies’ [sic] are two complementary but somewhat different limitations. In part those words limit the business of federal courts to questions presented in an adversary context and in a form historically viewed as capable of resolution through the judicial process. And in part those words define the role assigned to the judiciary in a tripartite allocation of power to assure that the federal courts will not intrude into areas committed to the other branches of government. Justiciability is the term of art employed to give expression to this dual limitation placed upon federal courts by the case-and-controversy doctrine.<sup>2</sup>

The justiciability doctrines include the prohibition on advisory opinions,<sup>3</sup> standing,<sup>4</sup> ripeness,<sup>5</sup> mootness,<sup>6</sup> and the political question doctrine.<sup>7</sup> Standing and the political question doctrine have been used several times to resolve climate change cases on procedural grounds and thus keep courts from reaching their substantive merits. Just as these two

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<sup>1</sup> U.S. CONST. art. 3, §2 (stating that judicial power shall “extend to all Cases ... [and] ... Controversies”).

<sup>2</sup> *Flast v. Cohen*, 392 U.S. 83, 94–95 (1968).

<sup>3</sup> *See id.* at 96–97.

<sup>4</sup> *See infra* Section I.A.

<sup>5</sup> *See Abbott Labs. v. Gardner*, 387 U.S. 136, 148–49 (1967).

<sup>6</sup> *See United States Parol Comm’n v. Geraghty*, 445 U.S. 388, 397 (1980).

<sup>7</sup> *See infra* section I.B.

justiciability doctrines have acted as procedural bars to climate change litigation brought to date, so too will they likely impede cases for climate change harms brought by those representing the interests of future generations.

## A. Standing

While Article III does not explicitly set out any specific standing requirements, the Supreme Court has formulated the doctrine over time and established requirements that a plaintiff must show in order to bring a case. Some commentators have described this evolution as always in flux, even asserting that courts "can always find an excuse for giving standing" if they want to get to the merits of the case.<sup>8</sup> Many argue that the Court has restricted standing—particularly in environmental cases—to too narrow a set of individuals.<sup>9</sup>

Nonetheless, to have standing, a party must satisfy the Supreme Court's three-part test:

- 1) The plaintiff has suffered a particularized injury;
- 2) the injury is fairly traceable to the defendant's actions; and
- 3) the court has the ability to award relief that will redress the plaintiff's injury.<sup>10</sup>

The first prong, injury-in-fact, requires that a plaintiff demonstrate injury that is "concrete" and "particularized," affecting the plaintiff personally or individually, and "actual" or "imminent," rather than "conjectural" or "hypothetical."<sup>11</sup> The second prong, causation, requires that the plaintiff show a causal connection between the injury asserted and the contested conduct.<sup>12</sup> This injury must be fairly traceable to the defendant's challenged action and must not be the result of the independent action of a third party that is not before the court.<sup>13</sup> The third prong, redressability, requires a showing that the alleged injuries could be redressed by a favorable outcome in the case.<sup>14</sup> The plaintiff bears the burden of establishing all three elements of standing before a court can have jurisdiction over the case.<sup>15</sup>

In addition to meeting the constitutional Article III standing requirements of injury, causation, and redressability, the federal courts may require a plaintiff to satisfy certain prudential standing requirements. Prudential limitations are imposed by courts to assure that the proper party is bringing the suit.<sup>16</sup> For example, the "zone of interests" test is sometimes applied to assure that the plaintiff is within the class of individuals Congress intended to

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<sup>8</sup> Stephanie Francis Ward, *Warming Up To Standing*, 6 No. 14 A.B.A. J. (E-Report 1, 2007).

<sup>9</sup> See Robin Kundis Craig, *Removing the "Cloak of a Standing Inquiry": Pollution Regulation, Public Health, and Private Risk in the Injury-in-Fact Analysis*, 29 CARDOZO L. REV. 149, 176–83 (2007); Justin R. Pidot, *Global Warming in the Courts: An Overview of Current Litigation and Common Legal Issues 3–4* (Georgetown Envtl. Law & Policy Inst. 2006), available at [http://www.law.georgetown.edu/gelpi/current\\_research/documents/GlobalWarmingLit\\_CourtsReport.pdf](http://www.law.georgetown.edu/gelpi/current_research/documents/GlobalWarmingLit_CourtsReport.pdf); Joseph M. Stancati, *Victims of Climate Change and Their Standing to Sue: Why the Northern District of California Got it Right*, 38 CASE W. RES. J. INT'L L. 687, 704–06 (2006–07).

<sup>10</sup> See *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560–61 (1992).

<sup>11</sup> *Id.*

<sup>12</sup> *Id.* at 560.

<sup>13</sup> *Id.*

<sup>14</sup> *Id.* at 561.

<sup>15</sup> *Id.*

<sup>16</sup> Blake R. Bertagna, "Standing" Up for the Environment: The Ability of Plaintiffs to Establish Legal Standing to Redress Injuries Caused by Global Warming, 2006 B.Y.U. L. REV. 415, 419 (2006).

protect.<sup>17</sup> Courts may also limit suits where plaintiffs allege a generalized injury common to all if the sheer number of suits that would follow would overwhelm the courts or if the government could sue on behalf of the injured group as a whole.<sup>18</sup> The Court has expressly stated, however, that Congress—through citizen-suit provisions or clear congressional intent—may override these prudential limitations. Thus far, courts have not applied prudential limitations in the climate change litigation that has moved to date through the federal courts.

When it comes to environmental litigation, the application of the standing doctrine has proven to be particularly contentious. The unique nature of environmental injuries and the difficulties that can arise when showing causation and redressability have made standing quite a hurdle. In early environmental litigation, the Supreme Court seemed willing to apply a loose interpretation of the standing requirements to afford litigants asserting broad, generalized environmental injuries their day in court.<sup>19</sup> For example, in *United States v. Students Challenging Regulatory Agency Procedures (SCRAP)*,<sup>20</sup> the Court found that even an injury common to all was sufficient to satisfy standing as long as the plaintiffs themselves were in fact injured.<sup>21</sup> The Court later clarified that it would only deny standing for generalized, common-to-all injuries if it were both widely shared and abstract and indefinite, such as “harm to the ‘common concern for obedience to law’”<sup>22</sup> asserted in *SCRAP*. This aspect of standing particularly comes into play in climate change litigation because it is such a global phenomenon.

### 1. A particularized injury

To prove that an injury is both “concrete and particularized” and “actual or imminent,” plaintiffs must show that their harm is different than that suffered by society at large and that it is not conjectural or hypothetical. In *Lujan v. Defenders of Wildlife*, the Court ruled that an environmental group challenging the Department of the Interior’s interpretation of an Endangered Species Act provision had not established standing for want of an adequate injury-in-fact.<sup>23</sup> The group based its injury claim on two of its members, alleging that the interpretation would lead to loss of endangered species, which would prevent the members from observing and studying those species as they had done in the past and planned on doing again in the future. Specifically, the Court found that the petitioners’ injury was not “imminent injury.”<sup>24</sup> Writing for the majority, Justice Scalia stated that where an injury is not “actual,” then some sort of imminence must be shown:<sup>25</sup> since the petitioners had no concrete plans to travel to observe or study the species, such “some day intentions” were insufficient to meet the imminence requirement of injury-in-fact.<sup>26</sup>

The Court loosened these requirements eight years later in *Friends of the Earth, Inc., v. Laidlaw Environmental Services (TOC), Inc.*, when it held that a citizen group had standing to bring a suit against a corporation that had

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<sup>17</sup> Bradford C. Mank, *Standing and Global Warming: Is Injury to All Injury to None?*, 35 ENVTL. L. 1, 28 (2005).

<sup>18</sup> *Id.*

<sup>19</sup> See *Sierra Club v. Morton*, 405 U.S. 727, 738 (1972) (establishing that aesthetic concerns and environmental well-being could suffice to establish injury-in-fact, but the Court dismissed the case because the plaintiffs were not themselves among those injured).

<sup>20</sup> *United States v. Students Challenging Regulatory Agency Procedures (SCRAP)*, 412 U.S. 669 (1973).

<sup>21</sup> *Id.* at 688 (stating that “to deny standing to persons who are in fact injured simply because many others are also injured, would mean that the most injurious and widespread... actions could be questioned by nobody”); see also *Warth v. Seldin*, 422 U.S. 490, 501 (1975) (stating that a plaintiff can establish standing “even if it is an injury shared by a large class of other possible litigants”).

<sup>22</sup> *Fed. Election Comm’n v. Akins*, 524 U.S. 11, 23 (1998).

<sup>23</sup> 504 U.S. at 555.

<sup>24</sup> *Id.* at 556.

<sup>25</sup> *Id.*

<sup>26</sup> *Id.* at 564.

been discharging pollutants in violation of the Clean Water Act.<sup>27</sup> The citizen group asserted that the corporation's discharges directly affected its members' recreational, aesthetic, and economic interests because of suspected pollution to the river. The Court concluded that the reasonable, subjective fear of mercury pollution was sufficient to satisfy the injury-in-fact standard, noting that this subjective fear outweighed the objective analysis of actual harm for purposes of satisfying standing.<sup>28</sup> It did so reasoning that the requisite showing was "not injury to the environment but injury to the plaintiffs."<sup>29</sup> Circuit courts have followed *Laidlaw's* "increased risk" formulation<sup>30</sup> of the injury-in-fact requirement.<sup>31</sup> In particular, the Ninth Circuit held that plaintiffs can establish an injury-in-fact by sufficiently demonstrating that their enjoyment of a particular area will be less enjoyable in the future and thus they will suffer in their degree of aesthetic or recreational satisfaction if the area becomes environmentally degraded.<sup>32</sup> *Laidlaw* seems to have expanded the standing doctrine by opening the door for plaintiffs asserting environmental harms.

## 2. Causation and redressability

Courts often intertwine the causation and redressability requirements because one needs to identify who caused the harm in order to determine what can be done to remedy that harm. In *Lujan*, the Court held that because the federal government only provides a fraction of the support for the projects that may cause harm to endangered species, the projects would still take place without the funding; thus, the alleged harm would not be mitigated by a remedy prohibiting federal funding of such projects.<sup>33</sup> Surprisingly, the Court also found that the sought after remedy—civil penalties paid to the federal government and not the citizen group—would effectively redress the injury since the penalties would act as a deterrent for the future.<sup>34</sup>

For global warming purposes, courts may be concerned that a particular defendant is only responsible for a small portion of the total GHG emissions and thus a plaintiff could have trouble establishing redressability. However, in *Friends of the Earth, Inc. v. Watson*, a federal district court held that a plaintiff had standing to sue in a climate change lawsuit, finding that defendant's funding of fossil fuel development may have an impact on global warming.<sup>35</sup>

## 3. Massachusetts v. EPA

Before *Massachusetts v. EPA* reached the Court last year, lower courts labored to fit "the square peg of global climate change injury through the round hole of current standing doctrine," often coming up with mismatched results.<sup>36</sup>

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<sup>27</sup> *Friends of the Earth, Inc. v. Laidlaw Env'tl. Servs. (TOC), Inc.*, 528 U.S. 167, 181–82 (2000).

<sup>28</sup> *Id.* at 184–85.

<sup>29</sup> *Id.* at 181.

<sup>30</sup> *Id.* at 190–91.

<sup>31</sup> See *Maine People's Alliance and Natural Res. Def. Counsel v. Mallinkrodt, Inc.*, 471 F.3d 277 (1st Cir. 2006); *Friends of the Earth, Inc. v. Gaston Copper Recycling Corp.*, 204 F.3d 149 (4th Cir. 2000); *Ecological Rights Found. v. Pac. Lumber Co.*, 230 F.3d 1141 (9th Cir. 2000); see also *Kundis Craig*, *supra* note 9, at 182–83.

<sup>32</sup> See *Kundis Craig*, *supra* note 9, at 192 (citing *Ecological Rights Found. v. Pac. Lumber Co.*, 230 F.3d 1141 (9th Cir. 2000)).

<sup>33</sup> See 504 U.S. at 568–71.

<sup>34</sup> *Id.* at 581 n.177.

<sup>35</sup> No. C02-4106 JSW, 2005 WL 2035596 (N.D. Cal. 2005).

<sup>36</sup> Nigel Cooney, *Without a Leg to Stand On: The Merger of Article III Standing and Merits in Environmental Cases*, 23 WASH. U. J.L. & POL'Y 175, 199 (2007).

The circuits split on how much evidence of injury or proof of causation is required in climate change cases, particularly under the National Environmental Policy Act of 1969 (NEPA).<sup>37</sup>

The difficulty occurs because climate change litigation raises unique issues under all three prongs of the standing doctrine. As for injury, climate change plaintiffs often have problems showing that an injury is “concrete” and “imminent,” rather than “conjectural” or “hypothetical.” Under *Lujan*, issues related to climate change may be viewed as too uncertain or distant to constitute an injury-in-fact. However, as the science continues to mature and the problems become more prevalent, injuries relating to global warming are becoming more “actual” than ever before.<sup>38</sup> Under causation, climate change plaintiffs may have difficulty showing that the injury is “fairly traceable” to the challenged action of the defendant rather than that of a third party not before the court. Since climate change is a global problem to which virtually everyone contributes in varying degrees, it is hard to show that only the defendant caused the injury. Also, under causation it may be difficult to prove that certain consequences—such as increasingly violent hurricanes or rising sea levels—are actually caused by climate change. Finally, under the redressability prong, a plaintiff may have problems showing that the desired remedy will effectively redress the injury. A U.S. court can only “redress,” at the most, a small percentage of the global problem of climate change, which may not be enough to satisfy the redress prong of Article III standing, especially since China and India’s GHG emissions are exponentially increasing.<sup>39</sup> Given the widespread and multi-faceted nature of climate change, courts may feel reticent to pin the punishment on a single defendant or group of defendants. Nonetheless, no matter how complex and unique the issues associated with global warming may be, plaintiffs bringing climate change suits must establish Article III standing under the standard three-prong test before a court will address the merits of the case.

The holding in *Massachusetts v. EPA*<sup>40</sup> has, arguably, loosened the injury-in-fact requirements further as applied to climate change plaintiffs. In this case, the petitioners—twelve states led by Massachusetts, three cities, one territory, and thirteen organizations—filed an action asking the D.C. Court of Appeals to review EPA’s decision not to regulate GHG emissions. In 2003, EPA formally denied a 1999 petition submitted by several organizations asking the agency to

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<sup>37</sup> The D.C. Circuit had fashioned a stringent “substantial probability” test in climate change cases; *see, e.g.*, *Florida Audubon Soc’y v. Bensten*, 94 F.3d 658 (D.C. Cir. 1996) (establishing four-part test for plaintiffs asserting procedural rights under statute like NEPA, requiring for the causation prong that it is “substantially probable” that the agency action will cause the demonstrable injury asserted by the plaintiff); *Massachusetts v. EPA*, 415 F.3d 50, 56 (D.C. Cir. 2005), while the Ninth and Tenth Circuits had taken a more relaxed approach. *See, e.g.*, *Comm. to Save the Rio Hondo v. Lucero*, 102 F.3d 445 (10th Cir. 1996) (rejecting the substantial probability test and instead granting standing if “increased risk [of injury] is fairly traceable to the agency’s failure to comply with [NEPA]”); *Citizens for Better Forestry v. U.S. Dept. of Agric.*, 341 F.3d 961 (9th Cir. 2003) (to have standing, plaintiffs “need only establish the reasonable probability of the challenged action’s threat to [their] concrete interest”); *Covington v. Jefferson County*, 358 F.3d 626 (9th Cir. 2004) (granting standing on same test, but Judge Gould’s concurring opinion specifically rebuffed the “injury to all is injury to none” viewpoint, stating that the global risks associated with ozone depletion—such as skin cancer and cataracts—was sufficient to satisfy Article III standing, even though the defendants only contributed to a small percentage of that global problem). Although the Supreme Court has now decided the issue, these holdings may still remain good law when it comes to standing, especially since they predominantly deal with standing under NEPA, which the Court was not addressing in *Massachusetts v. EPA*. While the Supreme Court’s ruling will have an effect on all climate change cases, it is important to realize that these holdings still may control in their respective circuits.

<sup>38</sup> For instance, it is hard to deny that melting permafrost, dwindling glaciers, and disappearing sea ice are not “actual injuries” (although one would still have to address causation and redressability).

<sup>39</sup> AMERICAN BAR ASSOCIATION, *GLOBAL CLIMATE CHANGE & U.S. LAW* 185 (Michael B. Gerrard ed. 2007) [hereinafter *CLIMATE CHANGE & U.S. LAW*].

<sup>40</sup> 127 S. Ct. 1438 (2007).

regulate GHG emissions from automobiles, asserting that it lacked authority to do so under the Clean Air Act (CAA).<sup>41</sup> The Court of Appeals dismissed the claim and the Supreme Court granted certiorari.

The Supreme Court, in an opinion written by Justice Stevens, held that the plaintiffs had satisfied the Article III standing requirements of injury-in-fact, causation, and redressability. In doing so, the Court first addressed the fact that the petitioners were procedural injury plaintiffs, stating that “a litigant whom Congress has ‘accorded a procedural right to protect his concrete interest can assert that right without meeting all the normal standards for redressability and immediacy.’”<sup>42</sup> Therefore, if a plaintiff asserts a procedural right under a statute—in the instance case, the right to challenge agency action unlawfully withheld—the litigant has standing “if there is some possibility that the requested relief will prompt the injury-causing party to reconsider the decision that allegedly harmed the litigant.”<sup>43</sup> In other words, once injury is satisfied, the rest of the test is seemingly not as difficult to show for procedural plaintiffs.

The Court next focused on Massachusetts’ standing, for only one petitioner need demonstrate Article III standing for the Court to hear the case.<sup>44</sup> Relying on *Georgia v. Tennessee Copper*,<sup>45</sup> the Court reiterated that “states are not normal litigants for the purposes of invoking federal jurisdiction,” and that a state has a “quasi-sovereign” interest that it has the right to assert.<sup>46</sup> The Court stated:

When a State enters the Union, it surrenders certain sovereign prerogatives. Massachusetts cannot invade Rhode Island to force reductions in greenhouse gas emissions, it cannot negotiate an emissions treaty with China or India, and in some circumstances the exercise of its police powers to reduce in-state motor-vehicle emissions might well be pre-empted. . . . These sovereign prerogatives are now lodged in the Federal Government, and Congress had ordered EPA to protect Massachusetts (among others) by prescribing standards applicable to [certain emission under the CAA]. . . . Congress has moreover recognized a concomitant procedural right to challenge rejection of its rulemaking petition as arbitrary and capricious. Given that procedural right and Massachusetts’ stake in protecting its quasi-sovereign interests, the Commonwealth is entitled to special solicitude in our standing analysis.<sup>47</sup>

The Court never specifically defined the extent of this “special solicitude” and how it affects the standing analysis, but seemed to translate it into an overall relaxation of this justiciability doctrine.

The Court then moved into a traditional three-prong analysis of Article III standing, but notably never specifically referred to the “special solicitude” awarded Massachusetts nor how its quasi-sovereign interest affected the Court’s reasoning. In fact, when walking through the test, the Court referred mainly to the interest Massachusetts asserts “in its capacity as a landowner.”<sup>48</sup> First, the Court concluded that Massachusetts had suffered a “particularized” and

<sup>41</sup> In the alternative, EPA argued that even if it could regulate, it wouldn’t do so at that time because there did not exist a scientifically sound causal connection between GHG emissions and climate change; it did not want to try and tackle the problem of global climate change with such a piecemeal approach; and that it did not want to interfere with the executive branch’s national and foreign policy regarding climate change. *Id.* at 1462–63.

<sup>42</sup> *Id.* at 1453.

<sup>43</sup> *Id.*

<sup>44</sup> *Id.*

<sup>45</sup> 206 U.S. 230 (1907).

<sup>46</sup> 127 S. Ct. at 1454.

<sup>47</sup> *Id.* at 1454–55.

<sup>48</sup> This is one of the weak points in the analysis. Justice Stevens began the analysis speaking of the state’s “quasi-sovereign” interest that deserves “special solicitude,” then switches to its proprietary interest when going through the traditional three-part test. *Id.* at 1455–56.

“concrete” injury-in-fact because of the current and future coastal land loss allegedly due to climate change.<sup>49</sup> The Court clarified that the “widely shared” nature of climate change’s harms and risks does not affect the petitioners’ standing because Massachusetts was able to show a particularized and individualized injury.<sup>50</sup>

Next, when analyzing the causation prong, the Court began by stating that the EPA itself acknowledged the causal connection between GHG emissions and global climate change. Therefore, “at a minimum ... EPA’s refusal to regulate such emissions ‘contributes’ to Massachusetts’ injury.”<sup>51</sup> According to the Court, because U.S. auto emissions make up a significant amount of worldwide emissions—more than six percent of global GHG emissions—the petitioners were able to show that the EPA’s failure to regulate those emissions contributed to the overall problem and to Massachusetts’ injury. “Judged by any standard,” wrote Justice Stevens, “U.S. motor-vehicle emissions make a meaningful contribution to greenhouse gas concentrations and hence ... to global warming.”<sup>52</sup> Since global warming was the uncontested cause of the petitioners’ injury, the Court reasoned that the EPA contributed to that injury by refusing to regulate auto emissions.

Last, the Court concluded that the desired outcome—forcing the EPA to rethink its decision and possibly regulate GHG emissions—would effectively redress the petitioners’ injury: while emission regulation “will not by itself reverse global warming, it by no means follows that we lack the jurisdiction to decide whether EPA has a duty to take steps to *slow* or *reduce* it.”<sup>53</sup> The Court also concluded that adequate redress had been established, despite the fact that the remedy might be “delayed during the (relatively short) time it takes for a new motor-vehicle to replace an older one.”<sup>54</sup> In addition, the Court dismissed the government’s argument that increased emissions from India and China would further reduce the remedy’s effectiveness, asserting that a “reduction in domestic emissions would slow the pace of global emissions increases, no matter what happens elsewhere.”<sup>55</sup> In sum, the Court found that the petitioners’ injury would be reduced “to some extent” if they received the remedy sought.<sup>56</sup>

The Supreme Court’s standing analysis in *Massachusetts v. EPA* will undoubtedly be used by future litigants bringing climate change suits. Although the Court’s analysis demonstrates a positive step overall for climate change law, it may benefit some plaintiffs more than others. For example, the Court’s focus on Massachusetts as a sovereign state with a special interest in protecting its territory or property, may limit its reach to ordinary, private litigants.<sup>57</sup> Only states serving as plaintiffs may receive this inchoate “special solicitude” when asserting their “quasi-sovereign” interests. In addition, plaintiffs claiming procedural injuries, like those sought under the CAA, NEPA, the Administrative Procedures Act (APA), or other citizen-suit provisions, will also seek the relaxed standing standards once having established a concrete injury. Given that many climate change cases present procedural injuries asserted under a statute, *Massachusetts v. EPA* will undoubtedly bolster the standing claims of many plaintiffs. In contrast, plaintiffs asserting non-procedural

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<sup>49</sup> The petitioners alleged many other injuries, but the Court focused on this one because it was “actual” and “concrete.” The state’s uncontested affidavits asserted that sea levels rose somewhere between ten and twenty centimeters during the 20<sup>th</sup> century. *Id.*

<sup>50</sup> *Id.* at 1456.

<sup>51</sup> *Id.* at 1457.

<sup>52</sup> *Id.*

<sup>53</sup> *Id.* at 1458 (emphasis added).

<sup>54</sup> *Id.*

<sup>55</sup> *Id.*

<sup>56</sup> *Id.*

<sup>57</sup> See Justin R. Pidot, *Global Warming in the Courts: The Massachusetts v. EPA Decision and its Implications* 3 (Georgetown Envtl. Law & Policy Inst. Apr. 2007), available at [http://www.law.georgetown.edu/gelpi/current\\_research/documents/GWL\\_Update\\_4.24.07.pdf](http://www.law.georgetown.edu/gelpi/current_research/documents/GWL_Update_4.24.07.pdf).

common law claims, most notably nuisance suits, may fail to receive this “special solicitude” when standing is reviewed. Finally, preemption suits usually brought by industry plaintiffs against state regulation of GHG emissions will likely be unaffected by the *Massachusetts* decision. Industry plaintiffs and others effected by emissions regulations have a financial stake in the rules that govern them and will generally not have a problem establishing Article III standing.

## B. Intergenerational Justice, Standing, and Climate Change Litigation

Establishing standing in climate change litigation is difficult enough, but when the plaintiffs are members of future generations, the complexities make this threshold showing almost insurmountable. Standing to sue for posterity or future generations has not been established in any area of U.S. law.<sup>58</sup> Despite this procedural hurdle, litigating climate change injuries on behalf of future generations is needed, given that they are the ones who will suffer the most irreparable harm as a result of global warming.

Several strategies are possible for meeting the standing requirements for future-generation plaintiffs. One option would be to bring a suit on behalf of the youngest generation currently living. This would sidestep the “metaphysical” argument that someone who does not exist cannot have standing to sue.<sup>59</sup> In this manner, a parent, grandparent, or other legal guardian could bring a suit on behalf of their descendants, claiming that global climate change has in some way injured them. Given the predicted climate change impacts by 2050, this group would sufficiently capture many of climate change’s harms to future generations. Moreover, while it may not cover “future generations” per se, it could generate positive results that would benefit future generations regarding climate change.

This judicial approach could also make inroads toward establishing a standing doctrine for generations that are not yet in existence. At least one scholar has suggested that courts could develop a new and independent doctrine for posterity standing in which a present representative could obtain standing to sue on behalf of future generations based on the language in the Constitution, the intent of the Framers, and the language found in several federal statutes.<sup>60</sup> This doctrine, called “equitable standing,” is derived from Article III, Section 2 of the Constitution’s extension of judicial power “to all Cases, in Law and Equity, arising under the Constitution, the Law of the United States, and Treaties made, or which shall be made, under their Authority.”<sup>61</sup> Historically, equitable standing has been used to allow an individual to represent legal incompetents or others that would otherwise be denied standing because of their status.<sup>62</sup> Based on the language of the Preamble—“We the People . . . to ourselves and our Posterity”—proponents of “equitable standing” for future generations assert that this new doctrine can be “derived from Article III, Section 2’s extension of the judicial power to cases arising in equity under the Constitution.”<sup>63</sup> This “new rationale,” when applied to future generations, may alleviate some of the difficulties that current plaintiffs have when establishing standing.<sup>64</sup> To date, this academic theory has not been tested in court.

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<sup>58</sup> See discussion *infra* Section IV.

<sup>59</sup> John Edward Davidson, *Tomorrow’s Standing Today: How the Equitable Jurisdiction Clause of Article III, Section 2 Confers Standing Upon Future Generations*, 28 COLUM. J. ENVTL. L. 185, 208 (2003).

<sup>60</sup> See generally *id.* For example, the Preamble and NEPA are two examples in which the language explicitly speaks of future generations.

<sup>61</sup> U.S. Const. art. III, § 2.

<sup>62</sup> Davidson, *supra* note 59, at 197–98.

<sup>63</sup> *Id.* at 220.

<sup>64</sup> For example, it may be easier for future generations to establish injury and causation under this new rationale than it is for living plaintiffs under the traditional doctrine.

Another option is to advocate in the legislature for the creation of standing for future generations in new climate change laws, like the statutes currently being debated in Congress and their state analogues. While the legislature cannot overrule constitutional aspects of the standing doctrine, it may act on those that are viewed as prudential. Likewise Congress can use its power to create other devices for future generations and their representatives to enforce their rights, such as citizen suit provisions and the creation of guardians ad litem to advocate on behalf of future generations.

Finding a plausible way to establish standing for future generations will not be easy, will not occur quickly, and will assuredly be met with criticism.<sup>65</sup> What is known is that current standing doctrine will probably not allow the interests of future generations to be represented in court. Therefore, a new way of thinking about what satisfies a “case or controversy” under Article III of the United States Constitution is needed.

### C. Political Question Doctrine

Another justiciability doctrine that courts must assess before reaching the merits of a case is the political question doctrine. Under this doctrine, the Court may decline to hear a case—even if the plaintiff satisfies all the elements of standing—if it decides that the issue at hand is better left to the political branches of the government. Specifically, there are six instances that implicate the political question doctrine, as first laid out in *Baker v. Carr*<sup>66</sup>:

(1) a textually demonstrable constitutional commitment of the issue to coordinate political department, (2) a lack of judicially discoverable and manageable standards for resolving it, (3) the impossibility of deciding without an initial policy determination of a kind clearly of nonjudicial discretion, (4) the impossibility of a court’s undertaking independent resolution without expressing lack of respect due coordinate branches of the government, (5) an unusual need for unquestioning adherence to a political decision already made, and (6) the potentiality of embarrassment from multifarious pronouncements by various departments on one question.<sup>67</sup>

With a controversial issue like global climate change, where the federal government has chosen not to take any action at this time, the courts can relatively easily dispose of a case as a non-justiciable political question. In fact, this doctrine has come into play in *California v. General Motors Corp.*<sup>68</sup> and *Connecticut v. American Electric Power*.<sup>69</sup> In both of those cases, the federal district courts found that the issue of global warming presented a political question that required an initial policy determination from the political branches of the government.<sup>70</sup> *American Electric Power*, however, has been appealed to the Second Circuit Court of Appeals and could possibly be reversed. As the federal government begins to take a more active role in addressing climate change post-*Massachusetts v. EPA*, courts will be more inclined to find that the political branches have addressed the issue and therefore not see it as beyond the reach of the federal courts.

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<sup>65</sup> See Davidson, *supra* note 59, at 208–220 (discussing many of the possible criticisms of a posterity standing doctrine).

<sup>66</sup> 369 U.S. 186 (1962).

<sup>67</sup> *Id.* at 217.

<sup>68</sup> No. C06–05755 MJJ, 2007 WL 2726871, at \*6 (N.D. Cal. 2007).

<sup>69</sup> 406 F. Supp. 2d 265 (S.D.N.Y. 2005).

<sup>70</sup> 2007 WL 2726871 at \*5–6; 406 F. Supp. 2d at 271–74.

## II. Federal constitutional law

Given the United States Constitution's focus on negative rights, it is unsurprising that there is not explicit, textual support for a right to a clean environment or a statement of correlative duties and rights between present and future generations.<sup>71</sup> But some constitutional scholars argue that the U.S. Constitution can and should be interpreted to guarantee both the rights of future generations and the right to a clean and healthful environment. While the legal community has not universally accepted these theories, they present a creative starting point for finding constitutional support for climate change law to benefit future generations.

One school of thought asserts that the Preamble's posterity clause provides explicit recognition of the framers' intent to recognize future generations' rights.

We the People of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defense, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution for the United States of America.<sup>72</sup>

While the Preamble and its posterity clause have never been said to create any substantive rights,<sup>73</sup> some suggest that this language bears on the interpretation of the Constitution as a whole.<sup>74</sup> In other words, substantive rights provisions of the Constitution should be interpreted to protect and apply to "ourselves," meaning current generations, "and our

<sup>71</sup> In contrast, more modern constitutions in other countries have granted these positive rights in the language of their constitutions. *See, e.g.*, S. AFR. CONST. ch. 2, § 24 (1996) (granting every citizen of the Republic of South Africa the right to "an environment that is not harmful to their health or well-being" and the right "to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures"); Pol. Const. art. 5 (2007) ("The Republic of Poland ... shall ensure the protection of the natural environment pursuant to the principles of sustainable development.").

<sup>72</sup> U.S. CONST. pmb. (emphasis added). It has been suggested that there are at least three possible ways to interpret the Preamble's posterity clause. One way is to read it to modify each of the six previously expressed goals of the Preamble, so that "we the people" form, establish, insure, provide, promote and secure various ends separately for "our posterity." *See* John Davidson, Const. L. Found., *The Stewardship Doctrine: Intergenerational Justice in the United States Constitution*, at Part III.A., <http://www.conlaw.org/Intergenerational-Intro.htm> (last visited June 30, 2008). A second way is to view the posterity clause as modifying only the last clause, to "secure the blessings of liberty." It has been suggested that this clause summarizes the preceding five Preamble goals, making the reading similar to that of the first interpretation. *See* Charlie Ogle, Const. L. Found., *Does the United States Constitution Provide Environmental Protection*, <http://www.conlaw.org/prearg2.htm> (last visited June 16, 2008). Other commentators have suggested that "the blessings of liberty" describes "civil liberties," like "life, liberty, and the pursuit of happiness," or "at a bare minimum, the preservation of essential environmental systems." Davidson, *supra* note 73, at Part III.A. A third way is to read the posterity clause to modify only the "ordain and establish" phrase. Like the other two interpretations, this reading "supports the idea that the federal government in all its aspects is intended to operate for the benefit of the entire intergenerational community." *Id.* Therefore, under any interpretation, the Preamble indicates that current and future generations are the beneficiaries of the powers and rights enumerated elsewhere in the Constitution.

<sup>73</sup> *See* Ogle, *supra* note 72, (stating that the Preamble has not been interpreted to guarantee any substantive rights because its "lofty goals are not guaranteed to each individual, "but rather to 'ourselves and our Posterity' in the aggregate."); *Jacobson v. Massachusetts*, 197 U.S. 11 (1904) (finding that the Preamble "has never been regarded as the source of any substantive power conferred on the Government...").

<sup>74</sup> *See* Ogle, *supra* note 72 (stating that "[t]he Government must, when applying the substantive powers conferred in the Constitution, fully respect the Preamble's statement of 'general purpose,'" and that "all substantive powers of the Government are subject to the Preamble's indication that 'We the people' act for 'ourselves and our Posterity'"); John Davidson, *supra* note 72, at Part III ("While the posterity clause, like the larger Preamble, does not itself confer substantive powers or affirmative duties upon government, it does indicate who the beneficiaries of powers and rights enumerated elsewhere in the constitution should be—'ourselves and our posterity.'").

Posterity,” meaning future generations.<sup>75</sup> For example, under this theory, the Equal Protection Clause of the Fourteenth Amendment should be interpreted to guarantee both present and future generations “equal protection of the law,”<sup>76</sup> thereby prohibiting present government action that would unreasonably discriminate against future generations.

One leading objection to this approach to constitutional interpretation comes from those who read the Constitution according to its original intent. They posit that posterity rights “could not have been intended by the framers, who were unfamiliar with such modern intergenerational threats as global warming, radioactive waste, persistent toxins, or biodiversity loss.”<sup>77</sup> However, while the Framers of the Constitution admittedly were unaware of some of the long-term generational problems facing the country today, they frequently discussed principles of intergenerational justice. In fact, the original intent doctrine supports rather than undermines the idea that “ourselves and our Posterity” are the beneficiaries of constitutional rights and protections.<sup>78</sup>

For example, the founding fathers relied on principles of intergenerational justice—in particular the concept of “protecting later generations’ political sovereignty from overreaching by earlier generations”<sup>79</sup>—to justify their separation from England, because in doing so, they were forced to violate a set of “explicit intergenerational commitments” set out by their English ancestors in the Magna Carta and the English Bill of Rights.<sup>80</sup> In breaking these obligations to the Crown, the Framers relied on the teachings of John Locke, who stated in his *Second Treatise of Government*: “[W]hatever Engagements or Promises any one has made for himself, he is under the Obligation of them, but cannot by any Compact whatsoever, bind his Children or Posterity.”<sup>81</sup>

Another example comes from the Virginia Declaration of Rights, which provided that “all men are by nature equally free and independent, and have certain inherent rights, of which, when they enter into a state of society, they cannot, by any compact, deprive or divest their posterity.”<sup>82</sup> This declaration embodies the idea that every generation has certain “inalienable rights” that should not be infringed upon by the actions of previous generations. Using these examples from the principles at play when the posterity clause was created, it can be argued that the “intergenerational aspects of the founders unalienable rights philosophy ... must be accorded due weight in any legitimate system of constitutional interpretation.”<sup>83</sup>

Accepting that the original intent of the Framers supports this theory, the issue then becomes whether the idea of safeguarding the political rights of subsequent generations—what has been referred to as “generational

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<sup>75</sup> See Davidson, *supra* note 72, at Part III (stating that “all subsequent constitutional provisions should be construed, where possible, in an intergenerational light”).

<sup>76</sup> U.S. CONST. amend. XIV, §1.

<sup>77</sup> John Davidson, Taking Posterity Seriously: Intergenerational Justice, <http://vlscli.wordpress.com/2008/01/28/taking-posterity-seriously-intergenerational-justice/> (Jan. 28, 2008).

<sup>78</sup> For a complete overview of the prevalence of intergenerational philosophy in the Western World, beginning in Ancient Greece and Biblical times up through the American Revolution, see Davidson, *supra* note 72, at Part I.

<sup>79</sup> Davidson, *supra* note 77.

<sup>80</sup> *Id.* For example, in the English Bill of Rights, the members of Parliament agreed to “most humbly and faithfully submit themselves, their heirs and posterities for ever, and do faithfully promise that they will stand to, maintain and defend [the King].” English Bill of Rights (1689).

<sup>81</sup> John Locke, TWO TREATISES OF GOVERNMENT 364 (Cambridge: 2d. ed. 1967) (1689); see also Davidson, *supra* note 72, at Part I (“Locke emphasized the right of each generation to be master of its own political destiny. He rejected the notion that parents or ancestors could oblige their descendants to pay allegiance to a particular government.”).

<sup>82</sup> Virginia Declaration of Rights, art. 1 (1776).

<sup>83</sup> See Davidson, *supra* note 72, at Part II (internal quotations omitted).

sovereignty”<sup>84</sup>—applies equally to protect the fundamental environmental interests of future generations. Some scholars firmly support this logic, because the Framers’ concept of generational sovereignty was actually derived from the bedrock principles of generational land use embedded in Anglo-American society and law.<sup>85</sup> The theory of safeguarding political generational sovereignty grew out of the already well-established concept of environmental generational sovereignty. These ideals are best captured in Thomas Jefferson’s famous 1789 letter to James Madison:

The question [w]hether one generation of men has a right to bind another... is a question of such consequences as not only to merit decision, but place also among the fundamental principles of every government.... I set out on this ground, which I suppose to be self-evident, ‘that the earth belongs in usufruct to the living’<sup>86</sup>

Thus when it came to “Posterity” and the environment, the Framers believed that current generations had an obligation to responsibly use the land so that it could be passed on to subsequent users—future generations.

Assuming that the Preamble makes “our Posterity” a proper beneficiary of the rights and protections of the Constitution, the next consideration is which substantive provisions could be used to protect the environmental rights of future generations.<sup>87</sup> One possibility is the Equal Protection Clause of the Fourteenth Amendment, which guarantees to all “equal protection of the law.”<sup>88</sup> Under this provision, government action benefitting current generations that could irreparably harm the environment could be challenged as discriminating against future generations. An equal protection challenge would only be plausible if brought against government action, rather than inaction, because government inaction generally fails to raise constitutional concerns.<sup>89</sup> Another consideration is what the standard of review would be for challenges brought on behalf of future generations under the Equal Protection Clause. While one scholar has argued for a strict scrutiny standard, since “Posterity” is not an enumerated class, rational basis review would more than likely be employed, which makes challenging a government action very unlikely to succeed.<sup>90</sup>

Another possibility, albeit an unlikely one, is to assert a substantive due process claim under the Fourteenth, Fifth, and Ninth Amendments.<sup>91</sup> More specifically, it has been argued that the right to a healthy environment should be declared based on “the penumbra protection of the Ninth Amendment, the liberty guarantee of the Fifth and Fourteenth Amendments, and violations of due process in general.”<sup>92</sup> Before this substantive right to a healthy environment can be enforced on behalf of future generations, it must first be established for current generations. Thus far, this has failed

<sup>84</sup> See *id.* at Part I–II.

<sup>85</sup> See *id.* (“[T]he founders and their contemporaries did understand each generation’s obligation to preserve the value and integrity of the land for generations to come. These stewardship principles, embedded in the legal constructs of entail, usufruct and waste were ethical bedrock....”).

<sup>86</sup> *Id.*

<sup>87</sup> Of course, as discussed in the previous section, another constitutional obstacle that would need to be cleared in any case is standing. See *supra* section I.A.

<sup>88</sup> U.S. Const. amend. XIV, § 1.

<sup>89</sup> See *DeShaney v. Winnebago County*, 489 U.S. 189 (1989); see also *Ogle*, *supra* note 72 (stating that “if the Government were to take no action that created a harm to posterity, no consideration of, or protection from, that harm would be required”).

<sup>90</sup> *But see* Davidson, *supra* note 77.

<sup>91</sup> See Janelle P. Eurick, *The Constitutional Right to A Healthy Environment: Enforcing Environmental Protection Through State and Federal Constitutions*, 11 INT’L LEGAL PERSP. 185, 210 (2001) (discussing several previous attempts to establish the right to a healthy environment under the U.S. Constitution); Mary Ellen Cusack, *Judicial Interpretation of State Constitutional Right to a Healthful Environment*, 20 B.C. ENVTL. AFF. L. REV. 173, 175 (1992) (same).

<sup>92</sup> Eurick, *supra* note 91, at 210.

to occur.<sup>93</sup> This fact does not foreclose the possibility that it will be established in the future. In fact, courts have long recognized the importance of environmental protection and the effect it may have on an individual's fundamental right to life in the future.<sup>94</sup> If this constitutional right is eventually secured for present generations, the right could likewise be asserted on behalf of future generations.

While many of these constitutional theories are yet to be accepted by the legal community or established by the judicial system, they still offer valuable insight into the concept of intergenerational equity and climate change. As these theories continue to develop in the scholarly community, they may someday aid the legislative and judicial branches in finding that the Constitution guarantees a right to a healthy environment to “ourselves and our Posterity.”

### III. State constitutional law

In contrast to the federal constitution, the majority of states have integrated some sort of environmental aspect into their constitutions,<sup>95</sup> and several state constitutions contain explicit provisions granting citizens a right to a healthy environment.<sup>96</sup> Although many states have taken the affirmative steps to protect the environment through their respective constitutions, these provisions vary greatly regarding subject matter and scope.<sup>97</sup> For example, some states have incorporated the public trust doctrine into their constitutions,<sup>98</sup> while others have constitutionalized the legislature's duty or power to enact laws that protect or preserve the environment.<sup>99</sup> However, the most prominent and powerful of these provisions are those that explicitly grant citizens—of present and future generations—a right to a clean and

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<sup>93</sup> See *Environmental Defense Fund v. Corp of Engineers of the United States Army*, 325 F. Supp. 728 (E.D. Ark. 1971) (holding that the right to a clean environment could not be established under the Ninth, Fifth, and Fourteenth Amendments); *Ely v. Velde*, 451 F.2d 1130 (4th Cir. 1971) (dismissing a case because the plaintiffs failed to cite any relevant support equating the right to a healthy environment with a constitutional right); *Tanner v. Armco Steel Corp.*, 340 F. Supp. 532 (S.D. Tex. 1972) (dismissing a claim based on the Fifth, Fourteenth, and Ninth Amendment because the plaintiffs failed to allege any judicially cognizable constitutional rights).

<sup>94</sup> *Stop H-3 Ass'n v. Dole*, 870 F.2d 1419 (9th Cir. 1989). (“We agree that it is difficult to conceive of a more absolute and enduring concern than the preservation and, increasingly, the restoration of a decent and livable environment. Human life, itself a fundamental right, will vanish if we continue our heedless exploitation of this planet's natural resources. The centrality of the environment to all of our undertakings gives individuals a vital stake in maintaining its integrity.”)

<sup>95</sup> For an in-depth state-by-state analysis of these provisions, see Bret Adams et al., *Environmental & Natural Resource Provisions in State Constitutions*, 22 J. LAND RESOURCES & ENVTL. L. 73 (2002) (discussing “207 state constitutional provisions relating to natural resources and the environment in 46 state constitutions”).

<sup>96</sup> See, e.g., MONT. CONST. art. 2, § 3 & art. 9, § 1; HI. CONST. art. XI, §§ 1–9; ILL. CONST. art. XI, §§ 1–2; PA. CONST. art. 1, § 27; MASS. CONST. art. Xli & Xlix.

<sup>97</sup> See Barton H. Thompson, *The Environment and Natural Resources*, in STATE CONSTITUTIONS AND THE TWENTY-FIRST CENTURY: THE AGENDA OF STATE CONSTITUTIONAL REFORM 307 (G. Alan Tarr & Robert F. Williams eds., 2006); Anil S. Karia, *A Right to a Clean and Healthy Environment: A Proposed Amendment to Oregon's Constitution*, 14 U. BALT. J. ENVTL. L. 37, 42 (2006) (“State constitutional provisions that address environmental issues tend to fall in one of four categories: (1) provisions providing that citizens have the right to a clean or healthy environment; (2) public policy provisions concerning the preservation of the environment; (3) financial provisions for environmental programs; or (4) provisions that restrict the environmental prerogatives of state legislatures.”).

<sup>98</sup> See, e.g., ALA. CONST. art XI, § 219.07 (establishing the “Alabama Forever Wild Land Trust” to protect “unique lands and water areas” for the “benefit of present and future generations”); COLO. CONST. art. XI, § 10 (setting up an “inter-generational public trust for the support of public schools”); HI. CONST. art. XI, § 1 (mandating that the state “conserve and protect Hawaii's natural beauty and all natural resources, including land, water, air, minerals and energy sources” and promote self-sufficiency of the state “for the benefit of present and future generations”); PA. CONST. art. 1, § 27 (“Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.”).

<sup>99</sup> See, e.g., FLA. CONST. art. 2, § 7; COLO. CONST. art. XVIII, § 6; UTAH CONST. art. XVIII, § 1.

healthy environment.<sup>100</sup> While courts interpret these provisions to varying degrees, express grants of a right to a clean environment generally give rise to an enforceable state substantive right to a healthy environment.<sup>101</sup> Thus citizens of these states may use these constitutional provisions to “claim legally protectable interests in state actions affecting the environment, bring citizen enforcement actions against state agencies, and challenge legislative acts that are inconsistent with environmental constitutional provisions.”<sup>102</sup>

The fact that a right or principle has been spelled out in a state constitution, however, is only the first step toward securing it. Courts have sometimes proven reluctant to enforce a provision or conclude that a constitutional provision guarantees substantive, versus procedural, rights.<sup>103</sup> Moreover, before citizens can use these state constitutional provisions to enforce and protect their substantive right to a healthy environment, they must show that they have the standing and that the provision is self-executing.<sup>104</sup> While these hurdles have diminished the impact of constitutional provisions guaranteeing the right to a healthy environment in many states, others have embraced the idea and strongly enforced the environmental rights contained in their constitutions.

Montana clearly falls into the latter category. The Montana Constitution, which was adopted in 1972 to replace the original one from 1889, has been described as “the single strongest statement of conservation philosophy in the constitution of any state and, very likely, of any nation in the world.”<sup>105</sup> The preamble alone exudes appreciation for the natural environment and intergenerational justice:

We the people of Montana grateful to God for the quiet beauty of our state, the grandeur of our mountains, the vastness of our rolling plains, and desiring to improve the quality of life, equality of opportunity and to secure the blessings of liberty for this and future generations do ordain and establish this constitution.<sup>106</sup>

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<sup>100</sup> See *supra* note 96.

<sup>101</sup> See Karia, *supra* note 97, at 42 (explaining that state constitutional provisions concerning public policy, financial support for environmental programs, and the prerogatives of the state legislature—as opposed to those provisions that explicitly grant citizens a substantive right to a clean environment—are often very narrow and generally do not incorporate any enforceable rights); see Eurick, *supra* note 91, at 187 (“Using the right to a healthy environment has become a common practice resulting in a substantive right within the international community and recently within the individual states of the United States.”).

<sup>102</sup> See Eurick, *supra* note 91, at 201.

<sup>103</sup> See Thompson, *supra* note 97, at 308 (“Most state courts have shied away from actually using the provisions and instead deferred to legislative judgments as to the appropriate level and types of environmental protections.”).

<sup>104</sup> See *id.* (stating that plaintiffs bringing an action under a state constitutional provision ensuring the right to a healthy environment “must establish that they meet state standing requirements and that the provision does not require further legislative action before it can be used”); see also Mary F. Cusack, *Judicial Interpretation of State Constitutional Rights to a Healthful Environment*, 20 B.C. ENVTL. AFF. L. REV. 173, 182 (1993) (stating that a “self-executing provision creates a legally enforceable right in and of itself; it does not require corresponding legislation to enable individuals to assert a claim based upon the provision”). When it comes to self-execution of environmental provisions, the provisions fall into one of three categories: (1) provisions that are expressly self-executing—*e.g.*, HI. CONST. art. XI, § 9 & ILL. CONST. art. XI, § 2; (2) provisions that are expressly non-self-executing—*e.g.*, LA. CONST. art. IX, § 1, S.C. CONST. art. XII, § 1 & VA. CONST. art. XI, §§ 1–2; and (3) provisions that are silent as to self-execution—*e.g.*, MONT. CONST. art. II, sec. 3 & PA. CONST. art. 1, § 27.

<sup>105</sup> John L. Horwich, *Montana’s Constitutional Environmental Quality Provisions: Self-Execution or Self-Delusion?*, 57 MONT. L. REV. 323, 323 (1996)

<sup>106</sup> MONT. CONST. pmbl.

Beyond the preamble, the Montana Constitution explicitly establishes a right to a clean and healthy environment, as well as a duty to maintain a clean and healthy environment. Article II, section 3, establishes the “inalienable rights” of all citizens of the state, which include a “right to a healthful environment.”<sup>107</sup> This provision works in conjunction with Article IX, section 1, which mandates that “[t]he state and each person shall maintain and improve a clean and healthful environment in Montana for present and future generations.”<sup>108</sup>

In 1999, in *Montana Environmental Information Center v. Department of Environmental Quality*, the Montana Supreme Court held that the rights contained in Article II, section 3, and the duties laid out in Article IX, section 1, are “interrelated and interdependent” fundamental rights and any state action implicating those rights are subject to strict scrutiny.<sup>109</sup> The state action at issue was the Montana Department of Environmental Quality (DEQ)’s approval of the development of a large gold mine on the upper Blackfoot River and specifically, the developer’s plan to discharge pumped ground water into the Blackfoot and another nearby river. The DEQ issued an amended permit based, in part, on a Montana Water Quality Act amendment exempting discharges from such test wells from the non-degradation review process otherwise required by the Montana Environmental Policy Act. The state supreme court reversed the district court, holding that the plaintiff’s constitutional right to a clean and healthful environment had been violated. Importantly, the court reasoned that although strict scrutiny does not normally apply to rights not found in the Montana Constitution’s Declaration of Rights, the right to a clean and healthful environment and the provisions in Article IX were “intended by the constitution’s framers to be interrelated and interdependent,” so strict scrutiny applies to any action implicating Article IX. Thus environmental actions taken by the state that can cause injury to a plaintiff are subject to the highest level of scrutiny in Montana courts. This case solidified these environmental rights and duties as fundamental rights that Montana citizens can judicially enforce against the state.<sup>110</sup>

Two years later, in *Cape-France Enterprises v. In re Estate of Peed*,<sup>111</sup> the Supreme Court of Montana expanded this right. In a contract dispute between two private parties, the court found “that the text of Article IX, Section 1, applies the protections and mandates of this provision to private action—and thus to private parties—as well.”<sup>112</sup> Therefore, both state and private action in Montana that could adversely affect the environment can be constrained under the state’s constitutional provisions that grant citizens the right to a clean environment and charge the state and private citizens with the duty to maintain a healthy environment for present and future generations.

Another state constitution rich in environmental principles is the Hawaiian Constitution. In fact, this constitution devotes an entire article to the issue, rather than the usual provision or two. Entitled “Conservation,

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<sup>107</sup> MONT. CONST. art. II, sec. 3:

All persons are born free and have certain inalienable rights. They include the right to a clean and healthful environment and the rights of pursuing life’s basic necessities, enjoying and defending their lives and liberties, acquiring, possessing and protecting property, and seeking their safety, health and happiness in all lawful ways. In enjoying these rights, all persons recognize corresponding responsibilities.

<sup>108</sup> MONT. CONST. art. IX, sec. 1.

<sup>109</sup> 988 P.2d 1236, 1246 (Mont. 1999) (“[A]ny statute or rule which implicates [the right to a clean environment] must be strictly scrutinized and can only survive scrutiny if the State establishes a compelling state interest and that its action is closely tailored to effectuate that interest and is the least onerous path that can be taken to achieve the State’s objective.”).

<sup>110</sup> Of course, any party wishing to enforce these rights in court would first need to establish that they have standing, which requires that “(1) the complaining party must clearly allege past, present, or threatened injury to a property or civil right; and (2) the alleged injury must be distinguishable from the injury to the public generally, but the injury need not be exclusive to the complaining party.” *Id.* at 1242.

<sup>111</sup> 29 P.3d 1011 (Mont. 2001).

<sup>112</sup> *Id.* at 1017.

Control, and Development of Resources,” Article XI contains eleven provisions relating to the environment and natural resources.<sup>113</sup> Several of them create environmental rights and duties that courts may enforce.

Article XI, section 1, begins by requiring that the state “conserve and protect Hawaii’s natural beauty and all natural resources, including land, water, air, minerals and energy sources,” promote self-sufficiency and conservation, and hold all public natural resources in trust “for the benefit of present and future generations.”<sup>114</sup> The intergenerational language in this provision was added to “affirm the ethical obligations of each generation to those that follow.”<sup>115</sup>

Moreover section 9 of Article XI creates enforceable “environmental rights” by declaring:

Each person has the right to a clean and healthful environment, as defined by laws relating to environmental quality, including control of pollution and conservation, protection and enhancement of natural resources. Any person may enforce this right against any party, public or private, through appropriate legal proceedings, subject to reasonable limitations and regulation as provided by law.<sup>116</sup>

This provision does several things. First, it provides courts with a definition of “clean and healthful environment,” as determined by “laws relating to environmental quality.” No other state has provided language to aid courts in determining when an action has violated or infringed upon an individual’s right to a clean and healthy environment as Hawaii has done.<sup>117</sup> Next, this constitutional provision’s second sentence makes it self-executing, meaning that the Hawaiian legislature need not take further action before the right could be enforced.<sup>118</sup> Finally, this provision relaxed traditional standing requirements, making it more likely that a party could successfully bring an action in court. In *Life of the Land v. Land Use Commission*,<sup>119</sup> the Hawaii Supreme Court read Article XI, section 9, to grant standing to an environmental group which challenged a land reclassification resulting from a zoning amendment, even though neither the group nor its members were owners or adjacent owners of the affected land.<sup>120</sup> The court stated that the plaintiffs needed only to assert an interest in “the needs of justice” or a “stake in the outcome of the alleged controversy” under the provision, rather than a particularized and personal injury caused by the defendant’s actions.<sup>121</sup>

<sup>113</sup> HAW. CONST. art. XI, §§ 1–11. Article IX, section 8, mandates that “[t]he State shall have the power to promote and maintain a healthful environment, including the prevention of any excessive demands upon the environment and the State’s resources.” HI. CONST. art. IX, § 8. This provision serves more as a policy statement than anything else, so it is within Article XI that the enforceable environmental rights and duties are found.

<sup>114</sup> HAW. CONST. art. XI, § 1:

For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii’s natural beauty and all natural resources, including land, water, air, minerals and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State.

All public natural resources are held in trust by the State for the benefit of the people.

<sup>115</sup> ANNE FEDER LEE, *THE HAWAII STATE CONSTITUTION: A REFERENCE GUIDE* 162 (1993).

<sup>116</sup> HAW. CONST. art. XI, § 9.

<sup>117</sup> See Cusack, *supra* note 104, at 191 (“Only Hawaii’s constitutional provision attempts to define “healthful” in its text.”).

<sup>118</sup> See *id.* (stating that the environmental rights provisions of the Hawaiian constitution “are self-executing because they refer to individuals’ right to enforce compliance without any further legislation”). The courts in Hawaii have acknowledged that these provisions are self-executing and give citizens standing to sue and use the courts to enforce their environmental rights. See *Kahana Sunset Owners Ass’n v. Maui County Council*, 948 P.2d 122, 124 (Haw. 1997).

<sup>119</sup> 623 P.2d 431 (Haw. 1981).

<sup>120</sup> *Id.* at 441.

<sup>121</sup> *Id.* See also *Sierra Club v. Dep’t of Transp.*, 167 P.3d 292, 320 (Haw. 2007) (affirming that “harms to plaintiffs environmental interests... may provide the basis for standing.”).

Other provisions in the Hawaiian Constitution promote the idea of environmental rights and sustainability, including Article XI, section 3, which addresses the protection, conservation and sustainability of Hawaii's agricultural lands;<sup>122</sup> Article XI, section 6, dealing with protection of marine resources;<sup>123</sup> and Article XI, section 7, articulating the state's "obligation to protect, control and regulate the use of Hawaii's water resources for the benefit of its people."<sup>124</sup> Each of these provisions provides a toehold for recognizing the rights of future generations, although they've not been so used in any cases to date.

Pennsylvania's constitution is often cited for its environmental rights and sustainability provision.<sup>125</sup> Article 1, section 27, does two things: It expressly grants citizens a right to "clean air, pure water, and to the preservation of natural, scenic, historic and esthetic values of the environment," and it mandates that the state is to conserve and maintain these natural resources as trustees for the benefit of "all the people, including generations yet to come."<sup>126</sup> The Pennsylvania Supreme Court concluded in *Commonwealth v. National Gettysburg Battlefield*, where the state sought to stop the erection of a tower, that this constitutional provision "establishe[d] rights to be protected by government" and was self-executing.<sup>127</sup> In this way, Pennsylvania's constitutional provision for a healthy environment became a substantive right that citizens could enforce via the courts.

While *Gettysburg* seemed to be a substantial victory for environmental rights under the Pennsylvania Constitution in 1971, two years later the state supreme court set a precedent that severely undermined *Gettysburg* without completely overruling it. In *Payne v. Kassab*,<sup>128</sup> in which the plaintiffs sought to stop the conversion of a park into a roadway, the court observed that viewing this constitutional provision in "absolute" terms would make it "difficult to imagine any activity in the vicinity of [an area held in trust by the state] that would not offend the interpretation of Article I, Section 27."<sup>129</sup> Consequently, the Pennsylvania Supreme Court held "that Section 27 was intended to allow the normal development of property in the Commonwealth, while at the same time constitutionally affixing a public trust concept to the management of public natural resources of Pennsylvania. The result of our holding is a controlled development of resources rather than no development."<sup>130</sup> To determine what type of development is constitutional, the court came up with a three-part balancing test:

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<sup>122</sup> HAW. CONST. art. XI, § 3.

<sup>123</sup> HAW. CONST. art. XI, § 6.

<sup>124</sup> HAW. CONST. art. XI, § 7.

<sup>125</sup> The Pennsylvania Constitution also contains two environmental provisions relating to the creation of debt and issuance of bonds for projects concerning conservation and preservation. See PA. CONST. art. VIII, § 15 (allowing the state "to create debt and to issue bonds...for the acquisition of land for State parks, reservoirs and other conservation and recreation and historical preservation purposes"); PA. CONST. art. VIII, § 16 (authorizing the state "to create a debt and issue bonds...for a Land and Water Conservation and Reclamation Fund to be used for the conservation and reclamation of land and water resources of the Commonwealth").

<sup>126</sup> PA. CONST. art. 1, § 27:

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

<sup>127</sup> 302 A.2d 886, 892 (Pa. 1973), *aff'd* 311 A.2d 588 (Pa. 1973). Despite the fact that the court found the provision to be self-executing and a creation of enforceable rights, it went on to hold that the state's cause of action did not demonstrate that the tower at issue would harm any of the rights enumerated in section 27. In order for the plaintiffs to assert a claim under the provision, they need to show by "clear and convincing evidence" that the challenged action would injure the interest protected under section 27. *Id.* at 892-94.

<sup>128</sup> 312 A.2d 86 (Pa. 1973).

<sup>129</sup> *Id.* at 94.

<sup>130</sup> *Id.*

Judicial review [under Article 1, section 27] must be realistic and not merely legalistic. The court's role must be to test the decision under review by a threefold standard: (1) Was there compliance with all applicable statutes and regulations relevant to the protection of the Commonwealth's public natural resources? (2) Does the record demonstrate a reasonable effort to reduce the environmental incursion to a minimum? (3) Does the environmental harm which will result from the challenged decision or action so clearly outweigh the benefits to be derived therefrom that to proceed further would be an abuse of discretion?<sup>131</sup>

This standard, rather than the view taken in *Gettysburg*, is what Pennsylvania courts now apply to claims brought under section 27 to enforce environmental rights.<sup>132</sup> In general, state action challenged under section 27 is upheld as long as the action has been carried out in compliance with applicable statutes.<sup>133</sup> Thus while the environmental rights provision in the Pennsylvania Constitution initially looked as if it could be a valuable and powerful tool, it has now been described as a provision that “seems to have more symbolic than substantive value, inscribed on plaques and quoted in speeches, but rarely used in decision making.”<sup>134</sup> Unlike Hawaii and Montana, the Pennsylvania courts have substantially extinguished the enforceability of the environmental rights provision of the state constitution. To this day, it has not been used to constrain state or private actions harmful to the environment.<sup>135</sup>

The Illinois Constitution also contains provisions explicitly granting its citizens substantive environmental rights, with Article XI, section 1, stating that “the duty of each person is to provide and maintain a healthful environment for the benefit of this and future generations.”<sup>136</sup> This article goes on to declare that “[e]ach person has the right to a healthful environment. Each person may enforce this right against any party, governmental or private, through appropriate legal proceedings subject to reasonable limitation and regulation.”<sup>137</sup> Like the Montana Constitution, these complementary provisions set up a dual system of duties and rights pertaining to the environment: the state and the people have a duty to present and future generations and each citizen also has an enforceable right to a healthy environment.<sup>138</sup> Like Hawaii, the Illinois provisions are facially self-executing and relax the standards for establishing standing.

Despite this powerful language, the Illinois courts have not interpreted these provisions to make it particularly easy to bring a constitutional claim. In 1995, the Illinois Supreme Court held in *City of Elgin v. County of Cook* that while Article XI, section 2 relaxes traditional standing requirements, it does not create a cause of action in itself.<sup>139</sup> In this case, several municipalities appealed a permit issued by the county for a solid waste disposal facility. The injuries alleged

<sup>131</sup> *Id.*

<sup>132</sup> See *Borough of Moosic v. Pa. Pub. Util. Comm'n*, 429 A.2d 1237, 1239 (Pa. 1981); *Concerned Residents of Yough, Inc. v. Dep't of Envtl. Res.*, 639 A.2d 1265, 1275 (Pa. 1994).

<sup>133</sup> See Adams, *supra* note 95, at 210; see also *Cnty. Coll. of Delaware County v. Fox*, 342 A.2d 468, 474 (Pa. 1975); *Mignatti Constr. Co. v. Commonwealth, Envtl. Hearing Bd.*, 411 A.2d 860, 864 (Pa. 1980).

<sup>134</sup> John C. Dernbach, *Taking the Pennsylvania Constitution Seriously When It Protects the Environment: Part I—An Interpretative Framework for Article I, Section 27*, 103 DICK. L. REV. 693, 696 (1999).

<sup>135</sup> See Thompson, *supra* note 97, at 321. New York is another state that has yet to use the environmental rights provisions in its constitution (N.Y. CONST. art. XIV, § 4) to constrain or limit state or private action that infringes on the right to a clean and healthy environment. See Adams, *supra* note 95, at 182 (“[D]espite allowing suits against the State, the New York courts have been reluctant to apply article XIV, section 4 in a manner that would limit State action.”).

<sup>136</sup> ILL. CONST. art. XI, § 1.

<sup>137</sup> ILL. CONST. art. XI, § 2.

<sup>138</sup> See MONT. CONST. art. II, sec. 3; MONT. CONST. art. IX, sec. 1.

<sup>139</sup> 660 N.E.2d 875, 891 (Ill. 1995).

were fear that environmental attributes of the balefill site would be spoiled, damaging nearby wildlife habitats. But because the plaintiffs could not assert other statutory or common law causes of action, the court dismissed the case.<sup>140</sup>

“Section 2 of Article XI does not create any new causes of action but, rather, does away with the ‘special injury’ requirement typically employed in environmental nuisance cases. Thus, while a plaintiff need not allege a special injury to bring an environmental claim, there must nevertheless still exist a [separate] cognizable cause of action.”<sup>141</sup>

In other words, the plaintiffs must have a separate cause of action that they could bring, despite the constitutional provision, before the court can hear the case. Once that case is properly brought before the court, standing requirements are relaxed.

Four years later, in *Glisson v. City of Marion*, the state supreme court further limited who could bring a claim under Article XI, section 2, when it held that the term “healthful environment” was “intended to refer to the relationship between the environment and human health.”<sup>142</sup> Therefore, Article XI only confers standing on individuals challenging actions that could be harmful to human health, but not the health of other species or the environment itself. Given that plaintiff Glisson challenged a state action that threatened only the health of two endangered species, the court ruled the injury insufficient to establish standing.<sup>143</sup> Like Pennsylvania, Illinois provides an example of the role that the courts may play in minimizing the impact of state constitutional environmental rights provisions.<sup>144</sup>

While some state courts have been hesitant to enforce environmental rights and sustainability provisions in state constitutions, others have embraced their respective provisions and even strengthened their force and effectiveness. Fundamentally, states have recognized the importance of environmental rights and duties to present and future generations, and have valued those principles enough to inscribe them in their constitutions. Every state constitution passed since 1959 has contained a provision either charging the state with a duty to protect the environment or granting the citizens of the state the right to a clean or healthful environment—or both.<sup>145</sup> Thus even while the federal constitution remains silent on environmental rights and ideas of sustainability, the states have recognized them, secured them, and, in several cases, enforced them.

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<sup>140</sup> *Id.*

<sup>141</sup> *Id.*

<sup>142</sup> 720 N.E.2d 1034, 1042 (Ill. 1999).

<sup>143</sup> *Id.*

<sup>144</sup> While states like Illinois and Pennsylvania have seemingly minimized the effectiveness of their state environmental constitutional provisions, other states have gone even further and found that their respective environmental provisions do not carry with them a cause of action. In other words, these constitutional provisions are mere policy statements that do not secure environmental rights or duties that can be enforced. *See, e.g.,* *Robb v. Shockoe Slip Found.*, 324 S.E.2d 674, 682 (Va. 1985) (holding that VA. CONST. art. XI, § 1—which states that the Commonwealth is to “protect its atmosphere, lands, and waters from pollution, impairment, or destruction, for the benefit, enjoyment, and general welfare of the people of the Commonwealth”—does not create any enforceable rights or duties because it “contains no declaration of self-execution, it is not in the Bill of Rights, it is not declaratory of common law, and it lays down no rules by means of which the principles it posits may be given the force of law”).

<sup>145</sup> Thompson, *supra* note 97, at 308.

## IV. Federal environmental statutes

Several federal environmental statutes contain express language regarding future generations, notably the National Environmental Policy Act (NEPA), Federal Land Policy and Management Act (FLPMA), and National Forest Management Act (NFMA). Most of the time, this language appears in the opening “policy” or “definitions” section. Several federal statutes do not contain explicit language concerning future generations but implicitly protect future generations through their enforcement. Almost all of these statutes require private actors or the government to consider the implications of their conduct on future generations, but many times, the sole remedy for violations of the statutory provisions is procedural and not substantive. Some of the statutes also have citizen suit provisions, which allow citizens to sue and enforce the statute; in some instances, citizens may sue to protect the interests of future generations. Constitutional standing requirements, however, make it hard to sue under these provisions for harms solely to future generations.<sup>146</sup>

### A. National Environmental Policy Act (NEPA)<sup>147</sup>

NEPA’s language has the potential to be the most protective of future generations. In the purpose section of the statute, Congress declared that its national environmental policy was to “create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.”<sup>148</sup> It also mandated the federal government to “fulfill the responsibilities of each generation as trustee of the environment for succeeding generations”<sup>149</sup> and “preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice.”<sup>150</sup>

To implement this policy, NEPA requires an Environmental Impact Statement (EIS) for any “major Federal actions significantly affecting the quality of the human environment.”<sup>151</sup> Regulations define “effects” as those which are “direct, indirect, or cumulative,” and “cumulative impact[s]” as “past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions.”<sup>152</sup> To decide whether an action will have a significant impact, agencies must first prepare an Environmental Assessment (EA). Although an EA is more limited than an EIS, it documents agency considerations when making the threshold determination. If there is no significant impact, the agency issues a Finding of No Significant Impact (FONSI) explaining how it reached its conclusion. If an agency determines that there is a significant impact, then an EIS must be completed and must analyze the “relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity”<sup>153</sup> and “any irreversible and irretrievable commitments of resources which would be involved in the

<sup>146</sup> See *supra* section I.B.

<sup>147</sup> National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §§ 4321-4347 (2000).

<sup>148</sup> 42 U.S.C. § 4331(a) (1970).

<sup>149</sup> 42 U.S.C. § 4331(b)(1) (1970).

<sup>150</sup> 42 U.S.C. § 4331(b)(4) (1970).

<sup>151</sup> 42 U.S.C. § 4332(C) (1970).

<sup>152</sup> 40 C.F.R. §§ 1500-1508; 40 C.F.R. § 1508.8; 40 C.F.R. § 1508.7. These regulations were promulgated by the Council on Environmental Quality (CEQ). Section 202 of NEPA established the Council on Environmental Quality to coordinate federal environmental efforts and to work closely with agencies and other White House offices in developing environmental policies and initiatives. On March 5, 1970, President Nixon granted the CEQ authority to issue regulations in Executive Order 11514. Under Executive Order 11514 and President Carter’s subsequent reauthorization of the order under Executive Order 11991, the CEQ issued mandatory regulations obligating agency compliance.

<sup>153</sup> 42 U.S.C. § 4332(C)(iv) (1970).

proposed action,”<sup>154</sup> including adverse effects of the proposed action, alternatives to the proposed action, and irreversible commitments to resources.<sup>155</sup> In this manner, NEPA requires federal agencies to take a “hard look” at the environmental consequences of their proposed actions.<sup>156</sup>

Courts have invalidated some EISs for not considering the future environmental harms of federal actions. In *Concerned About Trident v. Rumsfeld*, an environmental group challenged the adequacy of an EIS prepared by the Navy for the Department’s newest atomic missile submarine system.<sup>157</sup> The D.C. Court of Appeals held that the Navy’s EIS was insufficient because it limited the analysis to environmental harms up until 1981, which, at that time, was only seven years away.<sup>158</sup> The court concluded that the EIS “fails to ensure that the environment will be preserved and enhanced for the present generation, much less for our descendants.”<sup>159</sup>

Likewise, in *Potomac Alliance v. U.S. Nuclear Regulatory Commission*, where an environmental group sued the Nuclear Regulatory Commission (NRC) for failing to conduct a sufficient EIS when granting a license amendment allowing a nuclear reactor to increase its storage capacity, the court expressed concern about future harms.<sup>160</sup> The plaintiffs argued that the NRC violated NEPA because it failed to consider “the long-range future effects of permitting the increased storage capacity” prior to granting the amendment.<sup>161</sup> The D.C. Court of Appeals’ per curiam opinion instructed the EPA to consider “reasonably foreseeable environmental effects”<sup>162</sup> and required the NRC to consider the environmental impacts of the amendment beyond the plant’s closing date in 2011.<sup>163</sup>

Finally, in one NEPA case, a court even held that plaintiffs had standing to sue on behalf of future generations. In *Cape May County Chapter, Inc., Izaak Walton League of America v. Macchia*, an environmental group sued in a representative status in a class action suit on behalf of future generations to prevent the dredging and development of an island off the coast of New Jersey by a group of real estate developers.<sup>164</sup> The plaintiffs sought, among other things, injunctive relief and “the safeguarding of these natural resources and environment for future generations.”<sup>165</sup> The federal district court held that the plaintiffs had standing to sue and that standing extends “representatively also to the class which it purports to represent [future generations].”<sup>166</sup> One important limitation on this 1971 case, however, is that it was decided prior to *Lujan v. Defenders of Wildlife*, in which the United States Supreme Court significantly narrowed the standing requirements, particularly for environmental suits.<sup>167</sup>

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<sup>154</sup> 42 U.S.C.A. § 4332(2)(C)(v) (1970).

<sup>155</sup> 42 U.S.C. 4332(2)(C); 40 C.F.R. 1502.

<sup>156</sup> See *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332 (1989).

<sup>157</sup> 555 F.2d 817 (D.C. Cir. 1976).

<sup>158</sup> *Id.* at 830.

<sup>159</sup> However, there are no other cases that have cited to *Trident* or used its EIS language regarding harms to future generations.

<sup>160</sup> 682 F.2d 1030 (D.C. Cir. 1982).

<sup>161</sup> *Id.* at 1031.

<sup>162</sup> *Id.* at 1035.

<sup>163</sup> Timothy Patrick Brady, “*But Most of it Belongs to those Yet to be Born: the Public Trust Doctrine, NEPA, and the Stewardship Ethic*,” 17 B.C. ENVTL. AFF. L. REV. 621, 644 (1990) (citing *Potomac Alliance v. U.S. Nuclear Regulatory Commission*, 682 F.2d 1030 (D.C. Cir. 1982) (concurring opinion of Judge Bazelon)).

<sup>164</sup> 329 F. Supp. 504 (D.N.J. 1971).

<sup>165</sup> *Id.* at 509.

<sup>166</sup> *Id.* at 514.

<sup>167</sup> See discussion *supra* Section I.A.1.

More recently, NEPA has become a tool for climate change litigation. A few courts have recently held various EISs insufficient for their failure to consider the harms of global climate change.<sup>168</sup> In 2003, for example, a court held for the first time that EPA's decision not to prepare an EIS for the new Corporate Average Fuel Economy (CAFE) Standards for light trucks was invalid and ordered EPA to conduct one that considers the CAFE standards' effect upon global climate change.<sup>169</sup> Three years later, a court ruling upheld the sufficiency of a Supplemental EIS (SEIS) for a rail extension project to service coal mines, reasoning that the extensions would only slightly increase national coal consumption and thus lead to only a small increase in national greenhouse gas emissions.<sup>170</sup> While this decision positively reflects a required review of GHG emissions under NEPA, it also causes concern because taken this way, most EISs will show only minimal increases, since few projects individually are likely to increase GHG emission levels significantly.<sup>171</sup>

In a new twist, a case now pending in federal district court alleges that the Export Import Bank (EIB) and Overseas Private Investment Corporation (OPIC) should have conducted an EIS when choosing to finance fossil fuel development projects overseas.<sup>172</sup> At trial, the court will have to determine whether the projects are "major federal actions" subject to NEPA, and if so, whether the agencies must consider the future domestic effects of global warming caused by these international projects. Taken together, this NEPA-based climate change litigation is at the point of asking courts to determine the level of emissions that will ultimately trigger the threshold of significance. Because no GHG emission thresholds currently exist under NEPA and climate change is a global problem in which any single U.S. project is unlikely to produce consequential global emissions, it is an open question whether courts will be willing to equate GHG emissions with significant impact determinations.

One overarching limitation to NEPA is that the remedy for a NEPA violation is solely procedural; if an EA or EIS is found insufficient, the relief is limited to redoing it.<sup>173</sup> Moreover, if a reviewing court determines that an EIS is proper, then NEPA's purpose is achieved. Thus, despite the overtly ambitious nature of NEPA's preamble language about protecting future generations, its reach is limited to requiring the federal government to perform a proper EIS. Courts cannot look into the substantive decisions that an agency makes based on an EIS.<sup>174</sup>

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<sup>168</sup> See, e.g., *Center for Biological Diversity v. National Highway Traffic Safety Adm.*, 2007 WL 3378240 (9th Cir. 2007); *Border Power Plant Working Group v. Dept. of Energy*, 260 F. Supp. 2d 997 (S.D. Cal. 2003).

<sup>169</sup> *Border Power Plant Working Group v. Dept. of Energy*, 260 F. Supp. 2d 997 (S.D. Cal. 2003); see also *Mid States Coalition for Progress v. STB*, 345 F.3d 520 (8th Cir. 2003). This case came in the wake of the *Border Power Plant* decision and ordered a remand to the Surface Transportation Board (STB) to address the indirect effect the challenged project would have on air quality, including GHG emissions. The Eighth Circuit found GHG emissions to be a relevant NEPA consideration, but left the door open as to what level of increased GHG emissions would compel further steps, such as mitigation.

<sup>170</sup> Justin R. Pidot, *Global Warming in the Courts: A Litigation Update* 1–2 (Georgetown Envtl. Law & Policy Inst. March 2007), available at [http://www.law.georgetown.edu/gelpi/current\\_research/documents/GWL\\_Update\\_3.13.07.pdf](http://www.law.georgetown.edu/gelpi/current_research/documents/GWL_Update_3.13.07.pdf).

<sup>171</sup> *Id.* at 2.

<sup>172</sup> *Friends of the Earth, Inc. v. Watson*, No. C02-4106 JSW, 2005 WL 2035596 (N.D. Cal. 2005). As of December, 2007, the district court has rejected both defendants' and then plaintiff's motions for summary judgment. In the defendants' motion, asserting lack of standing, the court held that plaintiff needs only to demonstrate that it is reasonably probable that defendants' actions will threaten plaintiff's concrete interest and that although there is some uncertainty about injury, it is "with respect to how great the consequences will be, and not whether there will be any significant consequences." *Id.* at 3.

<sup>173</sup> See *Stryker's Bay Neighborhood Council v. Karlen*, 444 U.S. 223, 227–28 (1980).

<sup>174</sup> Advocates and academics continue to debate potential arguments that would extend NEPA's reach despite this Supreme Court precedent. Some argue that instead of rejecting substantive review completely, the *Stryker's Bay* Court left the possibility open that if an agency acted arbitrarily, the Court "might" agree to plenary review. See *id.* at 228 n.2. Plenary review would permit a court to set aside an agency's arbitrary substantive decision regardless of whether it met NEPA's procedural requirements. Some argue that as more calls for climate change mitigation reach the courts, judges may look to this footnote as an invitation to substantive review.

Likewise, courts have consistently held that NEPA does not provide a private right of action for violations of its provisions.<sup>175</sup> NEPA does not contain a citizen suit provision nor otherwise provides for any other private causes of action.<sup>176</sup> Plaintiffs must sue under the APA, which authorizes a suit where a person has suffered because of agency action or inaction.<sup>177</sup> The APA requires that the agency action/inaction complained of be a “final agency action.”<sup>178</sup> Given that the only agency action that can be compelled under the APA is one that is legally required under its enabling statute, any agency action that is considered discretionary is not readily challengeable.<sup>179</sup>

## B. Federal Land Policy and Management Act (FLPMA)<sup>180</sup>

Like NEPA, the FLPMA contains some explicit references to future generations. The FLPMA’s purpose is to protect lands held by the federal government. One of the stated goals of the statute is to ensure that the principles of “multiple use” and “sustained yield” govern the management of federal land.<sup>181</sup> The term “multiple use” is defined to ensure that public lands are utilized in a manner that “will best meet the present and future needs of the American people.”<sup>182</sup> In this way, the FLPMA sets out a statutory obligation for the federal government to consider the future needs of American citizens when managing federal land.

In *National Wildlife Federation v. Burford*, plaintiffs used this language to seek an injunction to prevent the government from withdrawing approximately 180 million acres of land from government control.<sup>183</sup> The district court had issued a preliminary injunction enjoining the government from lifting these restrictions.<sup>184</sup> The D.C. Court of Appeals upheld the district court’s reliance on the public interest purpose of the FLPMA in affirming the grant of injunctive relief.<sup>185</sup> The court stated that “denying the motion could ruin some of the country’s great environmental resources—and not just for now but for generations to come.”<sup>186</sup>

While the FLPMA’s language and the sentiments expressed in *Burford* would appear to protect future generations, enforcing the statute in such a manner has proven difficult. First, many advocates view the Bureau of Land Management (BLM), which enforces the FLPMA, as not interpreting the “multiple use” and “sustained yield” requirements as “environmentally friendly” as the statute does.<sup>187</sup> This is particularly true of federal grasslands, where the BLM weighs the interest of cattle production very heavily.<sup>188</sup> Second, because the FLPMA lacks a citizen suit provision and does not otherwise create a private right of action, the sole avenue for private enforcement of the FLPMA is through

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<sup>175</sup> *Muhly v. Espy*, 877 F. Supp. 294, 298 (W.D. Va. 1995).

<sup>176</sup> *See Forest Serv. Employees for Envtl. Ethics v. U.S. Forest Serv.*, 397 F. Supp. 2d 1241, 1247 (D. Mont. 2005).

<sup>177</sup> *Id.* (citing 5 U.S.C. § 702 (1966)).

<sup>178</sup> *Norton v. S. Utah Wilderness Alliance*, 542 U.S. 55, 61–62 (2004).

<sup>179</sup> *Id.* at 63.

<sup>180</sup> Federal Land Policy and Management Act of 1976 (FLPMA), 43 U.S.C. §§ 1701-1787 (1994).

<sup>181</sup> 43 U.S.C. § 1701(a)(7) (1976).

<sup>182</sup> *Id.* § 1702(c).

<sup>183</sup> *Nat’l Wildlife Fed’n v. Burford*, 835 F.2d 305 (D.C. Cir. 1987).

<sup>184</sup> *Id.* at 310.

<sup>185</sup> *Id.* at 326.

<sup>186</sup> *Id.*

<sup>187</sup> Parthenia Blessing Evans, *Multiple Use, Sustained Yield Planning on the Public Lands*, 53 U. COLO. L. REV. 411, 460 (1982) (the article is adapted from a speech given by Professor George Cameron Coggins).

<sup>188</sup> *Id.*

the APA.<sup>189</sup> Thus, a citizen challenging that the BLM did not apply certain environmental principles under the “multiple use” and “sustained yield” planning requirements would likely have a tough time bringing a viable claim under the APA; once the BLM has at least considered those principles, the courts afford almost absolute discretion to how the agency applied them.

### C. National Forest Management Act (NFMA)<sup>190</sup>

The NFMA is very similar to the FLMPA in that express language concerning future generations would appear to guide resource management actions. The statute requires that federal forests, like federal lands, are managed according to “multiple use and sustained yield” principles.<sup>191</sup> The Secretary of Agriculture is required to prepare a Renewable Resource Assessment of federal forest land that analyzes present and future uses; demand for, and supply of, the renewable resource;<sup>192</sup> and a specific analysis of the potential effects of global climate change on the renewable resources in the federal forests.<sup>193</sup> The Secretary is required to produce the assessment every ten years.<sup>194</sup> Assessments were produced in 1979, 1989, and 2000.<sup>195</sup> These reports document that global climate change is a possibility and that it will have impacts on the nation’s forests.<sup>196</sup> The assessments also try to discern future uses of the forest resources to determine how best to manage the forests to allow for the future use.<sup>197</sup> The NFMA requires the government to draft regulations for land management plans, which ensure that environmental conditions in the area of timber harvesting will not be “irreversibly damaged”<sup>198</sup> and that the lands can be “adequately restocked within five years after harvest.”<sup>199</sup>

Enforcement of the NFMA is like that of the FLMPA. There is no private cause of action or citizen suit provision.<sup>200</sup> Plaintiffs must sue under the APA, and are subject to the same requirements laid out in section A above.<sup>201</sup>

### D. Clean Water Act (CWA)<sup>202</sup>

The CWA contains no express language about future generations, harms, or interests.<sup>203</sup> The statute’s purpose is to prevent water pollution, and it seeks to achieve this goal by distributing permits that limit the amount of pollution an applicant can discharge into navigable waterways. Although there is no express protection of future generations, there is some implicit recognition of future interests in the statute. For instance, one provision of the CWA allows the

<sup>189</sup> Norton v. S. Utah Wilderness Alliance, 542 U.S. 55, 61–62 (2004). See *supra* section IV.B analysis of an APA action.

<sup>190</sup> National Forest Management Act of 1976 (NFMA), 16 U.S.C. §§ 1600–1687 (1994).

<sup>191</sup> 16 U.S.C. § 1600(3) (1976).

<sup>192</sup> *Id.* § 1601(a)(1).

<sup>193</sup> *Id.* § 1601(a)(5).

<sup>194</sup> *Id.* § 1601(a).

<sup>195</sup> USDA Forest Service, *The RPA Assessment: Past, Present, and Future*, Sept. 18, 2002, <http://www.fs.fed.us/pl/rpa/what.htm>.

<sup>196</sup> USDA Forest Service, *RPA Assessment of the Forest and Rangeland Situation, 1989*, <http://www.fs.fed.us/pl/rpa/assmt89.htm>; USDA Forest Service, *2000 RPA Assessment of the Forest and Range Lands*, <http://www.fs.fed.us/research/rpa/2000rpa/rpaasses.pdf>.

<sup>197</sup> *Id.*

<sup>198</sup> 16 U.S.C. § 1604(g)(3)(E)(i) (1976).

<sup>199</sup> *Id.* § 1604(g)(3)(E)(ii).

<sup>200</sup> Ecology Ctr., Inc. v. U.S. Forest Serv., 192 F.3d 922, 924–25 (9th Cir. 1999).

<sup>201</sup> See *supra* section IV.A.

<sup>202</sup> Clean Water Act (CWA), 33 U.S.C. §§ 1251–1387 (2000).

<sup>203</sup> See *id.*

government to designate a particular body of water an “Outstanding Natural Resource Water.”<sup>204</sup> This designation provides the maximum amount of protection that is available under the CWA for that particular body of water because it ensures that “no permanent degradation of water quality can occur” and therefore protects healthy watersheds for future generations.<sup>205</sup> This provision, however, is rarely used and is limited to “high quality waters,” which include waters in national parks, state parks, wildlife refuges, and waters of “exceptional recreational or ecological significance.”<sup>206</sup>

Another instance of where the CWA may implicitly protect future generations is when the EPA, under its CWA authority, promulgates industry-wide effluent limitations. In *Weyerhaeuser Co. v. Costle*, the D.C. Court of Appeals considered effluent limitations for pulp, paper, and paper-board mills promulgated by the EPA.<sup>207</sup> Some factories and mills that could not meet the effluent limitations and remain financially viable challenged them as improper under the statute.<sup>208</sup> The appellate court upheld the regulations, even though some of the regulated industries would shut down.<sup>209</sup> The court reasoned that Congress had determined that “the health and safety gains that achievement of the Act’s aspirations would bring to future generations will in some cases outweigh the economic dislocation it causes in the present generation.”<sup>210</sup> In this manner, the court recognized thirty years ago that the CWA implicitly protects future generations.

If the federal government fails to enforce the CWA, citizens have the ability to enforce the Act through its citizen suit provision.<sup>211</sup> A citizen may sue to enforce the CWA against a violator<sup>212</sup> or may sue the EPA for failure to enforce the CWA or for failure to promulgate a rule required by the CWA.<sup>213</sup>

#### **E. Resource Conservation and Recovery Act (RCRA)<sup>214</sup>**

RCRA’s protection of future generations is very similar to the CWA, since it also contains no express language protecting future generations but may implicitly protect future generations through its citizen suit provision. One problem is that RCRA’s regulatory structure is limited to the transportation and disposal of hazardous waste and never explicitly calls for a ban on production.<sup>215</sup> While there is a goal to “[minimize] the generation of hazardous waste and the land disposal of hazardous waste by encouraging process substitution, materials recovery, properly conducted recycling and reuse, and treatment,”<sup>216</sup> there is no express mandate; it is limited to minimization by encouragement. Likewise, RCRA declares it to be the “national policy of the United States that, wherever feasible, the generation of hazardous

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<sup>204</sup> 40 C.F.R. § 131.12(a)(3) (1998).

<sup>205</sup> Judith M. Brawer, *Antidegradation Policy and Outstanding National Resource Waters in the Northern Rocky Mountain States*, 20 PUB. LAND & RESOURCES L. REV. 13, 13, 29 (1999).

<sup>206</sup> *Id.* at 13–14.

<sup>207</sup> 590 F.2d 1011 (D.C. Cir. 1978).

<sup>208</sup> *Id.* at 1023.

<sup>209</sup> *Id.* at 1037.

<sup>210</sup> *Id.*

<sup>211</sup> See 33 U.S.C. § 1365 (1972).

<sup>212</sup> 33 U.S.C. § 1365(a)(1) (1972).

<sup>213</sup> 33 U.S.C. § 1365(a)(2) (1972).

<sup>214</sup> Resource Conservation and Recovery Act of 1976 (RCRA), 42 U.S.C. §§ 6901-7000 (2000).

<sup>215</sup> 42 U.S.C. § 6902 (1976) but 6902(b) declares it to be the “national policy” of the U.S. that, wherever feasible, the generation of hazardous waste is to be reduced or eliminated as expeditiously as possible. Waste nevertheless generated should be dealt with to minimize the present *and future* threat to human health and environment.

<sup>216</sup> 42 U.S.C. § 6902(a)(6) (1976).

waste is to be reduced or eliminated as expeditiously as possible,”<sup>217</sup> yet fails to establish mandatory guidelines to be implemented in the pursuit of such a policy.

However, RCRA may still implicitly protect future generations by combining the intent behind this declared national policy and its citizen suit provision. This provision allows citizens to sue to enforce RCRA when the government fails to enforce it.<sup>218</sup> This provision allows a citizen to sue anyone who has contributed to handling hazardous or solid waste that “may present an imminent and substantial endangerment to health or the environment.”<sup>219</sup> Many courts have given a broad interpretation to “imminent and substantial endangerment,” finding it when a landfill leaking hazardous chemicals posed “only threatened harm”<sup>220</sup> and when substantial contamination from an oil refinery and tank farm “threatened harm [which] may not be realized, if ever, for many years.”<sup>221</sup> Thus, the statute implicitly protects future generations because it allows citizens to sue for harms that have yet to occur but may occur in the future.

#### **F. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)<sup>222</sup>**

CERCLA, similar to the CWA and RCRA, contains no express language protecting future generations. However, its provisions may implicitly protect future generations. CERCLA mandates clean-up of certain hazardous waste sites to deal with the long-term effects of hazardous waste dumps.<sup>223</sup> The statute specifically states that remedial actions that can permanently and significantly reduce the dangerousness of hazardous wastes are to be preferred over other remedial actions.<sup>224</sup> Also, it states that the President is required to consider long-term harms, uncertainties, and maintenance costs when selecting remedial actions.<sup>225</sup> The statute originally lacked much specificity when dealing with remedy selection; thus, Congress enacted amendments in the 1980s to help guide the Environmental Protection Agency (EPA) in selecting remedies that were more protective of future generations’ health and environment.<sup>226</sup> The statutory definition of remedial action now requires that the remedial action selected needs to prevent or minimize harms to “present or future public health or welfare or the environment.”<sup>227</sup>

These provisions and definitions appear to implicitly protect future generations, taking their concerns into account when selecting remedies. However, many times, the EPA selects a remedy that does not necessarily eliminate the risk of harm, but instead, one that reduces proximity of people to the harm.<sup>228</sup> The EPA may require a fence or soil

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<sup>217</sup> 42 U.S.C. § 6902(b) (1976).

<sup>218</sup> See 42 U.S.C. § 6972 (1976).

<sup>219</sup> 42 U.S.C. § 6972(a)(1)(B) (1976).

<sup>220</sup> *Dague v. City of Burlington*, 935 F.2d 1343, 1356 (Cir. 1991) (rev’d on other grounds).

<sup>221</sup> *Wilson v. Amoco Corp.*, 989 F. Supp. 1159, 1174 (D. Wyo. 1998); cf. *Price v. U.S. Navy*, 39 F.3d 1011, 1019 (9th Cir. 1994) (also broadly interpreting “imminent and substantial endangerment” as requiring only “threatened or potential harm . . . not proof of actual harm,” but finding none when a concrete foundation sufficiently prevented migration of hazardous contaminants into a home, there was no threat of migration through ground or surface water or air, and the level of possible contamination was unclear).

<sup>222</sup> Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. §§ 9601-9675 (2000).

<sup>223</sup> Jeffrey Spear, *Remedy Selection Under CERCLA and Our Responsibilities to Future Generations*, 2 N.Y.U. ENVTL. L.J. 117, 119 (1993).

<sup>224</sup> 42 U.S.C. § 9621(b)(1) (1988).

<sup>225</sup> *Id.*

<sup>226</sup> See Spear, *supra* note 223, at 134.

<sup>227</sup> 42 U.S.C. § 9601(24) (1988).

<sup>228</sup> *Id.*

cover-up in order to prevent people from using the soil or area.<sup>229</sup> This does not actually remove the threat to future generations; it just minimizes the potential future use of the land.<sup>230</sup> Thus, in practice, CERCLA may not protect future generations as much as the statute allows.

If the government fails to enforce CERCLA, citizens may enforce the statute via a citizen suit provision. This provision allows a citizen to bring suit against any person who is violating the statute.<sup>231</sup> The statute also allows for a citizen to bring suit against the EPA for failure to enforce CERCLA.<sup>232</sup>

### G. Surface Mining Control and Reclamation Act (SMCRA)<sup>233</sup>

Similar to the previous statutes, SMCRA does not contain any express language protecting future generations but it may be interpreted to protect future generations implicitly. The statute has two main provisions, each dealing with a separate harm. Congress enacted the first provision to focus on past harms, by providing funds to reclaim and restore land and water resources adversely affected by past coal mining.<sup>234</sup> The second provision addresses present and future harms. The Seventh Circuit has concluded that this provision, Title V, was meant to force coal mine operators to control the environmental harm their operations may cause.<sup>235</sup> The court of appeals held that “Congress intended Title V to control coal mining’s present and future environmental harms.”<sup>236</sup> The sections in Title V include operation permit requirements that “[control] present and future adverse environmental impacts” so that future generations can benefit from its use.<sup>237</sup>

Where the government fails to enforce SMCRA, the statute allows for citizens to enforce it via a citizen suit provision.<sup>238</sup> The provision allows a citizen to bring suit against any person whose is alleged to have violated the statute.<sup>239</sup> The statute also allows for a citizen to sue the government to enforce its provisions where the government has failed to enforce it.<sup>240</sup>

### H. Clean Air Act (CAA)<sup>241</sup>

The original CAA contained no express language protecting future generations, but did contain language stating that the purpose of the statute was to protect the Nation’s air quality in order to “promote the public health and welfare and the productive capacity of its population.”<sup>242</sup> In 1990, however, Congress passed amendments as a result of the acid rain problem, and the amendment specifically noted that “current and future generations of Americans will be adversely

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<sup>229</sup> Spear, *supra* note 223 at 142–44.

<sup>230</sup> *Id.*

<sup>231</sup> 42 U.S.C. § 9659(a)(1) (1988).

<sup>232</sup> *Id.* § 9659(a)(2).

<sup>233</sup> Surface Mining Control and Reclamation Act of 1977 (SMCRA), 30 U.S.C. §§ 1201–1328 (1994).

<sup>234</sup> U.S. v. Tri-No Enters., 819 F.2d 154, 156 (7th Cir. 1987).

<sup>235</sup> *Id.* at 157.

<sup>236</sup> *Id.*

<sup>237</sup> U.S. v. Devil’s Hole, Inc., 747 F.2d 895, 898 (3rd Cir. 1984).

<sup>238</sup> 30 U.S.C. § 1270(a) (1977).

<sup>239</sup> *Id.* § 1270(a)(1).

<sup>240</sup> *Id.* § 1270(a)(2).

<sup>241</sup> Clean Air Act (CAA), 42 U.S.C. §§ 7401–7700 (2000).

<sup>242</sup> 42 U.S.C. § 7401(b)(1) (1955).

affected by delaying measures to remedy the problem.”<sup>243</sup> The CAA is structured so that the EPA first determines whether a certain pollutant emitted should be regulated, and once that is determined, the EPA must promulgate provisions to regulate that pollutant.

Where the government fails to enforce the CAA, citizens may do so through the citizen suit provision.<sup>244</sup> The individual can sue any violator of the CAA<sup>245</sup> or the administrator of the EPA where the EPA has failed to enforce the statute.<sup>246</sup> Recently, in *Massachusetts v. EPA*, the State of Massachusetts and others sued the EPA for failure to enforce the Clean Air Act.<sup>247</sup> The plaintiffs sought to force the EPA to begin regulating greenhouse gases as a result of its future harms resulting from global warming.<sup>248</sup> The Supreme Court held that the plaintiffs had standing to sue, that the CAA authorized the EPA to regulate greenhouse gases from new motor vehicles, and that in order to avoid regulating these pollutants, the agency must give a statutorily permissible purpose, which it had not previously done.<sup>249</sup> As of this writing, the EPA has not taken action to regulate GHG emissions, despite almost one year passing since the Court’s decision. On April 2, 2008, 18 states, led by California and including Vermont, sued the EPA to compel action.<sup>250</sup>

### I. The Endangered Species Act of 1973<sup>251</sup>

Through the Endangered Species Act (ESA), Congress acknowledged the “esthetic, ecological, educational, historical, recreational, and scientific value” of fish, wildlife, and plants to the Nation and its people.<sup>252</sup> The ESA declares it to be the policy of Congress that all federal agencies “shall seek to conserve endangered species and threatened species.”<sup>253</sup> While the ESA does not explicitly mention the interests of future generations, it implicitly protects such interests through the conservation language found throughout the Act: encouraging States to “develop and maintain conservation programs which meet national and international standards is a key to . . . safeguarding, for the benefit of all citizens, the Nation’s heritage in fish, wildlife, and plants.”<sup>254</sup>

Describing the ESA as “the most comprehensive legislation for the preservation of endangered species ever enacted by any nation,”<sup>255</sup> the Supreme Court noted that “[t]he plain intent of Congress in enacting this statute was to halt and reverse the trend toward species extinction, whatever the cost.”<sup>256</sup>

ESA protects only those species listed as endangered or threatened. An endangered species is one “in danger of extinction throughout all or a significant portion of its range”<sup>257</sup> while a threatened species is simply any species

<sup>243</sup> 42 U.S.C. § 7651(a)(5) (1990).

<sup>244</sup> 42 U.S.C. § 7604(a) (1970).

<sup>245</sup> *Id.* § 7604(a)(1).

<sup>246</sup> *Id.* § 7604(a)(2).

<sup>247</sup> *Massachusetts v. EPA*, 127 S. Ct. 1438 (2007).

<sup>248</sup> *Id.* at 1446.

<sup>249</sup> *Id.* at 1454, 1462-63.

<sup>250</sup> Petition for Writ of Mandamus to Compel Compliance with Mandate, *Massachusetts v. EPA*, No. 03-1361 (D.C. Cir. Apr. 2, 2008), available at [http://ag.ca.gov/cms\\_attachments/press/pdfs/n1540\\_mandamus\\_petition\\_april\\_1\\_final.pdf](http://ag.ca.gov/cms_attachments/press/pdfs/n1540_mandamus_petition_april_1_final.pdf).

<sup>251</sup> 16 U.S.C. §§ 1531–1544 (1973).

<sup>252</sup> *Id.* § 1531(a)(3).

<sup>253</sup> *Id.* § 1531(c)(1).

<sup>254</sup> *Id.* § 1531(a)(5).

<sup>255</sup> *Tennessee Valley Auth. v. Hill*, 437 U.S. 153, 180 (1978).

<sup>256</sup> *Id.* at 184.

<sup>257</sup> 16 U.S.C. § 1532(6).

“likely to become an endangered species within the foreseeable future.”<sup>258</sup> The Secretaries of Commerce and the Interior (depending on the species) have a statutory duty to list qualified species<sup>259</sup> and any “interested person” may petition them to list or de-list a species or designate a critical habitat.<sup>260</sup> Such “interested persons” have included the National Audubon Society, Defenders of Wildlife,<sup>261</sup> and the Center for Biological Diversity.<sup>262</sup> Five criteria must be considered:

1. the present or threatened destruction, modification, or curtailment of its habitat or range;
2. overutilization for commercial, recreational, scientific, or educational purposes;
3. disease or predation;
4. the inadequacy of existing regulatory mechanisms; or
5. other natural or manmade factors affecting its continued existence.<sup>263</sup>

The main purpose of listing a species as endangered or threatened is to “compel those changes needed to save these species from extinction.”<sup>264</sup>

Once a species is listed, the Secretary must designate that species’s “critical habitat.”<sup>265</sup> The ESA generally limits a “critical habitat” to the geographical area occupied by the species at the time of the listing where the “physical or biological features essential to the conservation of the species” can be found.<sup>266</sup> It should be noted, however, that the Secretary may exclude any area from the critical habitat if it is determined that the benefits of excluding the area outweigh those of including it, unless the failure to designate such an area will result in extinction.<sup>267</sup> After a listed species’s critical habitat is designated, it benefits from the conservation obligations and recovery plans outlined in the ESA.

All federal agencies must use their authority to further the purposes of the ESA by implementing conservation programs.<sup>268</sup> Additionally, the ESA mandates federal agencies to ensure 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” a critical habitat.<sup>269</sup> A federal agency must consult with the Secretary before taking any “agency action” if there is reason to believe an endangered or threatened species may be present in an area to be affected by such action.<sup>270</sup> As a result of this procedural consultation, similar to an EIS under NEPA, the Secretary can issue a written “no jeopardy” statement exempting the agency from penalty if it is determined

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<sup>258</sup> *Id.* § 1532(20).

<sup>259</sup> *Id.* § 1533(a)(1)-(2).

<sup>260</sup> *Id.* § 1533(b)(3)(A).

<sup>261</sup> Emergency Petition for a Rule to List the Red Knot as Endangered under the ESA (filed July 28, 2005), *available at* <http://www.delawareaudubon.org/action/redknotesapetition.pdf>.

<sup>262</sup> Petition to List the Polar Bear as a Threatened Species Under the ESA (filed Feb. 16, 2005), *available at* [http://www.biologicaldiversity.org/species/mammals/polar\\_bear/pdfs/15976\\_7338.pdf](http://www.biologicaldiversity.org/species/mammals/polar_bear/pdfs/15976_7338.pdf).

<sup>263</sup> 16 U.S.C. § 1533(a)(1)(A)-(E).

<sup>264</sup> *Oregon Natural Res. Council v. Daley*, 6 F. Supp. 2d 1139, 1152 (D. Or. 1998).

<sup>265</sup> 16 U.S.C. § 1533(a)(3)(A)(i).

<sup>266</sup> *Id.* § 1532(5)(A)(i).

<sup>267</sup> *Id.* § 1533(b)(2).

<sup>268</sup> *Id.* § 1536(a)(1).

<sup>269</sup> *Id.* § 1536(a)(2).

<sup>270</sup> *Id.* § 1536(a)(3).

that the action will not jeopardize the species's continued existence or adversely modify its habitat, or that "reasonable and prudent" measures will be taken to avoid jeopardy.<sup>271</sup>

Congress declared that the "best scientific and commercial data available" should be used when making listing decisions,<sup>272</sup> designating critical habitat,<sup>273</sup> and in agency action consultations.<sup>274</sup> Courts have afforded federal agencies "wide discretion" to determine what data is the best available.<sup>275</sup> However, deference is not owed when "the agency has completely failed to address some factor consideration of which was essential to [making an] informed decision."<sup>276</sup> This caveat will become increasingly important in future litigation as courts have declared no jeopardy statements invalid because the "agency failed to utilize the best available scientific information by not addressing the ... issue of climate change."<sup>277</sup>

The ESA also commands federal agencies to develop recovery plans for the conservation and survival of listed species, unless it is determined that such a plan would not promote the conservation of the species.<sup>278</sup> Some courts have claimed that the recovery plans are discretionary and for "guidance purposes only."<sup>279</sup> However, at least one court has determined that the ESA "imposes a clear duty on the agency to fulfill the statutory command."<sup>280</sup> Nonetheless, a recovery plan is viewed as simply a guideline for future goals, not a mandate for any particular action.<sup>281</sup>

By implementing conservation and recovery plans to protect imperiled species and their critical habitats, the ESA can be used to aggressively combat climate change. The statute's citizen suit provision, which allows any citizen to file a civil lawsuit against "any person, including the United States and any other governmental instrumentality or agency" who allegedly violated any provision of the ESA,<sup>282</sup> is often used to provoke these plans. A suit may also be brought against federal agencies to compel compliance with the ESA or in response to an alleged failure to perform a nondiscretionary act or duty required by the ESA.<sup>283</sup>

The number of recovery plans that list global warming as a damaging factor went from zero in 1990 to 141 in 2007.<sup>284</sup>

## V. A Selection of State Environmental Statutes

In light of federal foot dragging to reduce GHG emissions, states have sought to fill the void. For example, California's Global Warming Solutions Act of 2006<sup>285</sup> and Massachusetts's recent adoption of a cap-and-trade regulatory

<sup>271</sup> 16 U.S.C. § 1536(b)(4).

<sup>272</sup> *Id.* § 1533(b)(1)(A).

<sup>273</sup> *Id.* § 1533(b)(2).

<sup>274</sup> *Id.* § 1536(a)(2).

<sup>275</sup> *Natural Res. Def. Council v. Kempthorne*, 506 F. Supp. 2d 322, 359 (E.D. Cal. 2007).

<sup>276</sup> *Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv.*, 422 F.3d 782, 798 (9th Cir. 2005).

<sup>277</sup> *Kempthorne*, 506 F. Supp. 2d at 388; *see also Pac. Coast Fed'n of Fishermen's Ass'ns v. Gutierrez*, \_\_\_ F. Supp. 2d \_\_\_, 2008 WL 2223070 (E.D. Cal. 2008) (declaring the biological no-jeopardy opinion to be invalid due to the National Marine Fisheries Service's "total failure to address, adequately explain, and analyze the effects of global climate change on the species.").

<sup>278</sup> 16 U.S.C. § 1533(f)(1).

<sup>279</sup> *Fund for Animals v. Rice*, 85 F.3d 535, 547 (11th Cir. 1996).

<sup>280</sup> *Fund for Animals v. Babbitt*, 903 F. Supp. 96, 107 (D.D.C. 1995).

<sup>281</sup> *Oregon Natural Res. Council v. Turner*, 863 F. Supp. 1277, 1284 (D. Or. 1994).

<sup>282</sup> 16 U.S.C. § 1540(g)(1)(A).

<sup>283</sup> *Id.* § 1540(g)(1)(B)-(C).

<sup>284</sup> Mark Clayton, *New Tool to Fight Global Warming: Endangered Species Act?*, CHRISTIAN SCIENCE MONITOR, Sept. 7, 2007, available at <http://www.csmonitor.com/2007/0907/p03s03-usgn.html>.

<sup>285</sup> 2006 Cal. Legis. Serv. Ch. 488 (A.B. 32).

regime<sup>286</sup> represent significant efforts to reduce emissions and stem the impacts of climate change. In addition, state environmental disclosure statutes—so called “little NEPAs” or state environmental policy acts (SEPAs)<sup>287</sup>—are quickly becoming the new laboratory for combating climate change. Little NEPAs often require agencies not only to discuss, but also to mitigate environmental harms.<sup>288</sup> For example, California’s Environmental Quality Act (CEQA) explicitly requires agencies to “mitigate or avoid the significant environmental effects . . . as identified in the completed environmental impact report.”<sup>289</sup> These dual procedural and substantive aspects of little NEPAs make them potentially attractive weapons in combating climate change.<sup>290</sup> For example, CEQA has just recently emerged from a flurry of climate change litigation in California. In 2006, the Natural Resources Defense Council filed a claim against the California Reclamation Board for failing to account for a residential development’s impact on climate change in its environmental impact report (EIR).<sup>291</sup> One year later, the Center for Biological Diversity filed a claim against San Bernardino County alleging that the county should have assessed the GHG emissions in the EIR for a commercial compost facility.<sup>292</sup> These cases are still pending and could yield interesting results for pursuing climate change litigation in California and, perhaps, nationally.

Among the states with SEPAs, only California, Connecticut, Indiana, Maryland, Minnesota, Montana, North Carolina, Washington, and Puerto Rico explicitly mention a state obligation to manage natural resources for

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<sup>286</sup> 310 MASS. CODE REGS. 7.00 (2007); 310 MASS. CODE REGS. 7.29 (2007).

<sup>287</sup> They are so called because they are significantly modeled after NEPA. David Sive & Mark A. Chertok, *Environmental Impact Assessment: NEPA and Related Requirements* (A.L.I.-A.B.A. Continuing Legal Education), Dec. 2007, at 351. Following NEPA’s passage, seventeen states, Puerto Rico, and the District of Columbia adopted SEPAs throughout the 1970s. These include Arkansas, California, Connecticut, Florida, Georgia, Hawaii, Indiana, Maryland, Massachusetts, Minnesota, Montana, New York, North Carolina, South Dakota, Virginia, Washington, and Wisconsin. Nicholas C. Yost, *NEPA Deskbook 44* (The Environmental Law Reporter, 3d ed. 2003); *Growing Smart Legislative Guidebook: Model Statutes for Planning and the Management of Change 1183-85* (Am. Planning Ass’n, Stuart Meck ed., 2002), available at [http://www.huduser.org/Publications/pdf/growingsmart\\_guide.pdf](http://www.huduser.org/Publications/pdf/growingsmart_guide.pdf).

<sup>288</sup> See, e.g., MINN. STAT. ANN. § 116D.04(6) (stating that “[n]o state action significantly affecting the quality of the environment shall be allowed... so long as there is a feasible and prudent alternative consistent with the reasonable requirements of the public health, safety, and welfare and the state’s paramount concern for the protection of its air, water, land and other natural resources from pollution, impairment, or destruction.”); N.Y. ENVTL. CONSERV. LAW § 8-0109(8) (stating that “[a]gencies shall use all practicable means to realize the policies and goals set forth in this article, and shall act and choose alternatives which, consistent with social, economic and other essential considerations, to the maximum extent practicable, minimize or avoid adverse environmental effects....”).

<sup>289</sup> CAL. PUB. RES. CODE § 21081(a) (West 2007).

<sup>290</sup> Unlike NEPA, state statutes generally “screen out environmentally unsound proposals by modifying them to reduce environmental impacts or by deterring agencies and developers from proposing projects which would be environmentally unsound or controversial.” Langdon Marsh, *Symposium on the New York State Environmental Quality Review Act: Introduction—SEQRA’s Scope and Objectives*, 46 ALB. L. REV. 1097, 1113 (1982).

<sup>291</sup> *Natural Res. Def. Council v. Reclamation Bd.*, No. 06CS01228 (Cal. Sup. Ct. filed Aug. 18, 2006); Tony Held et al., *Climate Change Focus Group, Addressing Climate Change in NEPA and CEQA Documents 20* (Aug. 2007), <http://www.climatechangeocusgroup.com/docs/cc-whitepaper.pdf> (last visited July 22, 2008).

<sup>292</sup> *Ctr. for Biological Diversity v. San Bernardino County*, No. 07-00295 (Cal. Sup. Ct. filed Apr. 11, 2007); Tony Held et al., *Climate Change Focus Group, Addressing Climate Change in NEPA and CEQA Documents 19* (Aug. 2007), <http://www.climatechangeocusgroup.com/docs/cc-whitepaper.pdf> (last visited July 22, 2008); see also discussion of *California v. San Bernardino County* *infra* pp. 76–78, Section V.C.; *General Motors Corp. v. California Air Res. Bd.*, No. 05-02787 (Cal. Sup. Ct. filed Sept. 2, 2005) (pending litigation contending that the adoption of new GHG standards did not comply with CEQA and would slow the rate of retirement for older, higher-emission vehicles.); *Ctr. for Biological Diversity vs. City of Banning*, No. RIC460967 (Cal. Sup. Ct. filed Nov. 21, 2006) (pending litigation contending that the EIR for the Black Bench residential development ignored GHG emissions.); *Ctr. for Biological Diversity and Sierra Club v. City of Desert Hot Springs*, No. R1C464585 (Cal. Sup. Ct. filed Jan. 24, 2007) (pending litigation contending that a new housing development’s EIR failed to account for GHG emissions and climate change.); *Ctr. for Biological Diversity v. City of Perris*, No. RIC477632 (Cal. Super. Ct. filed Aug. 9, 2007) (pending litigation contending that the EIR failed to analyze a commercial development’s GHG impact or energy needs.).

future generations<sup>293</sup> According to Washington's SEPA, "[i]t is the policy of Washington to use all practicable means and measures to "(a) foster and promote the general welfare; (b) create and maintain conditions under which man and nature can exist in productive harmony; and (c) fulfill the social, economic, and other requirements of present and future generations of Washington citizens."<sup>294</sup> CEQA contains repeated references to future generations via the clause "[n]ow and in the future"<sup>295</sup> and in the preamble goal to "[c]reate and maintain conditions under which man and nature can exist in productive harmony to fulfill the social and economic requirements of present and future generations."<sup>296</sup>

Massachusetts, Washington, and California are using their little NEPAs to lead the charge to regulate GHG emissions, and merit more detailed scrutiny.

### A. Massachusetts

In April, 2007, Massachusetts became the first state to adopt an official policy requiring state agencies and project developers to assess GHG emissions under the Massachusetts Environmental Policy Act (MEPA).<sup>297</sup> This GHG policy requires developers to mitigate, as well as assess, emissions under MEPA.<sup>298</sup> The mitigation provision is where the rubber will meet the road. Although the policy does not require hard limits on GHG emissions, requiring mitigation as an element of environmental impact analysis is a clarion call to project developers about the state's climate change priorities. The true impact of MEPA's GHG policy remains to be seen, for thus far, developers have not tested the policy's bounds.

MEPA requires an Environmental Impact Report (EIR) for all projects proposed or funded by a state agency, as well as the following private development proposals: (1) projects which require a state air permit; (2) office projects generating 3,000 or more vehicle trips per day; (3) mixed-use projects with 25% office space generating 6,000 or more vehicle trips per day; and (4) other private projects generating 10,000 vehicle trips or more per day.<sup>299</sup> If a project is subject to MEPA, then its proponent must first quantify the potential annual GHG emissions from the project and report this amount in the EIR.<sup>300</sup> After calculating the GHG emissions for the proposed project, project proponents must

<sup>293</sup> See, e.g., CAL. PUB. RES. CODE §§ 21000(a), 21001(a), 21001(e)-(g) (California), CONN. GEN. STAT. §22a-1(a)(b)(1) (Connecticut), IND. CODE ANN. §13-12-4-4(1) (Indiana), MD. NAT. RES. CODE ANN. §1-302(c) (Maryland), MINN. STAT. ANN. §§116D.02(1), 116D.02(2)(1) (Minnesota), MONT. CODE ANN. §§75-1-103(1), 75-1-103(2)(a) (Montana), N.C. Gen. Stat. §113A-3 (North Carolina), WASH. REV. CODE §§43.21C.020(1)(c), 43.21C.020(1)(c)2(a) (Washington), and P.R.LAWS ANN. TIT. 12, §§1123(a), 1123(a)b(1) (Puerto Rico).

<sup>294</sup> WASH. REV. CODE § 43.21C.020 (2007).

<sup>295</sup> CAL. PUB. RES. CODE § 21000(a) (West 2007); id. § 21001(a).

<sup>296</sup> Id. § 21001(e).

<sup>297</sup> David A. Gold & Miles H. Imwalle, *Accounting for Climate Change in Environmental Review Documents*, 39 TRENDS: ABA SECTION OF ENVIRONMENT, ENERGY, AND RESOURCES NEWSLETTER 8, 9 (Jan./Feb. 2008).

<sup>298</sup> MEPA also requires that proponents consider a project alternative in the EIR (environmental impact report, like an environmental impact statement under NEPA) in which the proponent must identify and describe sources of, and propose measures to avoid, minimize, or mitigate, project-related GHG emissions. Massachusetts Executive Office of Energy and Environmental Affairs, MEPA Greenhouse Gas Emissions Policy and Protocol (Oct. 19, 2007)[hereinafter MEPA Policy & Protocol], available at <http://www.mass.gov/envir/mepa/pdffiles/misc/GHG%20Policy%20FINAL.pdf>.

<sup>299</sup> Dustin T. Till, *Assessing Climate Change—Trends Under State Environmental Policy Acts and the National Environmental Policy Act*, Environmental Impact Assessment Committee Newsletter (ABA Section of Env't., Energy, & Res.) Nov. 2007 at 3. If the project is proposed after October 31, 2007 and falls within one of the above criteria, the GHG policy applies. If the agency or developer proposed the project before October 31, 2007, the Office of Energy and Environmental Affairs (EEA) will make a case by case determination of the policy's applicability.

<sup>300</sup> Although the focus is on carbon dioxide emissions, the Kyoto Protocol's five other GHGs—methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride—must also be included. Project proponents must assess these GHGs from 1) direct emissions from stationary sources, like boilers, heaters, ovens, or furnaces (including periodic sources like emergency

then calculate the GHG emissions reductions associated with project alternatives. Proponents are expected to compare the baseline emissions from each alternative and explain why the alternatives have been rejected.

Although no stringent GHG reductions are explicitly stated in the policy, the project proponent is required to commit to some form of emission reduction measures.<sup>301</sup> While direct mitigation at the project site is preferred by the Office of Energy and Environmental Affairs (EEA), the EEA will consider off-site measures.<sup>302</sup> Additionally, the EEA will consider, on a case-by-case basis, requests to opt out of this quantification analysis where a proponent commits in advance to exceptional measures.<sup>303</sup> Because this provision has yet to be enforced, it is unclear what constitutes an exceptional measure.

## B. Washington

While Massachusetts requires the quantification, assessment, and ultimate mitigation of GHGs, King County, Washington only requires state agencies to consider climate change impacts more broadly under Washington's SEPA. Ron Sims, the King County Executive, issued an executive order requiring that "climate impacts,<sup>304</sup> including but not limited to those pertaining to greenhouse gasses, be appropriately identified and evaluated when such Departments are acting as the lead agency in reviewing the environmental impacts of private and public proposals pursuant to the State Environmental Policy Act."<sup>305</sup>

Under Washington's SEPA, an environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment.<sup>306</sup> In order to determine such probability, the proponent first completes a SEPA checklist containing questions on the proposal's air emissions. With Sims' executive order, both direct and indirect greenhouse gas emissions are added to that list for King County. This includes all GHG emissions created over the lifespan of the project: emissions associated with obtaining construction materials, emissions

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generators); 2) indirect emissions from energy consumption, such as heating, cooling, electricity, and/or steam, used at a project site; and 3) indirect emissions from transportation sources used by employees, vendors, and customers. Adam P. Kahn, Seth D. Jaffe, & Amy E. Boyd, *Massachusetts Requires Developers to Assess—and Mitigate—Greenhouse Gas Emissions Under MEPA*, Environmental Alert (Foley Hoag LLP), Oct. 25, 2007, available at [http://www.foleyhoag.com/NewsCenter/Publications/Alerts/Environmental/Environmental\\_Alert-102507.aspx?ref=1](http://www.foleyhoag.com/NewsCenter/Publications/Alerts/Environmental/Environmental_Alert-102507.aspx?ref=1).

<sup>301</sup> MEPA Policy & Protocol, *supra* note 298.

<sup>302</sup> *Id.* at 7. The policy contains an appendix with over fifty suggested mitigation measures. The following are a few examples: minimize building footprint; minimize energy use through building orientation; construct green roofs; use efficient, directed exterior lighting; use energy efficiency measures such as energy star-rated appliance; purchase alternative fuel and/or fuel efficient vehicles for fleet; and provide new transit service or support extension/expansion of existing transit (buses, trains, shuttles, water transportation). *Id.* at 9.

<sup>303</sup> *Id.* at 7.

<sup>304</sup> But note that one of the open questions is whether "upstream impacts," "mid-stream impacts," or "downstream impacts" should be taken into account. Steven Jones, *King County (WA) First in the Nation to Require Climate Change Impacts to be Considered During Environmental Review of New Projects*, Martin Law Group, Aug. 1, 2007, available at <http://www.martenlaw.com/news/?20070801-climate-sepa-review>.

<sup>305</sup> Ron Sims, Executive Order on the Evaluation of Climate Change Impacts through the State Environmental Policy Act, June 27, 2007, available at <http://www.metrokc.gov/exec/news/2007/pdf/climateimpacts.pdf>.

<sup>306</sup> This SEPA trigger and the resulting consideration by state agencies of GHGs contained in the SEPA checklist is much broader than the criteria triggering a MEPA GHG analysis. This broad scope in Washington has raised a number of concerns within the building community. *Supra* note 304.

from fuel used during construction, emissions from energy consumed during a building's operation, and emissions produced during the transportation of a building's occupants.<sup>307</sup>

While GHG mitigation measures currently do not exist under Washington's SEPA, emission thresholds and mitigation requirements are currently being investigated under King County's Comprehensive Plan, which was scheduled to be released later in 2008.<sup>308</sup> Based on the report's recommendations, mitigation may become an element. While the County is currently only seeking information, no one doubts that the ultimate purpose of the policy is to develop thresholds and regulatory limits for new developments. It is largely believed that mandatory reductions will follow from baseline calculations of GHG emissions.<sup>309</sup>

### C. California

Massachusetts and King County, Washington, are the only jurisdictions which explicitly require GHG assessments in their environmental review documents. But, a swell of litigation is currently underway in California seeking to determine when and how project proponents must address climate change under CEQA.<sup>310</sup> CEQA cases raise two principal issues: (1) when must project proponents quantify GHG emissions and incorporate measures for reducing them; and (2) when must project proponents assess the impacts of their proposals in light of environmental changes associated with climate change.<sup>311</sup> CEQA requires an agency to analyze a project's "potentially significant impacts" on the environment prior to approving it, as well as to adopt feasible mitigation measures to minimize significant impacts.<sup>312</sup>

California's Attorney General, Jerry Brown, has been crusading against state agencies that do not adequately take climate change into account in their environmental impact reviews (EIR). All of the current climate change CEQA cases present more or less the same facts: the Attorney General and/or environmental and community groups challenge the sufficiency of the environmental review documents based on either no or inadequate discussion of climate change and GHG emissions. Most of these cases are currently pending in court or have settled.

The most notable CEQA climate change case, brought against San Bernardino County, settled in August, 2007.<sup>313</sup> San Bernardino is the largest county in the contiguous forty-eight states and has one of the fastest growing population rates.<sup>314</sup> The Attorney General alleged that the county's EIR was legally inadequate for failing to account for climate change impacts.<sup>315</sup> The settlement required the county to prepare the following by early 2010: (1) an inventory

<sup>307</sup> King County Department of Development and Environmental Services SEPA GHG Emissions Worksheet, *available at* <http://www.metrokc.gov/ddes/forms/SEPA-GHG-EmissionsWorksheet-Bulletin26.pdf>.

<sup>308</sup> Ron Sims, *King County Executive, Sims Adds Greenhouse Gas Pollution to Project Environmental Review*, News Release, June 28, 2007, *available at* <http://www.metrokc.gov/exec/news/2007/0628climate.aspx>.

<sup>309</sup> Jones, *supra* note 304.

<sup>310</sup> Till, *supra* note 299, at 3; *see also* Madeline Stone, *Current Status of Climate Change Analysis Under CEQA*, Environmental Impact Assessment Committee Newsletter Vol. 3, No. 1, Nov. 2007, at 9.

<sup>311</sup> Till, *supra* note 299, at 3-4.

<sup>312</sup> Gold & Imwalle, *supra* note 297, at 8.

<sup>313</sup> The settlement agreement is *available at* [http://ag.ca.gov/cms\\_pdfs/press/2007-08-21\\_San\\_Bernardino\\_settlement\\_agreement.pdf](http://ag.ca.gov/cms_pdfs/press/2007-08-21_San_Bernardino_settlement_agreement.pdf).

<sup>314</sup> Petition for Writ of Mandate, *California v. County of San Bernardino*, No. CIV-SS-07-00329 (Cal. Super. Ct. of San Bernardino County, filed Apr. 13, 2007), *available at* [http://ag.ca.gov/globalwarming/pdf/SanBernardino\\_complaint.pdf](http://ag.ca.gov/globalwarming/pdf/SanBernardino_complaint.pdf).

<sup>315</sup> The Attorney General's draft comments raised the following issues: (1) the General Plan of San Bernardino envisioned significant population growth, but it and the draft EIR failed to analyze the related increase in GHG emissions; (2) AB 32 recognizes California's vulnerability to climate change and requires that action must be taken to address it; (3) CEQA requires an examination of a project's impact on climate change and the adoption of feasible mitigation measures; and (4) such analysis can -and must- be done today even absent established thresholds of significance or regulations under AB 32. *Id.*; *see also* Gold & Imwalle, *supra* note 297, at 8.

of GHG sources currently existing in the county; (2) an inventory of current GHG emissions, as well as those in 1990 and projected for 2020; and (3) a plan to reduce GHG emissions attributable to land use decisions to a target level by adopting feasible GHG emission-reduction measures.<sup>316</sup> Although far from constituting judicial precedent, this settlement has nonetheless caused GHG emissions and climate change to play a much larger role in EIRs. California developers are now discussing climate change and GHGs to save project time by averting a court challenge.<sup>317</sup>

## VI. Common law doctrines

Given the lack of robust enforcement of federal and state environmental laws in the face of climate change harms, environmental advocates have returned to the common law. Currently, the climate change litigation making its way through federal and state courts includes a handful of suits based on public nuisance.<sup>318</sup> While none have been successful in court to date, having been dismissed on procedural grounds, their very being has drawn attention to the judiciary's role in applying long-standing common law doctrines in the climate change context.

The current common law litigation does not explicitly address ideas of intergenerational equity. But looking beyond these suits, one sees fundamental conceptions of U.S. property and tort law that provide analytical frameworks for addressing legal interests spread over time. Using the time-tested tools of corresponding rights and duties to create intergenerational accountability, the U.S. property law of waste and trusts, as well as the tort law of public nuisance, provide examples of how intergenerational norms have been legally enforced.

### A. The Property Law of Waste

As a model for thinking about accountability between present and future users of property, the doctrine of waste holds much appeal. It constrains what a person who currently possesses property can do, so as to not hurt the interests of future property holders. Waste can result from both affirmative (actively causing the waste) and passive (letting the land go to waste) activity. Cutting down trees before they reach full lumber value is an example of affirmative waste, while leaving them to rot illustrates passive waste. Determining waste turns on whether an action devalues the property, regardless of intent.

To bring a waste action, the plaintiff must have a future interest in the property at issue. General categories of future interests include remainder, reverter, and executory interest. A remainder is "a remnant of an estate in lands or tenements, expectant upon a particular estate created together with the same at one time."<sup>319</sup> Remainders must be created

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<sup>316</sup> Settlement Agreement, *California v. San Bernardino*, No. Civ-SS-07-00329 (Super. Ct. Aug. 28, 2007), available at [http://ag.ca.gov/cms\\_pdfs/press/2007-08-21\\_San\\_Bernardino\\_settlement\\_agreement.pdf](http://ag.ca.gov/cms_pdfs/press/2007-08-21_San_Bernardino_settlement_agreement.pdf); see also Gold & Imwalle, *supra* note 297, at 9.

<sup>317</sup> Concerns over project delays in light of CEQA climate change challenges caused a number of Republicans in the state Senate to boycott voting on the state budget until CEQA was amended to prohibit such challenges. A compromise bill was eventually agreed to. See Senate Bill No. 97 (passed August 21, 2007), available at [http://www.opr.ca.gov/ceqa/pdfs/SB\\_97\\_bill\\_20070824\\_chaptered.pdf](http://www.opr.ca.gov/ceqa/pdfs/SB_97_bill_20070824_chaptered.pdf). SB-97 provides that failure to adequately assess GHG emissions does not create a CEQA cause of action for: (1) transportation projects funded under California's Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006 or (2) projects funded under California's Disaster Preparedness and Flood Prevention Bond Act of 2006. SB-97 also requires the State to develop guidelines by 2009 on what parties must do to assess and mitigate GHG emissions under CEQA.

<sup>318</sup> See *Connecticut v. Am. Elec. Power Co. (AEP)*, 406 F. Supp. 2d 265 (S.D.N.Y. 2005); *California v. General Motors Corporation*, \_\_\_ F. Supp. 2d \_\_\_, No. C06-05755 MJJ, 2007 WL 2726871 (N.D. Cal. 2007); *Comer v. Murphy Oil*, \_\_\_ F. Supp. 2d \_\_\_, No. 1:05CV436LTDHRW, 2006 WL 1066645 (S.D. Miss. 2007); Complaint for Damages and Demand for Jury Trial, *Native Village of Kivalina v. ExxonMobil*, No. 4:2008CV01138 (N.D. Cal., filed Feb. 26, 2008), available at <http://www.climatelaw.org/cases/country/us/kivalina/Kivalina%20Complaint.pdf>.

<sup>319</sup> 1 JOHN A. BORRON, JR., *THE LAW OF FUTURE INTERESTS* §102 (3d ed. 2002).

by express limitation in the same instrument that creates the preceding estate.<sup>320</sup> There can also be no remainder after a fee simple.<sup>321</sup> This aspect of a remainder is important when considering whether future generations could assert that they have a remainder. Even though the U.S. government did own most of the land at one time or another, it granted the land in fee simple to private individuals, with no conditions. Thus, any legally recognizable interest in land that a future generation might hold does not fit literally into the remainder category.

Two other categories of future interests, executory and reverter, have the same kind of limited application to future generations. A person holding an executory interest will take if the preceding estate is cut short by a condition subsequent. Given this tenuous position, courts limit an executory interest holder's suit for waste to an injunction and are generally not favorable to them. Thus while it's conceivable that a future generation might be in a position to hold an executory interest, the courts' general disfavor of this class of future interests bodes ill for extending this common law property doctrine effectively to benefit future generations.

Likewise, the future interest of reversion holds little promise for assuring future generation rights. A reversion is "the residue of an estate left in the grantor to commence in possession after the determination of some particular estate granted out by him."<sup>322</sup> In this way, the grantor retains a vested interest in the estate since it will come back after termination of the interest given. The courts have recognized that reversion holders may sue for waste because they are certain to take the estate property. Again, as with remainders, future generations cannot claim a reversion interest because they cannot be a grantor.

A waste action is thus not a perfect legal fit for protecting future generations' rights. The initial question is about the property at issue. Future generation litigants seeking to remedy climate change harms will argue a property interest in water, land, and air. Future interests, however, can only exist in specific property when the grantor creates that interest. Absent a clear directive that the property holder intends to give an enforceable right in air, land, or water to future generations, a waste action will fail.

Fundamentally, future generations do not fit neatly into one of the future interest categories because a waste action is less of a recognition of future interest holders' rights and more of a recognition of present grantors' rights. Courts step in to enforce the conditions that the grantor has placed on the land and to ensure that one of the grantees does not ruin the land for the next holder. In this manner, U.S. property law recognizes that the grantor intended to leave something of value to the future interest holder and that the courts should support that intent.

Without having a legally recognizable interest, future generations cannot use the law of waste to enforce a property right against present generations for a planet unharmed by climate change. And given that courts have fought extending waste action rights to more tenuous future interests, it is unlikely they would be willing to entertain a future generation waste action.

But moving outside of a strict legal world, one can readily see the power of this legal concept as a metaphor for future generations' vested interest in "unwasted" air, water, and land. Conceptually, there will always be a future generation to inherit the earth and thus a previous generation will always have nothing more than a life estate in the earth. In this sense, waste provides a powerful metaphor that might serve as a framing device for policymakers in the legislative and executive branches of federal and state government. At its core, the doctrine of waste provides an example of how the judicial branch, via its development of the common law, has chosen to value future interests and enforce them against present interests.

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<sup>320</sup> *Id.* § 103.

<sup>321</sup> *Id.*

<sup>322</sup> *Id.* § 81, at 61.

## B. The Property Law of Trusts

As with the legal framework of waste, trust law appears an apt vehicle for recognizing the climate change rights of future generations because its historical roots are grounded in the basic task of caring for property in the present so that someone may enjoy it in the future. Some have called the development of the trust concept “the greatest and most distinctive achievement performed by Englishmen in the field of jurisprudence.”<sup>323</sup> This is so because the trust idea cleverly divides ownership so that the legal title is held by one party, the trustee, and the equitable title is held by a separate party, the beneficiary.<sup>324</sup> A trust creates two owners of property, with one owner, the trustee, owing a duty to the other, the beneficiary, to manage the property according to trust principles. These operating principles are established by the settlor, the party that creates the trust, who names both the beneficiary and trustee.

The dual ownership structure that now defines trusts first developed as an outgrowth of the separate courts of law and equity in England.<sup>325</sup> Because courts of equity settled disputes by imposing duties on defendants rather than creating rights in plaintiffs, equitable decrees would sometimes compel a defendant to exercise his property rights for the benefit of a successful plaintiff.<sup>326</sup> Although courts of equity could not impose legal transfer of title, they added a feature to their decrees to give successful plaintiffs in equity “an interest in the [defendant’s] property and . . . protection in the enjoyment of that interest.”<sup>327</sup> Property subject to such an equitable decree resulted in a two-tiered ownership structure whereby the legal title holder’s actions were governed by the interests of the equitable owner.

In the United States, a trust is presently defined as a relationship 1) of a fiduciary character, 2) with respect to property, 3) that involves the existence of equitable duties imposed on the holder of the property title for the benefit of another; and 4) that was intentionally created.<sup>328</sup> The importance of the first three characteristics is that they reveal that all trusts are bilateral relationships governed by the rules of fiduciary duties.

As a relationship, a trust is more than a duty owed by the trustee to the beneficiary; it is also a set of “rights, privileges, powers and immunities which the beneficiary has against the trustee and the rest of the world.”<sup>329</sup> The scope of the relationship is defined by the property held in trust; the trustee-beneficiary relationship is not a personal one and instead centers on the duties of the trustee to manage the property for the beneficiary’s benefit. Well-established principles of fiduciary relationships govern all trustees’ actions, regardless of the specific terms of an individual trust. On the trustee side of the relationship, these include preventing fiduciaries from delegating performance of their duties to third parties and from profiting at the beneficiary’s expense. On the beneficiary side, these include having the right to ask courts to set aside transactions that are unfair to them.<sup>330</sup> On top of the general fiduciary structure, a unique set of legally-binding terms established by the settlor governs each trust relationship. A settlor has broad latitude in determining the duties, powers, and rights contained in a trust, and all trust provisions that are not “counter to any rule or policy of the law . . . are valid and enforceable.”<sup>331</sup>

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<sup>323</sup> A. SCOTT, ABRIDGMENT OF THE LAW OF TRUSTS § 1, at 3 (Little, Brown and Co. 1960).

<sup>324</sup> *Id.* at 4–5.

<sup>325</sup> *Id.* at 4.

<sup>326</sup> *Id.*

<sup>327</sup> *Id.*

<sup>328</sup> *Id.* § 2.3, at 24 (citing the Restatement of Trusts definition of an express trust).

<sup>329</sup> *Id.* § 2.4, at 24.

<sup>330</sup> *Id.* § 2.5, at 24.

<sup>331</sup> *Id.* § 4, at 27.

## 1. Natural resources trusts

In the last few decades, governments in the U.S. and elsewhere have used a legal structure similar to a private trust to manage natural resource revenues for the benefit of the entire community. The main benefits of using a trust framework for legislative action are (1) the trust is a legal tool already in existence, with a well-established set of enforceable legal obligations and rights; (2) the purpose of any trust is to ensure that a resource will be protected into the future for the sake of a beneficiary; and (3) those creating the trust have extremely broad latitude in establishing the terms of a trust, which terms bind the behavior of the trustee. Each individual trust has specific goals and objectives, but they all reflect an understanding that natural resources are a finite commodity. Knowing that non-renewable natural resources will not last forever, government institutions have created trusts to ensure responsible management of the resources and the revenues they generate, to benefit both current and future generations of its citizens. Sometimes these kinds of government-created trusts are mistakenly labeled as “public” trusts. While they are clearly intended to benefit the public of a given state or country, these kinds of natural resources trusts should not be confused with the public trust doctrine discussed below.

An example of this kind of publicly created trust is the Alaska Permanent Fund (APF), which has been called a “bold and innovative approach to managing natural resource wealth.”<sup>332</sup> Alaska’s economy has always been based largely on natural resources. In fact, Alaska’s original constitution dictated that the legislature would use, develop, and conserve “all the natural resources belonging to the State . . . for the maximum benefit of its people.”<sup>333</sup> However, when a large surplus of oil was discovered in Prudhoe Bay in 1967, and the Alaskan government received a \$900 million oil windfall from drilling leases, it managed to “squander” millions in a relatively short amount of time.<sup>334</sup> The consensus among politicians and citizens alike was that the money had been spent too frivolously and too quickly.<sup>335</sup> This temporary mismanagement of funds led to the realization in Alaska that oil was a finite resource that needed to be managed responsibly to “assure that its current good fortune will bring long-range benefits.”<sup>336</sup>

As a result, the people of Alaska approved a constitutional amendment in 1976, which mandated that at least 25 percent of all “mineral lease rentals, royalties, royalty sale proceeds, federal mineral revenue sharing payments and bonuses received by the State shall be placed in a permanent fund.”<sup>337</sup> After four years of interim management, the Permanent Fund Act of 1980 created the Alaska Permanent Fund Corporation (“APFC”) to manage the APF.<sup>338</sup> This newly formed corporation had the responsibility to “manage and invest the assets of the permanent fund” in accordance with the “prudent-investor rule.”<sup>339</sup> The APFC is operated by a Board of Trustees, which is comprised of six members—

<sup>332</sup> Emeka Duruigbo, *Managing Oil Revenues for Socio-Economic Development in Nigeria: The Case for Community-Based Trust Funds*, 30 N.C. J. INT’L L. & COM. REG. 121, 176–77 (2004).

<sup>333</sup> ALASKA CONST. art. VIII, § 2.

<sup>334</sup> Duruigbo, *supra* note 332, at 177.

<sup>335</sup> Deborah Groban Olson, *Fair Exchange: Providing Citizens with Equity Managed by a Community Trust, In Return for Government Subsidies or Tax Breaks to Businesses*, 15 CORNELL J.L. & PUB. POL’Y 231, 292 (2006).

<sup>336</sup> *Id.* at 291.

<sup>337</sup> ALASKA CONST. amend. IX, § 15. This percentage was later raised through legislation to 50 percent of revenues in some instances, but this was later repealed by the legislature and currently sits at the 25 percent allocation mandated by the state constitution. Olson, *supra* note 335, at 292.

<sup>338</sup> See ALASKA STAT. § 37.13.040 (2004).

<sup>339</sup> *Id.* §§ 37.13.040, 37.13.120 (the prudent-investor rule means that “the corporation shall exercise the judgment and care under the circumstances then prevailing that an institutional investor of ordinary prudence, discretion, and intelligence exercises in the designation and management of large investments entrusted to it . . . in regard to the permanent disposition of funds, considering

four members of the public and two state cabinet members—all of whom are appointed by the governor.<sup>340</sup> The APFC is a quasi-independent entity that is managed separately from the state treasury, yet is still accountable to the Alaskan people because its Board must (a) report annually to the Legislative Budget and Audit Committee and (b) have its budget approved annually by the legislature.<sup>341</sup>

Three objectives guide the APFC's management of the fund: (1) "the fund should provide a means of conserving a portion of the state's revenue from mineral resources to benefit all generations of Alaskans;" (2) "the fund's goal should be to maintain safety of principal while maximizing total return," and (3) "the fund should be used as a savings device managed to allow the maximum use of disposable income from the fund for purposes designed by law."<sup>342</sup> The first of these objectives—that oil revenues should be conserved to "benefit all generations of Alaskans"—reinforces the driving principle behind these trusts: non-renewable natural resources are finite and the most responsible thing for the present generation to do is to manage them for the benefit of all generations, both present and future.

The 1980 Act also created a distribution scheme for the APF. First, the 25 percent of all resource revenue required by the Constitution is treated as the "principal" of this trust. Placed into the Reserved Fund Balance, it can be invested by the APFC but cannot be spent by the legislature without a popular vote.<sup>343</sup> The APF's statutory net income for the year, which consists mainly of account interest and investment earnings less the cost of managing the fund assets, is called the Realized Earnings Account and may be spent by the legislature as it sees fit.<sup>344</sup> Since 1982, most of the money available for allocation has been used for two purposes: funding the APF dividend program and financing the inflation-proofing mechanism.<sup>345</sup> The dividend program provides a dividend check to each eligible Alaskan for his or her share of the realized earnings that year.<sup>346</sup> The dividend program reflects the belief that "ownership of Alaska's oil resides in the people of the state" and that "Alaskans are the primary stakeholders of their oil wealth."<sup>347</sup>

The APF is a good example of the concept that "the State's natural resources belong to the people and should provide benefit to all the people whenever they are exploited."<sup>348</sup> Just as in the framework of private trusts discussed above, here the state chose to place property—not the natural resource itself but rather, the revenues from selling it—into a fund to be managed per a written set of directions. By using a quasi-independent agency to manage the fund free from political influence, while still reserving some oversight for the legislature, the APF seeks to live up to a fiduciary duty of managing the fund for the beneficiaries with undivided loyalties. The APF is one of the more successful and well-organized government natural resources trusts, and provides a textbook model for countries or states looking to preserve non-renewable resource revenues for future generations' benefit.

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preservation of the purchasing power of the fund over time while maximizing the expected total return from both income and the appreciation of capital.")

<sup>340</sup> *Id.* §§ 37.13.050-37.13.060 (the public members serve staggered four-year terms and the cabinet members serve until they leave their posts or are removed by the governor).

<sup>341</sup> Olson, *supra* note 335, at 297.

<sup>342</sup> ALASKA STAT. § 37.13.020 (2004).

<sup>343</sup> Olson, *supra* note 335, at 294.

<sup>344</sup> *Id.* at 295.

<sup>345</sup> *Id.* Inflation proofing is simply a "program to protect the APF's purchasing power by moving some of each year's investment earnings into the protected principal, to cover the 'loss' to inflation." *Id.* at 293.

<sup>346</sup> *Id.* at 296–97. Each Alaskan who applies for a dividend, has resided in the state during the qualifying year, and has been in the state for at least 72 continuous hours during the prior two years, or a child of such a person, receives a dividend check. Dividend checks have ranged from \$331.29 in 1984 to \$1,963.86 in 2000. *Id.* at 297.

<sup>347</sup> Duruigbo, *supra* note 332, at 179.

<sup>348</sup> Olson, *supra* note 335, at 301.

## 2. The Public Trust Doctrine at Common Law

The public trust doctrine is a related but different legal concept. While the natural resources trusts rely on a deliberate, legislative act of trust creation, a government's responsibilities under the public trust doctrine are imposed by operation of the common law. The doctrine establishes a governmental duty to protect certain public resources so that they will be available to future generations. That duty gives the government a legal basis to restrict the actions of private parties who would exploit the public resource. But perhaps more importantly, when the government takes on the role of trustee, managing resources for the benefit of the public, then the public has enforceable rights against the government. The public trust doctrine gives citizens a tool to constrain the government's management of natural resources to protect those resources for future generations.

The public trust concept is a solid example of a legal doctrine used by private parties and by governments to constrain the actions of current government bodies and private parties for the sake of preserving natural resources for future generations. The doctrine has thus far been limited to water resources and public lands in U.S. law. And the trust principles used to date show that commercial and recreational purposes may take priority over environmental principles. But regardless of a public trust's priorities in a given trust management decision, the fundamental purpose of treating the resource as being held in trust is to guarantee that it will be protected for its designated use in perpetuity.

The many commentators who have advocated for using the public trust doctrine as an environmental protection tool typically point to early Roman law as the source of the public trust idea: quoting Justinian, "the air, running water, the sea, and consequently the sea-shore" are "by natural law common to all."<sup>349</sup> While Justinian's reference to the air looks like a promising source for climate change work, the real question for persuading U.S. courts is how the Roman concept of the public trust has evolved in Anglo-American case law. The public trust notion that moved from England to this country is firmly grounded in the Eighteenth Century necessity to keep navigable waters and the land surrounding them open to public use in order to promote the free flow of commerce. Case law lays out the guiding rules that both constrain government acting as trustee of the public trust and explain how private property rights in public trust resources are constrained. Developments in the case law also show a general unwillingness to expand the concept from navigable waters to other public resources.

The starting point is *Illinois Central Railroad Co. v. Illinois*,<sup>350</sup> which presents both an important step in expanding public trust law in the United States from the English common law and a framework for governmental and private rights within the public trust. The United States Supreme Court in *Illinois Central* explained that the English common law rule of "dominion over and ownership by the crown of lands within the realm under tide waters" is founded on the fact that tide waters are the navigable waters in England.<sup>351</sup> The English policy of keeping the land underneath tide waters under government control was aimed at maintaining "the use of such waters" for carrying on commerce: "The possession by private individuals of lands under them could not be permitted except by license of the crown, which could alone exercise such dominion over the waters as would insure freedom in their use so far as consistent with the public interest."<sup>352</sup>

*Illinois Central* took a step further in the reasoning and expanded the English rule over tidal water lands to cover land underlying the waters of the Great Lakes and other navigable fresh waters of the United States. In doing so, the Court recognized that even though the "Great Lakes are not in any appreciable respect affected by the tide . . . a

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<sup>349</sup> Allan Kanner, *The Public Trust Doctrine, Parens Patriae, and the Attorney General as the Guardian of the State's Natural Resources*, 16 DUKE ENVTL. L. & POL'Y F. 57, 63 (2005).

<sup>350</sup> 146 U.S. 387 (1892).

<sup>351</sup> *Id.* at 436.

<sup>352</sup> *Id.*

large commerce is carried on [them].”<sup>353</sup> Thus the policy behind the English common law rule—keeping commercial channels unhindered by “private interruption and encroachment”—defined the Court’s test for determining which lands are subject to the public trust in the United States. The unequivocal holding in *Illinois Central* is that the public trust doctrine applied to all land under navigable-in-fact waters, whether they are influenced by tides or not.

In addition to expanding the definition of navigable waters, *Illinois Central* outlines the constraints on government as trustee that can be extended to a broader notion of the public trust. The *Illinois Central* Court concluded that the state, as trustee of the lands underlying Lake Michigan, did not have the power to grant absolute ownership and control of those lands to a private party.<sup>354</sup> The Court held that the State cannot “abdicate its trust over property in which the whole people are interested” any more “than it can abdicate its police powers in the administration of government and the preservation of the peace.”<sup>355</sup> Just like fiduciary rules prohibit a private trustee from delegating its duties, so too the Court reasoned that a state cannot delegate its trust duties to a private party, or even absolutely to a municipality.<sup>356</sup> While states are allowed to make certain kinds of grants of trust land to private parties, such grants are always subject to the State’s power to revoke them in the interest of preserving the trust for the public or in the interest of putting the trust to a better public use.<sup>357</sup>

The constraint on the states’ ability to alienate public trust land in *Illinois Central* shows the doctrine’s concern about acting to favor future generations. The Court reasoned that allowing a legislature to irrevocably grant trust land would essentially be to “give away [or] sell the discretion of its successors in respect to matters, the government of which, from the very nature of things, must vary with varying circumstances.”<sup>358</sup> Because the conditions of the public and of the harbors will change over time, the legislature, as trustee for the public, must maintain the power to govern the use of the public trust land. If the State were allowed to make an absolute grant of trust land to a private party, then the government would lose the ability—and thus abrogate its responsibility—to regulate the trust land as currently needed by the public. The public trust doctrine insists that “[e]very legislature must, at the time of its existence, exercise the power of the state in the execution of the trust devolved upon it.”<sup>359</sup>

Two sentences from *Illinois Central* in particular, often paired together, have given hope to those who seek to expand the doctrine beyond waterways. The Court, while explaining the common denominator that commerce plays, the public’s interest in keeping it open to all, and hence the government’s role in ensuring this outcome, opined that “[t]he State can no more abdicate its trust over property in which the whole people are interested, like navigable waters and soils under them, so as to leave them entirely under the use and control of private parties.”<sup>360</sup> A little later in this reasoning, the Court reinforced these policy concerns by announcing that “so with trusts connected with public property, or property of a special character, like lands under navigable waters; they cannot be placed entirely beyond the direction and control of the state.”<sup>361</sup> In both sentences, the references to navigable waters are set off by commas, and thus form dependent clauses which appear to illustrate or provide one example of public property or that “of a special character.”

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<sup>353</sup> *Id.*

<sup>354</sup> *Id.* at 453.

<sup>355</sup> *Id.*

<sup>356</sup> *Id.* at 453–54.

<sup>357</sup> *Id.*

<sup>358</sup> *Id.* at 460.

<sup>359</sup> *Id.*

<sup>360</sup> *Id.* at 453.

<sup>361</sup> *Id.* at 454.

Read this way, navigable waters and the land beneath them seem like a starting point for applying the public trust doctrine, not an ending point.

In the same manner, those advocating to expand the public trust doctrine to other natural resources look to the Supreme Court's slight departure from the navigable waters straight and narrow in *Phillips Petroleum Co. v. Mississippi*. In this case, the Court held that land affected by the tides, even when it does not underlie waters that are navigable-in-fact, may be held in the public trust.<sup>362</sup> In its reasoning, the Court cited several previous decisions which had recognized legitimate state interests, uses, and regulations of public trust land that had "nothing to do with navigation."<sup>363</sup> The Court's departure from the purely commercial navigation rationale for the public trust doctrine represents an expansion of governmental power to manage trust lands. Nonetheless, now some twenty years after its announcement and with no further cases extending its reach, *Phillips Petroleum* nor its founding mother, *Illinois Central*, provide a clear basis for extending the public trust doctrine from water resources to other natural resources.

Those seeking to persuade a court to apply the public trust doctrine to climate change also look to *Geer v. Connecticut*, in which the Court upheld a Connecticut statute which forbade anyone from killing game birds for the purpose of transporting or possessing the birds out of state. The Court noted that "the state has an absolute right to control and regulate the killing of game as its judgment deems best in the interest of its people."<sup>364</sup> In reaching this conclusion, the Court recited a brief history of ownership of wild animals, noting that "[f]rom the earliest traditions, the right to reduce animals *ferae naturae* to possession has been subject to the control of the law-giving power."<sup>365</sup> *Geer*, while primarily focused on dormant Commerce Clause analysis, stood for the proposition that the colonies were vested with the power to control and regulate the taking of wild animals by the English common law, and that this power was passed to the states even after the Revolutionary War.<sup>366</sup>

But *Geer*'s usefulness is substantially tempered by its explicit overruling in *Hughes v. Oklahoma*.<sup>367</sup> In *Hughes*, an Oklahoma statute substantially identical to that upheld in *Geer* was struck down under modern Commerce Clause analysis.<sup>368</sup> *Geer*'s view of the state's ownership of wildlife, *Hughes* explained, was derived "from the view that the State had the power, as representative for its citizens, who 'owned' in common all wild animals within the State, to control not only the *taking* of game, but also the *ownership* of game that had been lawfully reduced to possession."<sup>369</sup> *Hughes* concluded that "[t]he 'ownership' language of cases such as those cited by appellant must be understood as no more than a 19th-century legal fiction expressing 'the importance to its people that a State have power to preserve and regulate the exploitation of an important resource.' Under modern analysis, the question is simply whether the State has

<sup>362</sup> *Phillips Petroleum Co. v. Mississippi*, 484 U.S. 469, 476 (1988).

<sup>363</sup> *Id.* Such interests included fishing, planting and harvesting oysters, and urban expansion.

<sup>364</sup> *Geer v. Connecticut*, 161 U.S. 519, 530 (1896).

<sup>365</sup> *Id.*

<sup>366</sup> *Id.* at 528.

<sup>367</sup> 441 U.S. 322, 325 (1979).

<sup>368</sup> In doing so, the Court concluded that *Geer* was overruled because it rested on a distinction between intrastate and interstate commerce that no longer applies in Commerce Clause analysis. The *Hughes* court stated that *Geer* rested on the conclusion that interstate commerce was not involved when a state forbade the out-of-state transport of wild animals that had been taken in the state. *Hughes*, 441 U.S. at 327.

<sup>369</sup> According to *Hughes*, *Geer* concluded that there was no question of interstate commerce regarding the Connecticut statute because the State's "ownership" of wild animals empowered it to qualify the ownership of taken wild animals, which in turn allowed the state to keep all commerce in wild game purely intrastate. Because Commerce Clause analysis developed to reach purely intrastate commerce, the *Geer* conclusion that the statute in question only affected intrastate commerce no longer saves state statutes like those in *Geer* and *Hughes* from being struck down under the Commerce Clause. *Id.* at 327.

exercised its police power in conformity with the federal laws and Constitution.”<sup>370</sup> These conclusions reflect the Court’s unwillingness to recognize a special kind of state ownership of natural resources that would allow states to protect natural resources in ways inconsistent with the Commerce Clause.<sup>371</sup>

As a purely common law doctrine, courts have limited the public trust doctrine to its historical roots in water resources, with some exceptions for public lands and parks. If a case were brought today to fight climate change effects on tidelands, for example, the public trust doctrine would be a useful litigation strategy. But the common law doctrine, as it has judicially evolved to date, does not provide a clear basis for atmosphere-centered climate change litigation. Nonetheless, legal academics are strongly attracted to applying public trust principles to combat climate change harms. For example, Professor Joseph Sax and many post-Sax commentators have advocated forcefully for the use of the public trust doctrine to address many current resource degradation problems. Professor Mary Wood<sup>372</sup> argues eloquently for atmospheric trust litigation in several recent articles.<sup>373</sup> But currently no courts have signaled a willingness to extend the public trust from its common law moorings in water resources. Inchoate sympathy for expanding the public trust doctrine to air can be only sporadically found in case law dating from the Nineteenth Century or an occasional case from U.S. environmental law’s judicial heyday in the 1970s.<sup>374</sup> Three different secondary sources published or updated in 2006 and 2007 concluded that “very few, if any, courts have extended the common law doctrine beyond tidal or navigable waters, thus leaving unprotected inland resources that are unconnected to navigable lakes or rivers.”<sup>375</sup> The doctrine has occasionally been applied to Native Americans and public lands, but those cases present a distinct set of issues, given the undisputed public ownership of the land. Thus, in terms of resource protection, “the public trust doctrine remains confined restlessly to submerged lands, the foreshore, which can be described as the bed of the sea, and other navigable waters, which can be understood to mean fresh waters of any consequence.”<sup>376</sup>

### 3. The Public Trust Doctrine in Enacted Law

The public trust doctrine, however, could be a promising avenue for legislative action because it could provide a legal tool for putting the government under a continuing obligation to protect the atmosphere. Some states have adopted statutes that encapsulate public trust principles and apply them broadly to natural resources. These types of statutes, deemed “environmental rights statutes” by one commentator, arose from Professor Joseph Sax’s work. Public trust-based statutes are different from most other environmental protection statutes because they are not based on

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<sup>370</sup> *Id.* at 335.

<sup>371</sup> Advocates for expanding the public trust doctrine from its traditional base in water resources also rely on *Georgia v. Tennessee Copper Company*, 206 U.S. 230 (1907). Georgia sued a Tennessee business to stop the transport of noxious gases over the state line under public nuisance. While the Court never explicitly referenced any public trust principles, it did recognize that the state had standing to bring the suit, even though it was not the title holder for the vast majority of the involved lands: it sustained injury “in its capacity of quasi-sovereign” because “the state has an interest independent of and behind the titles of its citizens, in all the earth and air within its domain.” *Id.* at 237.

<sup>372</sup> Professor Wood is a valued contributor to the CLI. Please see her Recommendation No. 8 in Appendix B.

<sup>373</sup> Mary Christina Wood, *Nature’s Trust: A Legal, Political and Moral Frame for Global Warming*, 34 B.C. ENVTL. AFF. L. REV. 577 (2007); Mary Christina Wood, *Nature’s Trust: Reclaiming an Environmental Discourse*, 25 VA. ENVTL. L. J. 243 (2007).

<sup>374</sup> See, e.g., *W.J.F. Realty Corp. v. New York*, 176 Misc. 2d 763 (1998) (a New York Supreme Court decision holding that a state law restricting development in a designated natural area of Long Island was not a taking without compensation because “the public trust doctrine limited the plaintiff’s property rights so as to render the law not a taking.”); Alexandra B. Klass, *Modern Public Trust Principles: Recognizing Rights and Integrating Standards*, 2 NOTRE DAME L. REV. 699, 712 (Dec. 2006).

<sup>375</sup> Klass, *supra* note 374, at 712; accord WILLIAM H. RODGERS, JR., ENVIRONMENTAL LAW AIR & WATER § 2.20 (current through the July 2007 Update); 1 DANIEL P. SELMI ET AL., STATE ENVIRONMENTAL LAW § 4:12.

<sup>376</sup> Rodgers, *supra* note 375, § 2.20(A).

specific environmental standards or permitting requirements. Instead, these statutes grant citizens an enforceable right to a clean environment in general, without defining pollution in specific terms. (This right stands in stark contrast to enforcement rights typically given to private citizens under federal environmental statutes like the Clean Water Act where a congressionally created citizen suit provision permits private citizens to sue only when a statutory provision or standard is violated, essentially in the place of government officials). Professor Sax helped to draft the first of these laws, the Michigan Environmental Policy Act. Minnesota has a similar statute, and thirteen other states have more limited forms of these general environmental rights statutes.<sup>377</sup>

There may be some promise for the doctrine as a litigation strategy to protect atmospheric resources in states that have codified public trust principles to protect all natural resources or air in particular, or that have guaranteed citizens a clean and healthy environment. One major procedural benefit of these enacted laws is that some of them have been interpreted to establish standing for any citizen concerned about environmental harms, or at least to ease the standing burden on private citizens seeking to prevent environmental harms.<sup>378</sup> Thus, the standing hurdle that looms large in environmental litigation would be much lower when using these public trust-based laws.

### C. The Tort Law of Nuisance

While a number of tort theories seem analytically applicable to climate change harms, nuisance has been the vehicle used by climate change advocates in U.S. courts to date. None of these cases have succeeded at this point, having been dismissed by courts in three different federal circuits under the political question doctrine.<sup>379</sup> Likewise there are no public nuisance cases that have been brought on behalf of future generations, nor are there public nuisances cases in which the court uses the impact on future generations as a part of its decision. There is one case, however, where the court rejects a company's abatement plan. In that case the court had found that a taconite mining company had dumped taconite tailings into Lake Superior, which violated environmental laws and constituted a public nuisance both in the water and ambient air in surrounding communities.<sup>380</sup> In the remand memorandum, the court rejected the abatement plan for several reasons, one of them being that the plan merely shifts the problem to future generations.<sup>381</sup> While the discussion is not in the court's analysis of whether it is a public nuisance or not, its appearance in the denial of the abatement plan is hopeful.

Public nuisance claims arise from activity that unreasonably interferes with the public's right to property, often in the form of interference with public health and safety. Litigants have applied this common law concept to climate change by asserting that an industry action contributes to climate change, which in turn harms their property and thus constitutes a nuisance. For example, in *Connecticut v. American Electric Power Co. (AEP)*,<sup>382</sup> a group composed of eight states, New York City, and three non-profit land trusts sued five utility companies which are the largest carbon dioxide (CO<sub>2</sub>) emitters in the United States, contending that their emissions are a nuisance to the public health and the environment and have caused irreparable harm to their real property. The *AEP* plaintiffs asked for court-ordered emissions caps and phased reductions,

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<sup>377</sup> Klass, *supra* note 374, at 725 (Connecticut, Florida, Hawaii, Illinois, Indiana, Iowa, Louisiana, Maryland, Nevada, New Jersey, North Dakota, South Dakota, and Wyoming).

<sup>378</sup> *Id.* at 723–24 (explaining that Minnesota courts have interpreted the Minnesota Environmental Rights Act to grant automatic standing to all persons, but that Michigan courts have placed constitutional standing limits on citizens seeking to use the Michigan Environmental Policy Act).

<sup>379</sup> See *supra* Section I.C.

<sup>380</sup> *U.S. v. Reserve Mining Co.*, 380 F. Supp. 11 (D.C. Minn. 1974).

<sup>381</sup> *Id.* at 81 (“In the absence of either a perpetual maintenance plan by Reserve or a perpetual funding plan by Reserve, the ultimate result of Reserve's proposal would be to shift the in-lake disposal problem from this generation to future generations.”).

<sup>382</sup> 406 F. Supp. 2d 265 (S.D.N.Y. 2005).

rather than the traditional remedy of money damages. Likewise, in *California v. General Motors Corp.*,<sup>383</sup> the state sued six major automobile manufacturers,<sup>384</sup> alleging that their combined fleets produce almost one-third of California's CO<sub>2</sub> emissions, which in turn creates a nuisance by injuring the state's coastline, water supply, and arid lands. California sought money damages to compensate for expenditures made for climate change planning, research, and remediation. In *Comer v. Murphy Oil*,<sup>385</sup> a group of property owners brought a class action suit against oil companies and refineries, alleging that the defendants' GHG emissions contributed to climate change, which in turn warmed the Gulf of Mexico, increased the frequency and severity of hurricanes, and resulted in Hurricane Katrina. These plaintiffs sought damages for their loss of property, loss of business and financial stability, and loss of loved ones. Most recently, in *Native Village of Kivalina v. ExxonMobil*, members of an Alaskan tribal village sued over twenty oil companies and electric utilities for public nuisance.<sup>386</sup> The plaintiffs allege that the defendants' contributions to climate change have diminished or destroyed their public and private property, including being forced to relocate their entire village at a cost of more than one hundred million dollars.

When the common law nuisance doctrine is applied to climate change harms, it is susceptible to several litigation road blocks. First, these claims may fail because courts will conclude that they lack jurisdiction to resolve the dispute; if the request for relief requires broad fact finding and policy making, a court may dismiss the case under the political question doctrine and thus leave the law making to the legislative branch.<sup>387</sup> Second, environmental nuisance actions may fail because they are viewed as having been displaced by federal statutes. A court will look very closely at the requested relief and query whether it already fits within a statutory scheme of regulation. For example, in *American Electric Power*, the defendants argued that the desired relief—regulating their emissions—is already achieved under the Clean Air Act, which displaced common law actions when it was enacted. Finally, nuisance claims may fail because, as the trial court noted in *Comer*, causation and redressability pose “daunting evidentiary problems,” making it difficult for plaintiffs to meet their initial standing requirements, let alone meet their burden of proof at trial.

## Conclusion

Whether one looks at trusts and the public trust doctrine, NEPA's inspirational preamble, or the environmental rights statements in various state constitutions, the seeds for framing rights and duties intergenerationally are present in U.S. law. All laws reflect the time and place of their creation. Most represent the status quo interests of the current economic system. Individuals who desire to pass wealth to their offspring create trusts. Judges, and later, some state legislatures, saw the public trust doctrine as the law's way of drawing the line between private interests and publicly retained resources, like navigable waters. The federal government created NEPA in the 1970s to force itself to balance economic development with environmental preservation, so that people and nature may “exist in productive harmony.” Several states, most notably Montana, amended their constitutions in the last forty years to create a fundamental right to a healthy environment for current generations and future ones. These laws are scattered among the various branches of the state and federal systems. In their individual forms, they bring the ethical norm of sustainability into the law. These legal norms could provide a platform for new lawmaking that recognizes and addresses the intergenerational effects of climate change.

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<sup>383</sup> *California v. General Motors Corporation*, \_\_\_ F. Supp. 2d \_\_\_, No. C06-05755 MJJ, 2007 WL 2726871 (N.D. Cal. 2007).

<sup>384</sup> *General Motors, Ford, DaimlerChrysler, Toyota, Honda, and Nissan*.

<sup>385</sup> 2006 WL 1066645 (S.D. Miss. 2006).

<sup>386</sup> Complaint for Damages and Demand for Jury Trial, *Native Village of Kivalina v. ExxonMobil*, No. 4:2008CV01138 (N.D. Cal., filed Feb. 26, 2008), available at <http://www.climatelaw.org/cases/country/us/kivalina/Kivalina%20Complaint.pdf>.

<sup>387</sup> This was the outcome in *Connecticut v. Am. Elec. Power Co.*, 406 F. Supp. 2d 265 (S.D.N.Y. 2005); *California v. Gen. Motors Corp.*, \_\_\_ F. Supp. 2d \_\_\_, No. C06-05755MJJ, 2007 WL 2726871 (N.D. Cal. 2007); and *Comer v. Murphy Oil*, \_\_\_ F. Supp. 2d \_\_\_, 2006 WL 1066645 (S.D. Miss. 2006).