The Role of Courts in Remedying Climate Chaos: Transcending Judicial Nihilism and Taking Survival Seriously

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ABSTRACT

Numerous courts have dismissed cases relating to the climate crisis as nonjusticiable political questions or for lack of redressability before ever reaching the cases' merits. These rulings demonstrate that too many courts have a nihilistic worldview when it comes to remedying the climate crisis. This judicial nihilism threatens an early end for Juliana v. United States, wherein youth plaintiffs allege that the federal government's exacerbation of the climate crisis violates a constitutional right to a stable climate system. To combat judicial climate nihilism, this Note demonstrates why the climate crisis does not present nonjusticiable political questions, especially in the constitutional context, and that courts do have the power to redress this crisis. In addition to relying on U.S. case law, the Note examines how the groundbreaking Urgenda decision from the Netherlands Supreme Court provides an insightful analysis of governments' political question and redressability defenses. Climate cases do not inherently contain political questions because (1) no textually demonstrable commitment to other political branches bars courts from addressing the climate crisis, (2) tort and constitutional law, along with science, provide judicially manageable and discoverable standards, and (3) deciding such cases does not require the courts to make an initial policy decision inappropriate for judicial discretion. If courts continue to dismiss climate cases as political questions, this may eventually undermine the legitimacy of the judiciary, as well as the rule of law itself. Furthermore, courts have the power to redress the climate crisis because partial redressability is enough to meet redressability as a standing requirement. Every reduction in greenhouse gas emissions helps remedy the climate crisis, and U.S. courts can order such reductions while leaving other branches of government to determine exactly how such reductions should be achieved. Finally, the constitutional right to a habitable environment can be derived from substantive due process doctrine, and the contrary position that no such right exists is the far more radical one.

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INTRODUCTION: JUDICIAL NIHILISM THREATENS THE LAWSUIT OF THE CENTURY

"Where is the hope in today's decision? Plaintiffs' claims are based on science, specifically, an impending point of no return. If plaintiffs' fears, backed by the government's own studies, prove true, history will not judge us kindly. When the seas envelop our coastal cities, fires and droughts haunt our interiors, and storms ravage everything between, those remaining will ask: Why did so many do so little?"¹

In 2015, twenty-one youth plaintiffs filed a lawsuit, *Juliana v. United States*, against the federal government alleging violations of their constitutional rights due to the government's exacerbation of the climate crisis.² The question at the heart of the case is whether there exists a right to a stable climate system, a question the *New Yorker* has characterized as "the constitutional question of the

^{1.} Juliana v. United States, 947 F.3d 1159, 1191 (9th Cir. 2020) (Staton, J., dissenting).

^{2.} I worked in a pro bono capacity with Our Children's Trust on this lawsuit throughout my first year of law school in preparation for the anticipated trial. The views expressed in this Note, unless otherwise indicated by a citation, are my own.

twenty-first century."³ Juliana stands out as perhaps the most prominent lawsuit of its kind in the United States, as the district court refused to dismiss it back in 2016, intending to let the case proceed to trial.⁴ As we shall see, it is far from certain that this trial will ever occur.

The current and future harms the *Juliana* plaintiffs allege include impacts on their drinking water, food sources, economic livelihoods, property, and health conditions; these impacts result from climate crisis harms such as ocean acidification, sea level rise, droughts, and increasingly deadly wildfires.⁵ The complaint contends that the federal government has known for decades that carbon dioxide ("CO2") emissions were causing "catastrophic climate change."⁶ Despite this knowledge, the government "created and enhanced the dangers through fossil fuel extraction, production, consumption, transportation, and exportation."⁷ The plaintiffs contend that "[t]hrough its policies and practices, the Federal Government bears a higher degree of responsibility than any other individual, entity, or country for exposing Plaintiffs to the present dangerous atmospheric CO2 concentration."⁸

To remedy their present and future injuries, the plaintiffs seek an injunction to prevent the federal government from permitting and authorizing fossil fuel projects.⁹ They also seek to have the government devise a plan to rapidly phase out CO2 emissions in order to reduce global atmospheric CO2 emissions to below 350 parts per million by the end of the century.¹⁰

To support the remedies they seek, the plaintiffs claim that the federal government is a trustee of national public resources, which include "the air (atmosphere), seas, shores of the sea, water, and wildlife."¹¹ They allege the government has violated its public trust duties by substantially impairing these resources and failing to take affirmative steps to protect them.¹² The plaintiffs also allege violations of the Due Process Clause and equal protection principles under the Fifth Amendment. Under the Due Process Clause, they claim that a stable climate system is a fundamental right that "is critical to Plaintiffs' rights to life, liberty, and property," and that the government has taken affirmative actions to destabilize this system by causing excessive CO2 emissions.¹³ Under the equal protection

^{3.} Carolyn Kormann, *The Right to a Stable Climate is the Constitutional Question of the Twenty-First Century*, NEW YORKER (June 15, 2019), https://perma.cc/T3PNSZPU.

^{4.} Juliana v. United States, 217 F. Supp. 3d 1224, 1234 (D. Or. 2016), *rev'd* 947 F.3d 1159 (9th Cir. 2020).

^{5.} Complaint ¶¶ 16–90, at 5–35, Juliana v. United States, 217 F. Supp. 3d 1224, (D. Or. 2016) (No. 6:15–cv–01517–TC).

^{6.} Id. at 51.

^{7.} *Id.* at 56.

^{8.} *Id.* ¶ 7, at 5.

^{9.} *Id.* ¶ 256, at 80.

^{10.} *Id.* ¶¶ 256–57, at 80.

^{11.} *Id.* ¶ 263, at 82.

^{12.} *Id*. ¶¶ 307–10, at 93–94.

^{13.} Id. ¶¶ 278–89, at 85–88.

principles embedded in the Fifth Amendment's Due Process Clause, the government has refused the young plaintiffs, as well as future generations, the same protection of fundamental rights it has given prior generations.¹⁴ Additionally, the plaintiffs argue that children and future generations are suspect classes in need of "extraordinary protection," as they are insular minorities that lack voting rights, and the government has "a long history of deliberately discriminating" against them "in exerting their sovereign authority over our nation's air space and federal fossil fuel resources for the economic benefit of present generations of adults."¹⁵ Finally, the plaintiffs claim a Ninth Amendment violation, contending that a stable climate system is an unenumerated right.¹⁶

These claims, especially those connected to the public trust doctrine, echo the conservation philosophy of intergenerational equity articulated by Edith Brown Weiss. In *The Planetary Trust: Conservation and Intergenerational Equity*, she writes: "Our fiduciary obligation as trustees of the planetary trust can be inferred from the nearly universal recognition and acceptance among peoples of an obligation to protect the natural and cultural heritage for future generations."¹⁷ She also contends that the existence of such a planetary trust "is implicit in the nature of the relationship between generations," and that the trust's "basic purpose . . . is to sustain the welfare of future generations."¹⁸

Thus far, *Juliana* is the most successful domestic lawsuit to attempt to assert a federal constitutional claim for what amounts to the right to a habitable environment. However, on January 17, 2020, a divided Ninth Circuit panel dismissed the case for lack of redressability while also citing separation of powers concerns related to the political question doctrine.¹⁹ As of the time of this writing, the plaintiffs plan to seek en banc review of the decision before the full Ninth Circuit.²⁰

As evident from the Ninth Circuit's recent decision, climate cases like *Juliana* face several significant challenges. This Note contends that foremost among these challenges is the nihilistic approach that most courts take when forced to address the seemingly gargantuan climate crisis. Many U.S. courts have dismissed climate cases on political question and redressability grounds before ever reaching the merits. In previous climate tort cases, for example, courts have cited the 'bigness' of this crisis as a key factor in dismissing the cases as nonjusticiable political questions, or on redressability grounds.²¹ Although the claims in *Juliana*

^{14.} Id. ¶¶ 291–92, at 89.

^{15.} *Id.* ¶¶ 293–94, at 90.

^{16.} *Id*. ¶¶ 303–06, at 92–93.

^{17.} Edith Brown Weiss, *The Planetary Trust: Conservation and Intergenerational Equity*, 11 ECOLOGY L.Q. 495, 499–500 (1984).

^{18.} Id. at 504, 508.

^{19.} Juliana v. United States, 947 F.3d 1159, 1165, 1170, 1173 (9th Cir. 2020).

^{20.} John Schwartz, *Court Quashes Youth Climate Change Case Against Government*, N.Y. TIMES (Jan. 17, 2020), https://perma.cc/X6YD-88JT.

^{21.} See infra Part II.B.

sound in constitutional rather than tort law, the U.S. government has made similar arguments regarding the political question doctrine and redressability for why courts should dismiss the case. Even if the Ninth Circuit agrees to hear the case en banc and sides with the plaintiffs, the Supreme Court has foreshadowed its skepticism of the plaintiffs' claims, indicating discomfort with their broad implications.²²

These U.S. court decisions reflect a nihilistic approach to environmental catastrophe. Nihilism is defined as "a viewpoint that traditional values and beliefs are unfounded and that existence is senseless and useless."²³ In the courtroom context, rather than adapting the law to mitigate the crisis, Linda Ross Meyer writes that "[t]he nihilist acknowledges the normative challenge that the catastrophe represents and stays there."²⁴ Similarly, R. Henry Weaver and Douglas A. Kysar observe: "The nihilist does not try to reconstruct the normative order unsettled by catastrophe. For the nihilist, the redress of harms will depend on power, not principle."²⁵ By refusing to address the climate crisis, courts allow the unsettling of the foundational order of a democratic society, such as relative security in one's life, liberty, and property. In place of this order, those with the most power to profit and protect themselves from the coming disasters reign.

Thus, I use the term "judicial nihilism" in reference to courts that rule on climate cases by abandoning fundamental American values—such as the rights to life, liberty, and property, or the perpetuity of the nation—and embrace pessimistic but erroneous notions of judges' capacity to remedy catastrophe. As I will demonstrate, describing this as mere defeatism does not fully capture the approach these courts take in dismissing climate cases. For example, courts are being more than just defeatist when they ignore arguments rooted in science that additional reductions in greenhouse gas ("GHG") emissions are critically important to avoiding catastrophe. By not accounting for such evidence, courts contradict their traditional duties to acknowledge sound scientific evidence and view plaintiffs' factual allegations as true on a motion to dismiss.²⁶ This departure from traditional legal and scientific principles surpasses rational defeatism and enters the realm of nihilism. Some courts further exhibit this nihilism in denying that a right to a habitable environment exists, thereby implying that the

^{22.} See, e.g., Order in Pending Case at 2, In re United States, dismissed, No. 18-505 (Nov. 2, 2018).

^{23.} Nihilism, MERRIAM-WEBSTER DICTIONARY, https://perma.cc/VH4C-83C3 (last visited Oct. 10, 2020).

^{24.} Linda Ross Meyer, *Catastrophe: Plowing Up the Ground of Reason, in* LAW AND CATASTROPHE 22 (Austin Sarat et al. eds., 2007).

^{25.} R. Henry Weaver & Douglas A. Kysar, *Courting Disaster: Climate Change and the Adjudication of Catastrophe*, 93 NOTRE DAME L. REV. 295, 302 (2017).

^{26.} See, e.g., Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 594 (1993) (stating the "overarching subject" of Federal Rule of Evidence 702 for admitting expert testimony is "scientific validity"); Swierkiewicz v. Sorema N. A., 534 U.S. 506, 508 n.1 (2002) ("Because we review here a decision granting respondent's motion to dismiss, we must accept as true all of the factual allegations contained in the complaint.").

government can knowingly take actions that will destroy the nation. What could possibly be more nihilistic than this?

This Note aims to push back against the courts' unwarranted environmental nihilism to demonstrate that courts have the judicial capacity and duty to address the climate crisis. This Note will then explain why, once courts have concluded the issue is both justiciable and redressable, they should conclude that a right to a habitable environment exists.

Part I provides an overview of the recent groundbreaking *Urgenda* decision, where the Supreme Court of the Netherlands ordered the Dutch government to further reduce national GHG emissions.²⁷ The court specifically addressed and rejected the government's political question and lack of redressability defenses.²⁸

Part II illustrates how, in contrast with *Urgenda*, most U.S. courts have dismissed climate cases before ever reaching their merits. First, this Part reviews the case history of *Juliana*, including a Ninth Circuit panel decision to dismiss the case on redressability (and arguably, political question) grounds. Second, it analyzes past climate tort cases where courts have dismissed cases on political question and redressability grounds—additional warning signs that *Juliana* may ultimately face a similar end. Parts III and IV then go on to argue that the reasoning in *Urgenda* and of the district court in *Juliana* regarding political questions, redressability, and constitutional environmental rights should be adopted for legal, scientific, and policy reasons.

Part III contends that the political question doctrine does not bar courts from addressing the climate crisis. Section A provides an overview of the doctrine's origins in *Baker v. Carr* and argues, using the reasoning in *Urgenda* and Judge Josephine L. Staton's dissent in the Ninth Circuit's latest *Juliana* decision as a guide, that (1) no express textual commitment reserves action on the climate crisis to the legislative and executive branches; (2) tort and constitutional law, along with science, provide judicially manageable and discoverable standards for ruling on climate cases; and (3) climate cases do not require courts to make initial policy determinations of the kind clearly for nonjudicial discretion. Next, section B observes that courts' concerns about their own legitimacy underlie the political question doctrine; it then argues that the refusal of judges to take steps to mitigate the climate crisis may ultimately diminish judicial legitimacy and the rule of law itself.

Part IV uses insights from *Urgenda*, Judge Staton's *Juliana* dissent, and the successful clean energy models of countries like Sweden to combat scientific misconceptions that U.S. courts have expressed regarding the redressability of the climate crisis.

^{27.} HR 20 december 2019, 2020 m.nt (De Staat Der Nederlanden/Stichting Urgenda) (Neth.), [hereinafter Urgenda Decision] https://perma.cc/2XZL-SCLY.

^{28.} Id.

2020]

Finally, Part V will demonstrate how courts can find a constitutional right to a habitable environment under the Supreme Court's substantive due process doctrine.

Thus, by deconstructing the political question and redressability arguments against climate cases and emphasizing why there is a constitutional right to a habitable environment, this Note hopes to inspire a more active judicial role in providing solutions to the defining crisis of our time.

I. URGENDA: A NEW HOPE FOR CONSTITUTIONAL CLIMATE CASES

The *Urgenda* case in the Netherlands stands out as a model of how courts can push back against political question and redressability defenses in climate cases. On November 20, 2013, the Urgenda Foundation, a non-profit organization dedicated to climate change research and advocacy, sued the Dutch government on behalf of itself and 886 individuals.²⁹ The Dutch government had planned to cut GHG emissions by 14–17% compared to 1990 levels by 2020.³⁰ The plaintiffs alleged that a reduction of at least 25% was needed instead, contesting the "unjustifiable negligence of the Dutch State in not adopting the necessary and proportionate level of ambition in its climate policy."³¹ In 2015, a district court agreed with the plaintiffs and ordered the government to cut its emissions by at least 25% within five years, citing the scientific findings of the Intergovernmental Panel on Climate Change.³² The Court of Appeals upheld the decision in 2018.³³ Finally, on December 21, 2019, the Supreme Court of the Netherlands affirmed the decision in a groundbreaking victory for the environmental movement.³⁴

The Dutch government argued that deciding how much to reduce GHG emissions posed a political question not meant for the courts to address.³⁵ In response, the Court acknowledged that "the government and parliament are responsible for decision-making on the reduction of greenhouse gas emissions" and that "they have a great deal of freedom to make the necessary political decisions."³⁶ However, at the same time, "[i]t is for the court to assess whether the government and parliament have exercised that freedom within the limits of the

^{29.} Arthur Neslen, *Dutch Government Ordered to Cut Carbon Emissions in Landmark Ruling*, THE GUARDIAN (June 24, 2015), https://perma.cc/K9A2-VSR5.

^{30.} Id.

^{31.} Summons at ¶ 32, Rb-Den Haag 24 juni 2015, m.nt (De Staat Der Nederlanden/Stichting Urgenda), *translated in* SUMMONS IN THE CASE: URGENDA FOUNDATION V. KINGDOM OF THE NETHERLANDS ¶ 32, at 16 (Urgenda Foundation, 2014), https://perma.cc/H72G-BBEQ.

^{32.} Nelsen, *supra* note 29.

^{33.} Hof's-Den Haag 10 september 2018, JB 2019, 10 m.nt Sanderink (De Staat Der Nederlanden/ Stichting Urgenda) (Neth.), https://perma.cc/SMP3-KC4Z.

^{34.} Urgenda Decision, *supra* note 27, ¶ 8.3.5.

^{35.} Id. ¶ 8.3.1.

^{36.} Id. ¶ 8.3.2.

law to which they are bound."³⁷ This echoes Judge Ann Aiken's reasoning in her *Juliana* district court decision when she quoted Chief Justice Marshall in writing that it is "emphatically the province and duty of the judicial department to say what the law is."³⁸

When analyzing the "limits of the law" in *Urgenda*, the Court noted it had a constitutional duty under Articles 93 and 94 of the Dutch Constitution to apply the protection of human rights enshrined in the European Convention for the Protection of Human Rights and Fundamental Freedoms ("ECHR").³⁹ Article 2 of the ECHR protects the right to life, whereas Article 8 protects the right to respect for private and family life.⁴⁰ Additionally, Article 13 of the ECHR mandates that every person whose rights, as set forth in the Convention, have been violated "shall have an effective remedy before a national authority notwithstanding that the violation has been committed by persons acting in an official capacity."⁴¹ In the context of the climate crisis, the Court reasoned that the ECHR mandated that the Dutch government reduce GHG emissions by at least 25% in 2020 to protect these enumerated rights, especially because the best available science demonstrates that the rights to life and the family will be threatened if the State does not take such action.⁴²

Relatedly, the *Urgenda* decision addressed the government's argument that ordering the State to further reduce GHG emissions amounted to a legislative act. The Court noted the consideration that judges "should not engage in the political decision-making that is involved in the drafting of legislation."⁴³ However, the Court also wrote that this "does not mean that the judge should not at all come into the field of political decision-making."⁴⁴ Under Article 94 of the Dutch Constitution, judges can invalidate legislation that violates binding treaties.⁴⁵ Case law also states that a court "can issue a declaration of justice," holding that a public entity has acted unlawfully by not adopting legislation with specific content.⁴⁶

The Court also dismissed the government's redressability argument that courts cannot impose orders to reduce GHG emissions on individual actors because other actors will continue to release emissions. *Urgenda* held that because the Netherlands has a partial responsibility under the United Nations Framework

^{37.} Id.

^{38.} Juliana v. United States, 217 F. Supp. 3d 1224, 1263 (D. Or. 2016) (quoting Marbury v. Madison, 5 U.S. (1 Cranch) 137, 170 (1803)), *rev'd* 947 F.3d 1159 (9th Cir. 2020).

^{39.} Urgenda Decision, *supra* note 27, ¶ 8.3.3.

^{40.} European Convention for the Protection of Human Rights and Fundamental Freedoms, art. 2, 8, June 1, 2010, C.E.T.S. No. 194, https://perma.cc/B2V2-2WHK.

^{41.} Id. art. 13.

^{42.} See Urgenda Decision, supra note 27, ¶ 8.3.4.

^{43.} *Id.* ¶ 8.2.3.

^{44.} *Id.* ¶ 8.2.4.

^{45.} Id.

^{46.} *Id*.

Convention on Climate Change ("UNFCCC") and ECHR to reduce its GHG emissions, this partial responsibility is not suddenly null and void just because other countries do not live up to their own partial responsibilities.⁴⁷ Likewise, the Court rejected the government's defenses that its share of GHG emissions is very low and that a reduction in its territorial emissions would make little difference on the global scale.⁴⁸ The Court wrote, "Acceptance of these defenses would lead to a country simply being able to escape its partial responsibility by pointing to other countries or to its small share."⁴⁹

The Court then highlighted an optimistic fact that U.S. courts never acknowledge when dismissing climate cases: "[E]very reduction [in GHG emissions] means that more space is left in the carbon budget."⁵⁰ Therefore, the defense that reducing emissions within one country would be pointless due to other countries that continue to increase their own emissions does not hold up, because "no reduction is negligible."⁵¹

As Parts III and IV argue, U.S. courts should closely examine *Urgenda's* political question and redressability analyses as they apply to climate cases sounding in U.S. constitutional and tort law. Although *Urgenda* is not binding on the U.S. court system, it provides a useful guide that speaks to the relevant *Baker v. Carr* factors in determining whether a climate case poses a political question outside the scope of the judiciary's powers. It also dispels a common scientific misconception regarding redressability—that lowering one source of GHG emissions has no meaningful effect.

II. JUDICIAL NIHILISM IN U.S. CLIMATE CASES

This section analyzes previous instances of judicial nihilism regarding the climate crisis in both constitutional and tort cases. Although the Supreme Court's ruling in *American Electric Power Co. v. Connecticut (AEP)* has significantly narrowed the possibility of bringing successful climate tort cases under federal common law, the climate tort cases preceding this ruling are nevertheless worth examining because they indicate how judges may treat constitutional climate cases. The warning signs of judicial nihilism in *Juliana* are explored in section A, whereas section B explores the precedent for this nihilism set in previous climate tort cases.

A. GATHERING CLOUDS OF NIHILISM IN JULIANA V. UNITED STATES

The constitutional claims in *Juliana* differ from the climate tort cases discussed in the next section. Because federal judges serve to interpret and apply the

47. Id. at, ¶ 5.7.7.

^{48.} Id.

^{49.} *Id.* 50. *Id.* § 5.7.8.

^{50.} *Id.* 1 5. 51. *Id.*

Constitution, constitutional claims in this context should, in theory, be more difficult to dismiss outright, especially given that *AEP's* holding displacing federal tort common law related to GHG emissions would not apply.

In 2016, District Court Judge Ann Aiken rejected the government's argument that the case presented a nonjusticiable political question. She wrote: "At heart, this lawsuit asks this Court to determine whether defendants have violated plain-tiffs' constitutional rights. That question is squarely within the purview of the judiciary."⁵² The district court also held that the plaintiffs met standing requirements.⁵³ In making these findings, the district court departed from the nihilistic framework of other courts, although the plaintiffs' assertion of constitutional claims rather than tort claims likely made this easier to justify.

Perhaps most significantly, the district court found that there exists a fundamental right to a stable climate system on the grounds that fundamental rights include rights expressly enumerated in the Constitution, as well as rights which are either (1) "deeply rooted in this Nation's history and tradition" or (2) "fundamental to our scheme of ordered liberty."⁵⁴ Applying this framework, the district court held that it had "no doubt that the right to a climate system capable of sustaining human life is fundamental to a free and ordered society."⁵⁵ It also determined that the plaintiffs' public trust claims based on harms to the ocean are valid under the Substantive Due Process Clause of the Fifth Amendment,⁵⁶ while leaving the question open as to whether the federal government's public trust assets include the atmosphere.⁵⁷

Notably, the district court's *Juliana* decision broke from the hopeless reasoning present in state court decisions regarding state governments' duty to protect the atmosphere under the public trust doctrine.

For example, in *Sanders-Reed ex rel. Sanders-Reed v. Martinez*, New Mexico's Environmental Improvement Board ("EIB") repealed GHG regulations in March and May 2012.⁵⁸ In doing so, EIB concluded that regulating GHG emissions in the state "will have no perceptible impact on climate change or global warming."⁵⁹ This kind of reasoning is not only scientifically incorrect, but also reflects the tragedy of the commons phenomenon at the heart of the climate

59. Id.

^{52.} Juliana v. United States, 217 F. Supp. 3d 1224, 1241 (D. Or. 2016), *rev'd* 947 F.3d 1159 (9th Cir. 2020).

^{53.} Id. at 1242-48.

^{54.} Id. at 1249 (citing McDonald v. City of Chicago, Ill., 561 U.S. 742, 767 (2010)).

^{55.} Id. at 1250.

^{56.} Id. at 1261.

^{57.} *Id.* at 1255 n.10 ("The dearth of litigation focusing on atmosphere may reflect the limited state of scientific knowledge rather than signal a determination that the air is outside the scope of the public trust.").

^{58.} Sanders-Reed ex rel. Sanders-Reed v. Martinez, 2015-NMCA-063, ¶ 5, 350 P.3d 1221.

crisis.⁶⁰ If every sovereign territory operated with such logic, then it would significantly exacerbate global warming.

Environmental groups then challenged New Mexico's repeal of the GHG regulations, contending this violated the state's duty to treat the atmosphere as a public trust. The district court dismissed the case as a "political decision, not a [c]ourt decision[,]" and stated the remedy is to "elect people who believe that greenhouse gases are a problem, [and] man[kind] does contribute to climate change[.]"⁶¹ The New Mexico Court of Appeals affirmed this decision, invoking related separations of power principles.⁶²

Similarly, state courts in Washington and Oregon also dismissed climate cases under the public trust doctrine as nonjusticiable political questions.⁶³ Thus, the district court's *Juliana* decision is not only significant for departing from these rulings, but also for doing so on the federal level.

The *Juliana* trial was scheduled to begin on October 29, 2018.⁶⁴ The lawsuit had managed to survive motions to dismiss and for summary judgment, multiple writ of mandamus petitions by the government to the Ninth Circuit, and two writ of mandamus petitions to the Supreme Court.⁶⁵

The Supreme Court denied the first writ of mandamus petition for being premature on July 30, 2018.⁶⁶ However, language in the Court's unanimous order indicate gathering clouds of judicial nihilism in the nation's highest court:

The breadth of respondents' claims is striking, . . . and the justiciability of those claims presents substantial grounds for difference of opinion. The District Court should take these concerns into account in assessing the burdens of discovery and trial, as well as the desirability of a prompt ruling on the Government's pending dispositive motions.⁶⁷

67. Id.

^{60.} See Garrett Hardin, The Tragedy of the Commons, 162 SCIENCE 1243, 1248 (1968).

^{61.} Sanders-Reed ex rel. Sanders-Reed, 2015-NMCA-063 ¶ 9.

^{62.} *Id.* \P 15–19. Although the appeals court agreed that the state does indeed hold the atmosphere in a public trust, it ruled that a common law cause of action under the public trust doctrine would improperly circumvent the process for addressing competing interests under the state's Air Quality Control Act. *Id.*

^{63.} Svitak ex rel. Svitak v. State, at *1–*2, 178 Wash. App. 1020 (2013) ("This is a political question and under the separation of powers doctrine is within the purview of the legislature . . . Because our state constitution does not address state responsibility for climate change, it is up to the legislature, not the judiciary, to decide whether to act as a matter of public policy."); Chernaik v Kitzhaber, No. 16-11-09273, 2012 WL 10205018, at *8 (Or. Cir. Apr. 5, 2012) (holding that GHG emissions established by the legislature "is a policy decision that has already been addressed by the Legislature[.] With the Legislature this decision should remain."), *rev'd*, Chernaik v. Kitzhaber, 328 P.3d 799 (Or. Ct. App. 2014).

^{64.} Juliana v. United States: Youth Climate Lawsuit, OUR CHILDREN'S TRUST, https://perma.cc/ 2WYV-3VYT (last visited Oct. 9, 2020).

^{65.} Id.

^{66.} United States v. U.S. Dist. Court for Dist. of Or., 139 S. Ct. 1 (2018). Interestingly, joining this order was Justice Anthony Kennedy's last official act as a Supreme Court Justice.

Importantly, the federal statute describing the standard for allowing interlocutory appeals includes situations where there exists "substantial grounds for difference of opinion."⁶⁸ Lisa Heinzerling notes, "Even while it conceded that the government did not meet the requirements of mandamus relief, the Supreme Court seized the opportunity to throw shade on the plaintiffs' claims and to goad the lower courts into booting the claims before trial."⁶⁹

Ten days before the trial date, Chief Justice John Roberts issued a temporary stay while the Court considered yet another one of the government's mandamus petitions.⁷⁰ On November 2, 2018, six justices signed onto an order that denied the government relief but also implied that the Ninth Circuit's previous decision denying mandamus relief was outdated and should be reconsidered.⁷¹ Specifically, the Court reasoned that the Ninth Circuit's decision was based on the early stage of the litigation, and the district court had since affirmed that trial was now imminent.⁷² However, the Court concluded the government's petition did not have a "fair prospect" of success "because adequate relief may be available" in the Ninth Circuit.⁷³ In doing so, the Court also highlighted the government's arguments, characterizing the case as "beyond the limits of Article III," with the plaintiffs' claims "based on an assortment of unprecedented legal theories."⁷⁴ Justices Thomas and Gorsuch would have granted the stay.⁷⁵

Reading between the lines, the Ninth Circuit stayed the trial and ordered the district court to resolve the government's motion to reconsider the denial of its request to certify orders for interlocutory review, citing both of the Supreme Court's orders.⁷⁶ Given such pressure from the higher courts, the district court certified the case for interlocutory appeal. Although the district court stood by its previous rulings and believed "this case would be better served by further factual development at trial," it took "particular note" of the two Supreme Court orders, as well as the Ninth Circuit's most recent "extraordinary" order.⁷⁷

The Ninth Circuit granted permission for an interlocutory appeal in January 2019, and oral arguments were held in June 2019.⁷⁸ On January 17, 2020, the court dismissed the case for lack of redressability. In its opinion, the majority wrote:

^{68. 28} U.S.C. 1292(b).

^{69.} Lisa Heinzerling, A Meditation on Juliana v. United States, SSRN, May 28, 2019, at 15–16, https://perma.cc/S3NE-ZLQW.

^{70.} OUR CHILDREN'S TRUST, supra note 64.

^{71.} In re United States, 139 S.Ct. 452, 453 (2018).

^{72.} Id.

^{73.} Id. at 452-53.

^{74.} Id.

^{75.} Id. at 453.

^{76.} Order, In re United States, No. 18-73014 (9th Cir. Nov. 8, 2018).

^{77.} Juliana v. United States, 217 F. Supp. 3d 1224, 1234 (D. Or. 2016), *rev'd* 947 F.3d 1159 (9th Cir. 2020).

^{78.} OUR CHILDREN'S TRUST, supra note 64.

The plaintiffs' experts opine that the federal government's leases and subsidies have contributed to global carbon emissions. But they do not show that even the total elimination of the challenged programs would halt the growth of carbon dioxide levels in the atmosphere, let alone decrease that growth. Nor does any expert contend that elimination of the challenged pro-carbon fuels programs would by itself prevent further injury to the plaintiffs. Rather, the record shows that many of the emissions causing climate change happened decades ago or come from foreign and non-governmental sources.⁷⁹

This excerpt epitomizes two strains of climate crisis nihilism. First, because carbon dioxide emissions will—absent collective action from political institutions continue to grow, why bother, as one of the political institutions possessing the power to produce such collective action, doing anything to redress the problem? Second, many emissions have already been released, including some from nongovernmental sources, so what is the point in stopping even more governmentlinked emissions? Part IV will address the misconceptions inherent in these objections to redressability.

The majority also cited concerns in their redressability analysis that relate to the political question doctrine, reasoning that "[a]s the opinions of [the plaintiffs'] experts make plain, any effective plan would necessarily require a host of complex policy decisions entrusted, for better or worse, to the wisdom and discretion of the executive and legislative branches."⁸⁰ It then analogized to the Supreme Court's decision in *Rucho v. Common Cause*, which held that federal courts lack judicially administrable standards to determine what constitutes too much partisan gerrymandering.⁸¹ The Ninth Circuit reasoned that it would lack judicially administrable standards in determining whether the climate plan the *Juliana* plaintiffs seek would be sufficient to remedy the harms they suffer.⁸²

Although the majority said they had not decided the case on political question grounds, Judge Staton argued in her dissenting opinion that the majority's reliance on *Rucho* and reference to the lack of judicially administrable standards for finding the case nonjusticiable "blur any meaningful distinction between the doctrines of standing and political question."⁸³ In response, the majority noted that political question and redressability concerns "often overlap" due to their roots in the same separation of powers principles.⁸⁴ For reasons explored later on, Judge Staton ultimately found that the court could redress plaintiffs' injuries and articulated the "perpetuity principle" that "the Constitution does not condone the Nation's willful destruction."⁸⁵

^{79.} Juliana v. United States, 947 F.3d 1159, 1170 (9th Cir. 2020).

^{80.} Id. at 1171.

^{81.} Id. at 1173 (citing Rucho v. Common Cause, 139 S. Ct. 2484, 2500-02 (2019)).

^{82.} Id.

^{83.} Id. at 1185 n.10 (Staton, J., dissenting).

^{84.} Id. at 1175, 1177 n.9 (majority opinion).

^{85.} Id. at 1175, 1177 (Staton, J., dissenting).

If the Ninth Circuit grants en banc review and follows the Supreme Court's auguries, the decision will not favor the child plaintiffs or future generations who will endure the brunt of the environmental catastrophes to come.

B. PREVIOUS NIHILISM IN FAILED CLIMATE TORT CASES

The Ninth Circuit's dismissal of *Juliana* on redressability and implied political questions grounds aligns with previous court decisions on climate issues. Before *Juliana*, U.S. courts routinely dismissed climate tort cases on political question and redressability grounds as well.⁸⁶ For example, in *Native Village of Kivalina v. ExxonMobil Corporation*, an Alaskan Inupiat village of approximately 400 people sued twenty-four fossil fuel corporations for their contributions to the climate crisis.⁸⁷ Sea ice had formerly protected Kivalina from winter storms, but with the sea ice melting, such storms had caused massive erosion.⁸⁸ The complaint stated, "Houses and buildings are in imminent danger of falling into the sea as the village is battered by storms and its ground crumbles from underneath it."⁸⁹ As a remedy, the plaintiffs sought from the corporations an estimated \$95–\$400 million dollars in relocation costs for their village.⁹⁰ These sympathetic plaintiffs' case "rested on a traditional cause of action—the exclusive use and enjoyment of property—and sought only modest damages, at least as compared to the defendants' profits."⁹¹

Even so, the district court dismissed the federal common law nuisance claims, holding that they presented a nonjusticiable political question. The court wrote that the case did not have judicially manageable standards, emphasizing, "Plaintiffs' global warming claim is based on the emission of greenhouse gases from innumerable sources located throughout the world and *affecting the entire planet and its atmosphere*."⁹² The court also highlighted the lengthy causal chain of the injury GHG emissions posed to the plaintiffs:

In a global warming scenario, emitted greenhouse gases combine with other gases in the atmosphere which *in turn* results in the planet retaining heat, which *in turn* causes the ice caps to melt and the oceans to rise, which *in turn* causes the Arctic sea ice to melt, which *in turn* allegedly renders Kivalina vulnerable to erosion and deterioration resulting from winter storms.⁹³

^{86.} See Weaver & Kysar, *supra* note 25, at 323–24. See generally Native Vill. of Kivalina v. ExxonMobil Corp., 663 F. Supp. 2d 863 (N.D. Cal. 2009), *aff* d, 696 F.3d 849 (9th Cir. 2012); California v. Gen. Motors Corp., No. C06- 05755, 2007 WL 2726871 (N.D. Cal. Sept. 17, 2007); Connecticut v. Am. Elec. Power Co., 406 F. Supp. 2d 265 (S.D.N.Y. 2005), *vacated*, 582 F.3d 309 (2d Cir. 2009), *rev'd sub nom*. Am. Elec. Power Co. v. Connecticut, 564 U.S. 410 (2011).

^{87.} Complaint for Damages Demand for Jury Trial at ¶ 1, *Native Vill. of Kivalina*, 663 F. Supp. 2d 863 [hereinafter Kivalina Complaint].

^{88.} Id. ¶ 4.

^{89.} Id.

^{90.} *Id.* ¶ 1.

^{91.} Weaver & Kysar, supra note 25, at 328.

^{92.} Native Vill. of Kivalina, 663 F. Supp. 2d at 875, aff'd, 696 F.3d 849 (9th Cir. 2012).

^{93.} Id. at 876.

The *Kivalina* district court also found that it would be inappropriate for the judiciary to make an initial policy decision determining how much GHG emissions should be allowed from the defendants.⁹⁴ Additionally, the court determined that the plaintiffs lacked Article III standing because their injuries were not fairly traceable to any defendant's GHG emissions, again emphasizing the complex, global scale of the case.⁹⁵ Thus, the 'bigness' of climate change appears to be a primary motivating factor as to why the court thought it should not proceed with the case.

Notably, the court did not address the state law civil conspiracy claim in the *Kivalina* complaint. The plaintiffs alleged defendants had conducted a "campaign to deceive the public about the science of global warming," thereby aggravating the harm to the village.⁹⁶ The court, however, refused to exercise supplemental jurisdiction over the state law claims.⁹⁷ On appeal, the Ninth Circuit dismissed the plaintiffs' remaining claims as displaced by the Clean Air Act, in accordance with the Supreme Court's ruling in *AEP*.⁹⁸

The district court's decision in *AEP*, perhaps the most significant climate tort case to date, nicely demonstrates the judicial nihilism such cases often trigger.⁹⁹ The district court dismissed the plaintiffs' public nuisance climate suit against electric utilities as presenting a nonjusticiable political question, concluding that a merits adjudication would be an "impossibility" without making "an initial policy determination of a kind clearly for non-judicial discretion."¹⁰⁰ The court also remarked: "The scope and magnitude of the relief Plaintiffs seek reveals the transcendently legislative nature of this litigation."¹⁰¹ This statement illustrates how judicial fears regarding what a remedy might require motivates judges to dismiss climate crisis cases, even though speculation as to the exact nature of the remedy at this early stage of litigation is "largely improper."¹⁰²

Interestingly, a Second Circuit panel reversed, rebutting the district court's quick dismissal: "The fact that a case may present complex issues is not a reason for federal courts to shy away from adjudication; when a court is possessed of jurisdiction, it generally must exercise it."¹⁰³ Nevertheless, the Supreme Court reversed the Second Circuit panel, unanimously ruling that the Clean Air Act displaces federal common law tort claims aiming to address the climate crisis and that the Act would still displace such claims even if the Environmental Protection

^{94.} Id. at 876–77.

^{95.} Id. at 880-81.

^{96.} Kivalina Complaint, *supra* note 87, ¶¶ 272–73.

^{97.} Native Vill. of Kivalina, 663 F. Supp. 2d at 882-83.

^{98.} Native Vill. of Kivalina v. ExxonMobil Corp., 696 F.3d 849 (9th Cir. 2012).

^{99.} Connecticut v. Am. Elec. Power Co., 406 F. Supp. 2d 265 (S.D.N.Y. 2005), vacated, 582 F.3d 309 (2d Cir. 2009), rev'd sub nom. Am. Elec. Power Co. v. Connecticut, 564 U.S. 410 (2011).

^{100.} *Am. Elec. Power*, 406 F. Supp. 2d at 272 (quoting Vieth v. Jubelirer, 541 U.S. 267, 278 (2004) (plurality opinion)).

^{101.} Id.

^{102.} Weaver & Kysar, supra note 25, at 325.

^{103.} Connecticut, 582 F.3d 309, rev'd sub nom. Am. Elec. Power Co., 564 U.S. 410.

Agency ("EPA") refused to use its regulatory authority to address GHG emissions.¹⁰⁴ The Court reasoned, "The Act itself thus provides a means to seek limits on emissions of carbon dioxide from domestic power plants—the same relief the plaintiffs seek by invoking federal common law. We see no room for a parallel track."¹⁰⁵ Weaver and Kysar critique this decision as improperly conflating tort law with regulation, as the Court fails "to acknowledge tort's norm-articulation and compensatory functions, let alone the manner in which tort law can serve as an important source of regulatory redundancy and inter-branch signaling in light of predictable government failure."¹⁰⁶

AEP has affected other cases aside from *Kivalina*. In 2007, when *AEP* was pending before the Second Circuit, California brought an action against automakers for monetary damages connected to the defendants' contributions to global warming, alleging a public nuisance, in *California v. General Motors Corporation*.¹⁰⁷ However, the district court dismissed the claims for posing non-justiciable political questions, citing the *AEP* district court decision.¹⁰⁸ Eventually, California decided to withdraw its appeal request, citing the EPA's decision to regulate GHG emissions and President Obama's order for the Department of Transportation to establish higher national fuel efficiency standards.¹⁰⁹

Although the plaintiffs in these cases may have had little chance of success even if courts had allowed their cases to go forward, Weaver and Kysar note that "merely by refusing to decide and offer principled reasons on the merits of these cases, courts surrender crucial normative territory in law's confrontation with catastrophe."¹¹⁰ The Ninth Circuit's *Juliana* decision echoed the logic expressed in these climate tort cases, and in doing so surrendered additional normative territory on the constitutional front.¹¹¹

Thus, the current state of affairs in how U.S. courts treat the climate crisis is not a hopeful one. If *Juliana* fails, however, it will not likely do so because the Supreme Court declares that Americans do not have a constitutional right to a habitable environment. Such a radical declaration would seemingly break the social contract upon which democratic governments are founded and be cause for revolution, as such governments have a general duty to prevent undue interferences with citizens' property and lives.¹¹²

^{104.} Am. Elec. Power Co., 564 U.S. at 424-29.

^{105.} Id. at 425.

^{106.} Weaver & Kysar, supra note 25, at 325.

^{107.} California v. Gen. Motors Corp., No. C06-05755, 2007 WL 2726871, at *1 (N.D. Cal. Sept. 17, 2007).

^{108.} Id. at *14-16.

^{109.} Unopposed Motion to Dismiss Appeal at 2–3, California v. Gen. Motors Corp., No. 07–16908, 2009 WL 1915707, (9th Cir. June 19, 2009).

^{110.} Weaver & Kysar, supra note 25, at 329.

^{111.} Juliana v. United States, 947 F.3d 1159, 1171-73 (9th Cir. 2020).

^{112.} JOHN LOCKE, TWO TREATISES OF GOVERNMENT § 131, 398 (Peter Laslett ed., Cambridge Univ.

Press 2013) (1690). In his Second Treatise of Government, John Locke noted that when people "enter

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Instead, *Juliana* is most likely to fail on the grounds that it poses a nonjusticiable political question and lacks redressability, as the Ninth Circuit has already ruled. Part III dispels this hopeless paradigm by explaining why courts have a duty to address the questions *Juliana* presents on the merits. Then, Part IV will demonstrate why addressing the climate crisis through the judiciary is both legally and scientifically feasible.

III. POLITICAL QUESTIONS, THE CLIMATE CRISIS, AND THE RISK OF JUDICIAL DELEGITIMIZATION

A. DECIDING CLIMATE CASES FITS SQUARELY WITHIN THE JUDICIARY'S ROLE

Even though the Constitution makes no mention of "political questions" that the federal judiciary may not rule upon, the Supreme Court has determined that matters demonstrably committed to the executive or legislative branches, or otherwise not fit for judicial consideration, are nonjusticiable.¹¹³

The doctrine has its roots in Chief Justice Marshall's opinion in *Marbury v*. *Madison*. He wrote, "Questions, in their nature political or which are, by the Constitution and laws, submitted to the executive, can never be made in this court."¹¹⁴ Thus, Marshall identified early on two strands of the modern political question doctrine: issues expressly delegated to coordinate branches of government, and those so inherently political as to be unfit for the judiciary.¹¹⁵

The modern political question doctrine examines "whether the duty asserted can be judicially identified and its breach judicially determined, and whether protection for the right asserted can be judicially molded."¹¹⁶ *Baker v. Carr* identifies six factors that each indicate a case presents a political question not fit for judges to decide:

(1) a textually demonstrable constitutional commitment of the issue to a coordinate political department; or (2) a lack of judicially discoverable and manageable standards for resolving it; or (3) the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion; or (4) the impossibility of a court's undertaking independent resolution without expressing lack of the respect due coordinate branches of government; or

into society," they "give up the equality, liberty, and executive power they had in the state of nature, into the hands of society... yet it being only with an intention in every one the better to preserve himself, his liberty and property; (for no rational creature can be supposed to change his condition with an intention to be worse) the power of the society, or *legislative* constituted by them, can *never be supposed to extend farther, than the common good*; but is obliged to secure everyone one's property, by providing against those three defects above mentioned, that made the state of nature so unsafe and uneasy." *Id.* (emphasis added).

^{113.} See Baker v. Carr, 369 U.S. 186, 217 (1962).

^{114.} Marbury v. Madison, 5 U.S. (1 Cranch) 137, 170 (1803).

^{115.} James R. May, Climate Change, Constitutional Consignment, and the Political Question Doctrine, 85 DENVER UNIV. L. REV. 919, 932–33 (2008).

^{116.} Baker, 369 U.S. at 198.

(5) an unusual need for unquestioning adherence to a political decision already made; or (6) the potentiality of embarrassment from multifarious pronouncements by various departments on one question.¹¹⁷

These six factors are "probably listed in descending order of both importance and certainty."¹¹⁸ For a judge to dismiss a case based on the political question doctrine, one of the six factors must be "inextricable" from the case.¹¹⁹ Additionally, as Justice Brennan observed in *Baker v. Carr*, just because a case involves politics does not mean it presents a nonjusticiable political question.¹²⁰

These six factors align with Marshall's two categories of cases inappropriate for judicial determinations. Factor one falls within Marshall's category of express delegations to other political branches, whereas factors two through six describe Marshall's prudential category of cases too political for the courts.¹²¹ Courts have wrongly dismissed cases involving the climate crisis under both the express and prudential categories of the doctrine.

1. No Express Delegations Reserve Handling the Climate Crisis to the Political Branches

The court erred in *California v. General Motors Corporation* when it dismissed the plaintiffs' case against the car companies based on the express version of the political question doctrine by invoking the Commerce and Treaty Clauses. It noted that the Constitution gives Congress the power "[t]o regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes."¹²² The court then inferred "that the concerns raised by the potential ramifications of a judicial decision on global warming in this case would sufficiently encroach upon interstate commerce, to cause the Court to pause before delving into such areas so constitutionally committed to Congress."¹²³ Similarly, with regards to the Treaty Clause, the court wrote that "the power to regulate foreign affairs is vested exclusively in the political branches of government."¹²⁴

However, neither Congress nor the Constitution has expressly reserved addressing the climate crisis to the political branches. As James R. May notes, precedent applying this prong demonstrates that "the commitment must be 'tex-tual,' not inferential."¹²⁵ For example, in *Colegrove v. Green*, the Supreme Court held the Constitution expressly assigns congressional districting to Congress

^{117.} Id. at 217.

^{118.} Vieth v. Jubelirer, 541 U.S. 267, 278 (2004).

^{119.} Baker, 369 U.S. at 217.

^{120.} Id. ("The doctrine of which we treat is one of 'political questions,' not one of 'political cases."").

^{121.} May, supra note 115, at 933.

^{122.} California v. Gen. Motors Corp., No. C06-05755, 2007 WL 2726871, at *13 (N.D. Cal. Sept. 17, 2007) (quoting U.S. Const. art. I, § 8, cl. 3.).

^{123.} Id. at *14.

^{124.} *Id.* at *13.

^{125.} May, supra note 115, at 938.

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under the Guaranty Clause.¹²⁶ Likewise, in *Nixon v. United States*, the Court held the Constitution expressly reserves to the Senate the conviction of impeachable offenses under the Impeachment Clause.¹²⁷ And in *Goldwater v. Carter*, the Court held the Treaty Clause expressly reserves the treaty process to the President for negotiation and to the Senate for ratification.¹²⁸ More recently, in *Rucho*, the Court banned federal courts from entertaining partisan gerrymandering cases based in part on the Elections Clause's "assign[ment] to state legislatures the power to prescribe the 'Times, Places and Manner of holding Elections' for Members of Congress, while giving Congress the power to 'make or alter' any such regulations."¹²⁹

No such unambiguous delegations exist when it comes to roping off the courts from remedying the climate crisis. Contrary to *General Motors Corporation*, the *Kivalina* district court agreed that nothing in the law textually committed handling this issue to the other branches of government.¹³⁰ The court reasoned, "[A] mandate to regulate a certain area is not the equivalent of delegating the exclusive power to resolve that issue to another branch. Rather, the issue is whether the Constitution has given one of the political branches final responsibility for interpreting the scope and nature of such power."¹³¹ Therefore, the first prong of the doctrine does not apply to climate cases.

2. Prudential Doctrines Do Not Bar Courts from Remedying the Climate Crisis

Courts that have dismissed climate cases based on the prudential prongs of the political question doctrine generally focus on whether the case presents "a lack of judicially discoverable and manageable standards for resolving it," or requires "an initial policy determination of a kind clearly for nonjudicial discretion."¹³² That courts choose to rely on these particular *Baker* factors makes sense, as a court would appear cowardly or unduly deferential, given the significance of the threat at hand, if it refused to deal with the climate crisis simply because it was afraid of "expressing lack of respect" to the other branches, or felt an "unusual need for unquestioning adherence" to their decisions, or thought there could be a potential for mere "embarrassment" of these branches.¹³³

^{126.} Id. at 934 (citing Colegrove v. Green, 328 U.S. 549, 556 (1946)).

^{127.} Id. at 934 (citing Nixon v. United States, 506 U.S. 224, 238 (1993)).

^{128.} Id. at 934 (citing Goldwater v. Carter, 444 U.S. 996, 537 (1979) (Rehnquist, J., concurring)).

^{129.} Rucho v. Common Cause, 139 S. Ct. 2484, 2495 (2019).

^{130.} Native Vill. of Kivalina v. ExxonMobil Corp., 663 F. Supp. 2d 863, 872–73 (N.D. Cal. 2009), *aff* d, 696 F.3d 849 (9th Cir. 2012).

^{131.} Id. at 872.

^{132.} May, supra note 115, at 940.

^{133.} See Baker v. Carr, 369 U.S. 186, 217 (1962).

a. Tort and Constitutional Law, Along with Science, Provide Judicially Manageable and Discoverable Standards

A perceived lack of judicially manageable standards played a role in the dismissals in *General Motors Corporation, Kivalina*, and *Juliana*. In *General Motors Corporation*, the court determined it was "left without guidance in determining what is an unreasonable contribution to the sum of carbon dioxide . . . or in determining who should bear the costs."¹³⁴ It also found previous cases treating pollution as a public nuisance inapplicable because none of those cases "implicates a comparable number of national and international policy issues."¹³⁵ Likewise, in *Kivalina*, the court found judicially manageable standards lacking because "[p]laintiffs' global warming nuisance claim seeks to impose liability and damages on a scale unlike any prior environmental pollution case."¹³⁶

However, both of these tort cases ignore that "two centuries of common law amply supply judicial standards for deciding whether there is an 'unreasonable [use or] interference with a right common to the general public."¹³⁷ Traditional tort standards of responsibility involving duty, breach, causation, and damages would easily apply to climate cases, even if they involve facts more complex than usual. In particular, causation is still fairly traceable, even if it is more complex. Studies exist providing evidence of how much GHG emissions individual countries and companies have caused,¹³⁸ and scientific data showing the average increase in global temperatures in correlation with such emission increases is undoubtedly available.¹³⁹ Courts may nevertheless determine that some actors' GHG emissions are so small as to render them not liable—but that would be a decision applying normal tort judicial standards, rather than refusing to even address the question.

Additionally, just because a set judicial framework for managing climate cases does not yet exist does not mean that a court cannot fashion one.¹⁴⁰ The climate crisis is a relatively new problem, and the law must have an opportunity to adapt to it.

Furthermore, the bigness of the cases at hand should not have prevented the courts from addressing the alleged harms. Even though the *Kivalina* district court

^{134.} California v. Gen. Motors Corp., No. C06-05755, 2007 WL 2726871, at *15 (N.D. Cal. Sept. 17, 2007)

^{135.} Id.

^{136.} Native Vill. of Kivalina, 663 F. Supp. 2d at 876.

^{137.} May, *supra* note 115, at 943 (quoting United States v. Oswego Barge Corp., 654 F.2d 327, 333 n.5 (2d Cir. 1981)).

^{138.} See, e.g., Each Country's Share of CO2 Emissions, UNION OF CONCERNED SCIENTISTS, https://perma.cc/Y9H7-X2NS (last updated Aug. 12, 2020); Matthew Taylor & Jonathan Watts, *Revealed: the 20 firms behind a third of all carbon emissions*, THE GUARDIAN (Oct. 9, 2019, 7:00 pm), https://perma. cc/AU83-3JTE.

^{139.} See, e.g., Hannah Ritchie & Max Roser, CO2 and Greenhouse Gas Emissions, OUR WORLD IN DATA, https://perma.cc/S5B2-RDMT (last updated Aug. 2020).

^{140.} May, supra note 115, at 943-44.

cited the Ninth Circuit's characterization of the second *Baker* factor as not turning on "whether the case is unmanageable in the sense of being large, complicated, or otherwise difficult to tackle from a logistical standpoint," the court explicitly considered the scale of the liability and damages when it determined judicially manageable standards did not exist.¹⁴¹ As further explored in Part IV on redressability, just because numerous actors have contributed to the climate crisis does not mean that the ones plaintiffs choose to bring before the court are not partially responsible. These are simply cases of joint tortfeasors, and not all of them need to be before the court for some of them to be held liable. The same is true in the constitutional context; assuming a constitutional right to a habitable environment exists, if the parties before the court have violated this right, the court has the power to enjoin such parties from continuing to participate in the harm.

Finally, the Ninth Circuit erred in *Juliana* when it relied on *Rucho* to determine it lacked judicially administrable standards to determine redressability. Although the majority classified its arguments as having to do with redressability, this Note agrees with Judge Staton's dissent that their concerns heavily implicate the political question doctrine. The majority claimed that it did not have standards (1) to determine what relief "is sufficient to remediate the claimed constitutional violation" or (2) to "supervise[] or enforce[]" such relief.¹⁴²

In her dissent, Judge Staton properly noted that the first point ignores "ample evidence" that there exists "a discernable 'tipping point' at which the government's conduct turns from facilitating mere pollution to inducing an unstoppable cataclysm in violation of plaintiffs' rights."143 The plaintiffs' evidence that atmospheric carbon levels of 350 ppm are necessary to secure a stable climate is a clear line rooted in science.¹⁴⁴ Staton observed that no clear line existed in Rucho, which held that in the context of partisan gerrymandering, "no standards exist by which to determine when a rights violation has even occurred."¹⁴⁵ In contrast, the "discernable standard" in Juliana is "the amount of fossil-fuel emissions that will irreparably devastate our Nation."¹⁴⁶ The plaintiffs provided such evidence, and at the pre-trial stage of the litigation, the court only needs to conclude that their evidence creates "a genuine dispute as to whether such an amount can possibly be determined as a matter of scientific fact."¹⁴⁷ If the Juliana trial ever does occur, the court could use Urgenda as a model that relied on the best available science in determining that the Dutch government must reduce its GHG emissions by at least 25% by 2020.¹⁴⁸ Other courts do not fear examining and

146. *Id.* 147. *Id.*

^{141.} Native Vill. of Kivalina, 663 F. Supp. 2d at 874-75.

^{142.} Juliana v. United States, 947 F.3d 1159, 1170 (9th Cir. 2020).

^{143.} Id. at 1187 (Staton, J., dissenting).

^{144.} Id.

^{145.} Id.

^{147.} IU.

^{148.} See Urgenda Decision, supra note 27, ¶ 8.3.4.

relying on scientific evidence, and neither should U.S. courts. An unwillingness to squarely face this science is akin to an unwillingness to confront facts, something in which courts have always traditionally dealt.

Judge Staton also distinguished *Rucho* by noting that the Supreme Court partially based that decision on the textual commitment and historical practice of delegating electoral district drawing to state legislators, whereas no such express textual commitment or historical practice exists regarding the climate crisis.¹⁴⁹ Furthermore, she observed that because *Rucho* essentially dealt with a request for the Court to "reallocate political power between the major parties," it confronted "fundamentally 'political' questions in the common sense of the term."¹⁵⁰ While addressing the climate crisis implicates many policies, it is not political in the sense of deciding how the nation should elect its representatives.¹⁵¹

Regarding the majority's concern about enforcing the requested relief, Judge Staton correctly observed that the "scope and number of policies a court would have to reform to provide relief is irrelevant to the second Baker factor."152 Like in General Motors Corporation and Kivalina, the majority's concern about the magnitude of the requested relief demonstrates an improper consideration regarding the litigation's bigness. Judge Staton then cited numerous instances of programmatic changes that implicated many policies "ushered in by the judiciary's commitment to requiring adherence to the Constitution."¹⁵³ In Brown v. Plata, for instance, the Court overhauled California's prison administration to uphold the Constitution's prohibition on cruel and unusual punishment.¹⁵⁴ Likewise, the Court ordered the racial integration of every public school in the nation on the state and federal level to guarantee the Constitution's equal protection under the law.¹⁵⁵ Judge Staton pointedly observed that in the school desegregation cases, "the Supreme Court was explicitly unconcerned with the fact that crafting relief would require individualized review of thousands of state and local policies that facilitated segregation."156

Thus, the first judicially manageable standard courts should look to in constitutional climate cases is whether a constitutional right has been violated. If a court determines, based on the best available science, that the government is violating a constitutional right, then it has no basis to deny relief on the grounds that the case appears to be too big or complex, or would generate considerable amounts of additional litigation. The court can turn to tort law if damages need to be apportioned (which is not the case in *Juliana*), and it can continue to rely on science to

^{149.} See Juliana, 947 F.3d at 1190 (Staton, J., dissenting).

^{150.} Id.

^{151.} Id.

^{152.} Id. at 1188.

^{153.} Id.

^{154.} See Brown v. Plata, 563 U.S. 493, 500-02 (2011).

^{155.} See Brown v. Bd. of Educ., 347 U.S. 483 (1954); Bolling v. Sharpe, 347 U.S. 497 (1954).

^{156.} Juliana, 947 F.3d at 1188 (Staton, J., dissenting).

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craft an appropriate remedy. As Chief Justice Marshall wrote in *Cohens v*. *Virginia*, a "[court] has no more right to decline the exercise of jurisdiction which is given, than to usurp that which is not given. The one or the other would be treason to the constitution."¹⁵⁷ Courts commit the very treason of which Chief Justice Marshall warns when they dismiss climate cases on the basis of the above non-constitutional fears.

b. Climate Cases Do Not Require Courts to Make Initial Policy Determinations of a Kind Clearly for Nonjudicial Discretion

The district courts in *AEP*, *General Motors Corporation*, and *Kivalina* all held that ruling on the climate cases before them would require the court to make an initial policy determination of a kind clearly for nonjudicial discretion.

In *AEP*, the court found the plaintiffs' allegations "extraordinary" and "patently political."¹⁵⁸ It also characterized the "scope and magnitude" of the potential remedy as "transcendentally legislative" in its nature.¹⁵⁹ This again demonstrates the concerns courts often have about the bigness of climate suits.

Notably, *AEP* also interpreted congressional silence on limiting GHG emissions as an affirmative order that courts should refrain from involvement in this arena:

The explicit statements of Congress and the Executive on the issue of global climate change in general and their specific refusal to impose the limits on carbon dioxide emissions Plaintiffs now seek to impose by judicial fiat confirm that making the 'initial policy determinations' addressing global climate change is an undertaking for the political branches.¹⁶⁰

General Motors Corporation cited *AEP* frequently in its analysis. It also analyzed the statutory schemes relating to GHG emissions under the Clean Air Act and Energy Policy and Conservation Act.¹⁶¹ Even though the court acknowledged that these statutes "do not directly address the issue of global warming and carbon dioxide emission standards," it determined that entering "the global warming thicket at this juncture would require an initial policy determination of the type reserved for the political branches of government."¹⁶²

Likewise, the district court in *Kivalina* wrote that the injunctive relief the village sought would require initial policy determinations about the acceptable level of GHG emissions emitted by the defendants and who should bear the cost of

^{157.} Cohens v. Virginia, 19 U.S. (6 Wheat.) 264, 404 (1821).

^{158.} Connecticut v. Am. Elec. Power Co., 406 F. Supp. 2d 265, 271 n.6 (S.D.N.Y. 2005), vacated, 582 F.3d 309 (2d Cir. 2009), rev'd sub nom. Am. Elec. Power Co. v. Connecticut, 564 U.S. 410 (2011).

^{159.} Id. at 272.

^{160.} Id. at 274.

^{161.} California v. Gen. Motors Corp., No. C06- 05755, 2007 WL 2726871 at *6-*10. (N.D. Cal. Sept. 17, 2007).

^{162.} Id. at *10.

global warming.¹⁶³ Without further explanation, the court concluded: "Plaintiffs ignore that the allocation of fault—and cost—of global warming is a matter appropriately left for determination by the executive or legislative branch in the first instance."¹⁶⁴

The most obvious problem with these court decisions is that they assume the elected branches have yet to make any initial policy determinations on the climate crisis and reducing GHG emissions.¹⁶⁵ The definition of "policy" includes "[t]he general principles by which a government is guided in its management of public affairs."166 When courts decided these cases, the United States had a general policy of aiming to reduce GHG emissions.¹⁶⁷ Even with the Trump Administration's withdrawal from the Paris Agreement, the Senate's ratification of the UNFCCC remains in effect. Article 2 states that the UNFCCC's ultimate goal is the "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system."¹⁶⁸ Similarly, Article 4(2)(a) states that each of the parties listed in Annex I, which includes the United States, "shall adopt national policies and take corresponding measures on the mitigation of climate change, by limiting its anthropogenic emissions of greenhouse gases and protecting and enhancing its greenhouse gas sinks and reservoirs."¹⁶⁹ Such initial policy determinations remain in effect, and the courts above failed to take them into account, let alone act in accordance with them. Thus, injunctive and legal relief on the issue of GHG emissions would not establish a new policy, but instead, would strengthen the implementation of an existing one.¹⁷⁰

On the other hand, when it comes to constitutional claims to a habitable environment, courts are also not required to make any initial policy determinations. Rather, courts should determine whether such a right exists based on their interpretation of the text of the Constitution. As the district court reasoned in *Juliana*, quoting Chief Justice Marshall in *Marbury v. Madison*, it is "emphatically the province and duty of the judicial department to say what the law is."¹⁷¹ Likewise, *Urgenda* found that although the other branches of government have a "great deal of freedom to make the necessary political decisions," courts must decide

167. Id. at 952 (citing multiple statements by the White House, State Department, and EPA).

^{163.} Native Vill. of Kivalina v. ExxonMobil Corp., 663 F.Supp.2d 863, 876–77 (N.D. Cal. 2009), *aff* d, 696 F.3d 849 (9th Cir. 2012).

^{164.} Id. at 877.

^{165.} May, supra note 115, at 951-52.

^{166.} Id. at 952 (citing BLACK'S LAW DICTIONARY 1196 (8th ed. 2004)).

^{168.} United Nations Framework Convention on Climate Change art. 2., May 9, 1992, S. Treaty Doc No. 102-38, 1771 U.N.T.S. 107.

^{169.} Id. at art. 4(2)(a).

^{170.} May, supra note 115, at 952.

^{171.} Juliana v. United States, 217 F. Supp. 3d 1224, 1263 (D. Or. 2016) (quoting Marbury v. Madison, 5 U.S. (1 Cranch) 137, 170 (1803), *rev'd* 947 F.3d 1159 (9th Cir. 2020).

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whether they "have exercised that freedom within the limits of the law."¹⁷² Because enumerated rights such as the rights to life, liberty, and property under the Fifth Amendment's Due Process Clause supply the initial policy determinations in *Juliana*, an order dismissing such claims on a political question basis before reaching the merits would be erroneous.

Furthermore, whether a case is complex, implicates many actors, or invites political action by other branches of government does not have any bearing on whether a case is a political question.¹⁷³ The problem of school desegregation certainly invited political action by the other branches of government, but in the absence of such action, the courts had to lead the way.¹⁷⁴ So, too, with the climate crisis. Again, just because a case is political does not mean it necessarily presents a political question. Nearly every case that comes before courts requires some kind of policy determination to be made, even if that determination is made in line with existing laws and policies. The Supreme Court has also stated that when identifying nonjusticiable political questions, "it is error to suppose that every case or controversy which touches foreign relations lies beyond judicial cognizance."¹⁷⁵ Thus, deciding to curb GHG emissions does not require courts to make an initial policy determination outside of their discretion.

B. EXPANDING THE JUDICIAL IMAGINATION OF WHAT ENVIRONMENTAL CATASTROPHE ENTAILS

One of the underlying purposes behind the political question doctrine is to preserve the legitimacy of the judiciary. For instance, the Second Circuit invoked the political question doctrine to dismiss a suit filed by Canada in which the nation attempted to enforce its own tax laws in U.S. courts.¹⁷⁶ The court determined that proceeding with the case would draw it into "disputes of foreign relations policy that are assigned to—and better handled by—the political branches of government."¹⁷⁷ In doing so, the Second Circuit wrote, "The legitimacy of our courts depends in no small measure on exercising authority only in those areas entrusted to the courts."¹⁷⁸ After all, if courts regularly exceeded the boundaries imposed on them by the Constitution or other laws, the other branches of government would refuse to comply with their rulings. Because courts lack the power to enforce their own rulings, power through legitimacy is all courts really have. The Ninth Circuit may have also implied this legitimacy concern in its *Juliana*

^{172.} Urgenda Decision, supra note 27, ¶ 8.3.2.

^{173.} May, *supra* note 115, at 953.

^{174.} See, e.g., Brown v. Bd. of Educ., 349 U.S. 294 (1955).

^{175.} Baker v. Carr, 369 U.S. 186, 211 (1962).

^{176.} Attorney Gen. of Canada v. R.J. Reynolds Tobacco Holdings, Inc., 268 F.3d 103, 114 (2d Cir. 2001).

^{177.} Id.

^{178.} Id.

decision when it wrote that, "in the end, any plan is only as good as the court's power to enforce it."¹⁷⁹

However, courts' refusal to employ their powers to promote justice can erode the justice system's legitimacy just as much as judicial overreach can. If courts hide behind the political question doctrine to avoid their constitutional duty to prevent government-exacerbated climate change from harming plaintiffs' lives, liberties, and properties, they may ultimately lose legitimacy in the long run. All three branches' continued failure to remedy the climate crisis threatens the future of the democratic state and the rule of law itself.

Take the example of water. Little more than 2% of the water on Earth is fresh, and only 1% of that water, at most, is accessible to people.¹⁸⁰ The climate crisis not only threatens drinking water due to rising sea levels, but has also exacerbated droughts throughout the world.¹⁸¹ As soon as 2030, global water demand may exceed supply by 40%.¹⁸² By 2050, five billion people could have poor access to freshwater, according to the United Nations.¹⁸³ Cape Town in South Africa almost had its taps run dry already. It only managed to avoid this crisis by implementing a series of emergency rationing measures and fortunately experienced an average rainfall in June 2018 for the first time in four years.¹⁸⁴ In the United States, saltwater intrusion from rising sea levels threatens south Florida drinking water supplies.¹⁸⁵ Additionally, the Colorado River Basin, which serves water to seven states, lost twelve cubic miles of groundwater between 2004 and 2013.¹⁸⁶ Meanwhile, the Ogallala Aquifer in the Texas Panhandle lost fifteen feet of groundwater in a decade, and in Kansas, groundwater is expected to drain by 70% over the next fifty years.¹⁸⁷ While not all water problems are climate-related, the climate crisis will make such problems worse.

In this dystopian future, will people abide by riparian or prior appropriation water law systems if they desperately need water? Put another way: will people listen to court orders if their survival depends on disobeying them? Of course not. And water is just *one* issue the climate crisis will exacerbate. Other issues include wildfires, floods, rising sea levels, ocean acidification, heat waves, crop failures,

^{179.} Juliana v. United States, 947 F.3d 1159, 1173 (9th Cir. 2020).

^{180.} DAVID WALLACE-WELLS, THE UNINHABITABLE EARTH: LIFE AFTER WARMING 86 (2019).

^{181.} Id. at 92-93.

^{182.} *Id.* at 87 (citing Press Release, U.N. Env't Programme, Half the World to Face Severe Water Stress Unless Water Use Is 'Decoupled' from Economic Growth, Says International Resource Panel (Mar. 21, 2016) https://perma.cc/TR5N-7VKR).

^{183.} *Id.* at 88 (citing UN WATER, THE UNITED NATIONS WORLD WATER DEVELOPMENT REPORT 2018: NATURE-BASED SOLUTIONS FOR WATER 3 (2018)).

^{184.} Christian Alexander, *Cape Town's 'Day Zero' Water Crisis, One Year Later*, BLOOMBERG CITYLAB (Apr. 12, 2019, 10:25 AM), https://perma.cc/C2KH-UVY8.

^{185.} Editorial, *Invading seawater jeopardizes South Florida's delicate drinking water source, but we can lessen the threat*, MIAMI HERALD (June 8, 2018, 5:23 PM), https://perma.cc/YUC8-X9Q6.

^{186.} Wallace-Wells, *supra* note 180, at 89.

^{187.} Id.

and mass extinctions.¹⁸⁸ If the public realizes that the courts played an active role in denying them effective remedies to these threats, the judiciary's legitimacy shall suffer further wounds—wounds from which it will not likely recover in the Hobbesian world the climate crisis will usher in, absent more ambitious emissions reductions. Thus, when courts invoke the political question doctrine to dismiss climate cases, they do so at their own peril.

Courts need to take climate plaintiffs' survival seriously because their survival implicates the survival of the courts, and by extension, our system of governance. Judge Staton's Juliana dissent recognized this when she wrote: "It is as if an asteroid were barreling toward Earth and the government decided to shut down our only defenses. Seeking to quash this suit, the government bluntly insists that it has the absolute and unreviewable power to destroy the Nation."¹⁸⁹ She also cited projections from government scientists that under current warming trends, sea levels will rise two feet by 2050, nearly four feet by 2070, over eight feet by 2100, eighteen feet by 2150, and over thirty-one feet by 2200.¹⁹⁰ She then noted that a sea level rise of three feet would make two million U.S. homes uninhabitable, whereas "a rise of approximately twenty feet will result in the total loss of Miami, New Orleans, and other coastal cities."191 Within the context of these projections, Judge Staton characterized plaintiffs' injuries as "the first small wave in an oncoming tsunami . . . that will destroy the United States as we currently know it."192 On both a literal and metaphorical level, this tsunami will not spare courthouses. More judges should take note of this inconvenient truth when considering the policy effects of future climate cases.

IV. CORRECTING MISCONCEPTIONS REGARDING THE FEASIBILITY OF REDRESSABILITY

Courts also dismiss climate cases due to the perceived lack of redressability that stems from difficulties establishing causation. For example, *General Motors Corporation* cited the "difficulty associated in evaluating the essential elements of causation and injury," given "the myriad sources" of GHG emissions and scientific uncertainties regarding how to separate out natural variations in the climate from those linked to anthropogenic causes.¹⁹³ Although this speaks most directly to the causation and injury prongs of standing, it also implicates redressability, because courts cannot redress a problem if they cannot trace the causes of

^{188.} See generally Wallace-Wells, supra note 180; ELIZABETH KOLBERT, THE SIXTH EXTINCTION: AN UNNATURAL HISTORY (2014).

^{189.} Juliana v. United States, 947 F.3d 1159, 1175, 1177 n.3 (9th Cir. 2020) (Staton, J., dissenting) (noting the asteroid analogy would be more applicable if "the government itself accelerated the asteroid towards the earth before shutting down our defenses.")

^{190.} Id. at 1176.

^{191.} Id.

^{192.} Id.

^{193.} California v. Gen. Motors Corp., No. C06- 05755, 2007 WL 2726871, at *14 (N.D. Cal. Sept. 17, 2007).

the injuries. Likewise, in *Kivalina*, the district court wrote that "the source of the greenhouse gases are undifferentiated and cannot be traced to any particular source . . . given that they rapidly mix in the atmosphere and inevitably merge with the accumulation of emissions in California and the rest of the world."¹⁹⁴

In *Juliana*, the government contended in its brief before the Ninth Circuit, "Plaintiffs' alleged injuries are not redressable because a single district judge may not . . . seize control of national energy production, energy consumption, and transportation in the ways that would be required to implement Plaintiffs' demanded remedies."¹⁹⁵ This statement demonstrates how concerns about political questions and redressability are often intertwined within the separation of powers context. The government also argued that plaintiffs have "only a generalized grievance" because the climate crisis affects everyone, and that they cannot "demonstrate causation because climate change stems from a complex, world-spanning web of actions across all fields of human endeavor."¹⁹⁶

While this Note does not aim to address in-depth all aspects of the *Juliana* plaintiffs' standing, the plaintiffs do allege particularized harms to the land and oceans that they depend upon. Additionally, alleged causation does exist in that the cumulative effects of anthropogenic GHG emissions have caused or exacerbated the harms they suffer. Or rather, as the Ninth Circuit majority found, there is at least a genuine factual dispute as to whether the "host of federal policies" that have exacerbated the climate crisis were a "substantial factor" in causing the plaintiffs' injuries.¹⁹⁷ The Ninth Circuit majority was willing to assume plaintiffs met these first two prongs but held that the court lacked the power to redress their injuries.¹⁹⁸

Regarding redressability, the Ninth Circuit majority implied it would be pointless to order the government to reduce GHG emissions, because the plaintiffs did not show that the "total elimination of the challenged programs would halt" or decrease such emissions, perhaps because other sources would continue emitting.¹⁹⁹ The majority also noted that many of the GHG emissions causing harm have already been released.²⁰⁰

Here, the majority's climate nihilism led to its assumptions about the nature of the climate crisis not supported by science or traditional legal doctrine. First, on the scientific level, increases in GHG emissions lead to increases in global average temperatures, and this increases the likelihood of climate-

^{194.} Native Vill. of Kivalina v. ExxonMobil Corp., 663 F.Supp.2d 863, 880 (N.D. Cal. 2009), *aff d*, 696 F.3d 849 (9th Cir. 2012).

^{195.} Appellants' Opening Brief at 21, Juliana v. United States, 947 F.3d 1159 (9th. Cir. 2020) (No. 18-36082), https://perma.cc/V3UK-EBGA.

^{196.} Id.

^{197.} Juliana, 947 F.3d at 1169.

^{198.} *Id.* at 1165, 1171.

^{199.} Id. at 1170.

^{200.} Id.

related harms.²⁰¹ Thus, as *Urgenda* recognized, "every reduction [in GHG emissions] means that more space is left in the carbon budget," meaning that "no reduction is negligible."²⁰² This echoes *Massachusetts v. EPA*, where the Supreme Court held that reducing GHG emissions by regulating vehicle emissions satisfied the Article III redressability requirement: "Nor is it dispositive that developing countries such as China and India are poised to increase greenhouse gas emissions substantially over the next century: A reduction in domestic emissions would slow the pace of global emissions increases, *no matter what happens elsewhere*."²⁰³ The Court thus implies that even if countries exceed the carbon budget, simply postponing the time when this occurs matters and provides some amount of relief. Likewise, Judge Staton contended, "Properly framed, a court order—even one that merely postpones the day when remedial measures become insufficiently effective—would likely have a real impact on preventing the impending cataclysm."²⁰⁴

Additionally, the harms alleged in *Juliana* and other climate cases include future harms. Just how bad these future harms will be may depend on the amount of future GHG emissions. In her dissent, Judge Staton noted that the "bulk of the injury" from catastrophic climate change is yet to come.²⁰⁵ Even if the world is set to exceed two degrees Celsius of warming, three degrees, or four degrees, or seven degrees could still be prevented.²⁰⁶ Science shows that even seemingly minuscule increases in global average temperatures carry with them devastating harms—harms that courts have a duty to redress.

For an example of such harms, look to crop yields. In general, staple cereal crops grown at optimal temperature have yield declines of 10% for every degree of warming, although some estimates run higher than this.²⁰⁷ Thus, three degrees of warming could equate to a 30% decline in cereal crop yields, whereas five degrees of warming could equate to a whopping 50% decline.²⁰⁸ Preventing a 30% decline from turning into a 50% decline is not negligible. Of course, at some level of warming, no crops will grow, but the world has not yet reached such apocalyptic levels. Such an extreme level of warming might be avoided altogether if our institutions, including the courts, take our collective survival seriously and start addressing climate cases on their merits.

^{201.} See, e.g., Ritchie & Roser, supra note 139.

^{202.} Urgenda Decision, supra note 32, ¶ 5.7.8.

^{203.} Massachusetts v. EPA 549 U.S. 497, 525 (2007) (emphasis added).

^{204.} Juliana, 947 F.3d at 1182 (Staton, J., dissenting).

^{205.} Id.

^{206.} See Matthew Collins & Reto Knutti, Long-Term Climate Change Projections, Commitments, and Irreversibility, in CLIMATE CHANGE 2013: THE PHYSICAL SCIENCE BASIS 1029, 1054–55 (Thomas Stocker et al. eds., 2018). The Intergovernmental Panel on Climate Change projects that the highest emission scenario could result in 4.5 degrees Celsius of warming by 2100, whereas strict emissions controls could limit warming to 2 degrees Celsius.

^{207.} WALLACE-WELLS, supra note 180, at 49.

^{208.} See id.

The Ninth Circuit majority also violated traditional legal standards of what constitutes redressability when it opined that enjoining affirmative activities by the government that exacerbate climate change will not "suffice to stop catastrophic climate change or even ameliorate [the plaintiffs'] injuries."²⁰⁹ This ignores that *partial* redressability is adequate to meet the redressability standing requirement,²¹⁰ and climate crisis injuries are at least *partially* redressable. If the plaintiffs had brought this case in a tort context similar to Kivalina, the court would not be prevented from ordering *some* tortfeasors to stop participating in the harm caused just because the court did not have jurisdiction over all tortfeasors. For instance, if multiple people participated in a serial killer ring, but most of them enjoyed diplomatic immunity and were thus outside the court's jurisdiction, the court could still enjoin the U.S. citizens from continuing to murder people and send them to prison. Maybe the foreign diplomats would continue killing people; perhaps someone threatened by one of the U.S. members was later killed by one of the foreign diplomats instead. Nevertheless, the court would have redressed a *portion* of the harm alleged.

Likewise, just because U.S. courts cannot fully redress the climate crisis does not mean they cannot take steps to partially redress it. On the point of partial redressability, Judge Staton—quoting the Supreme Court— noted: "While it may be true that regulating motor-vehicle emissions will not by itself reverse global warming, it by no means follows that we lack jurisdiction to decide whether EPA has a duty to take steps to slow or reduce it."²¹¹ Like in statutory climate cases, courts need not completely solve the climate crisis in constitutional climate cases.

U.S. courts also have a duty to prevent other branches of government from participating in behavior that violates the Constitution. This duty exists, even if it allows other countries to commit what the United States would consider constitutional violations. Just as *Urgenda* found the Dutch government could not ignore its responsibility to further reduce its GHG emissions just because other countries may not reduce their emissions, the United States cannot violate its assumed constitutional responsibility to reduce GHG emissions just because other countries may fail to do so. Thus, in the constitutional setting, the defense that the alleged harm will continue as a result of other countries' actions and is therefore not redressable, is no defense at all.

U.S. courts should also look to *Urgenda* when considering how to structure orders redressing the problem of GHG emissions. American courts, like Dutch courts, can order the government "to take measures to achieve a specific

^{209.} Juliana, 947 F.3d at 1170.

^{210.} See Meese v. Keene, 481 U.S. 465, 476 (1987) (requiring only partial redressability); Defs. of Wildlife v. Gutierrez, 532 F.3d 913, 925 (D.C. Cir. 2008) (". . . an order from the district court could redress appellants' injury, at least in part.").

^{211.} Juliana, 947 F.3d at 118 (quoting Massachusetts, 549 U.S. at 525).

objective," while leaving the means of exactly *how* to achieve that objective to legislators.²¹² The *Urgenda* Court reasoned that the order in question "does not amount to an order to take specific legislative measures, but leaves the State free to choose the measures to be taken in order to achieve a 25% reduction in greenhouse gas emissions by 2020."²¹³ This approach reflects the same method the Supreme Court employed in *Brown v. Board of Education* when it ordered public schools to desegregate "with all deliberate speed," leaving the specifics of exactly *how* to desegregate to other branches of government.²¹⁴ As Judge Staton noted, such a remedy would align with previous remedies to complex, systemic problems U.S. courts have rightly ordered.²¹⁵ Like in *Urgenda*, however, courts should be more particular about the timeline on which emission reductions should occur. Unlike many other political issues, there exists only a limited amount of time to prevent truly catastrophic changes in the climate. At some point, humanity will not simply be able to try again in the next decade.

Although courts should not determine how GHG reductions must be achieved, it may be additionally helpful for environmental advocates in their redressability arguments to provide scientific evidence regarding how some countries have already achieved drastic GHG reductions. Sweden stands out as a rapid decarbonization success story. From 1970 to 1990, the country cut its total carbon emissions by half and its emissions per person by 60%.²¹⁶ Such changes do not necessarily equate to reductions in economic growth. Within the same period in which Sweden achieved these reductions, its economy expanded by 50%, and its electricity generation more than doubled.²¹⁷ How did it do this? By rapidly scaling up its nuclear power and renewable energy supplies. Today, eight nuclear power plants produce 40% of Sweden's electricity; the rest comes mainly from wind power and biofuels.²¹⁸ France, Belgium, and Switzerland have taken a similar approach.²¹⁹ While dependence on nuclear power may be controversial in the United States, nuclear power plants already produce 20% of the nation's electricity.²²⁰ However, whether Sweden's particular path to clean energy is appropriate for the United States is a matter that courts can leave to the legislative and executive branches.

^{212.} See Urgenda Decision, supra note 32, ¶ 8.2.6; see also Brown v. Bd. of Educ., 349 U.S. 294, 301 (1955).

^{213.} Urgenda Decision, supra note, 27 at 8.2.7.

^{214.} Brown, 349 U.S. at 301.

^{215.} Juliana, 947 F.3d at 1188-89 (Staton, J., dissenting).

^{216.} JOSHUA S. GOLDSTEIN & STAFFAN A. QVIST, A BRIGHT FUTURE: HOW SOME COUNTRIES HAVE SOLVED CLIMATE CHANGE AND THE REST CAN FOLLOW 20 (2019).

^{217.} Id.

^{218.} Id. at 23.

^{219.} Id. at 27.

^{220.} Id. at 28.

A number of studies show drastically reducing GHG emissions 2050 is an achievable U.S. policy.²²¹ Such evidence demonstrates that significant GHG emission reductions are possible, making the climate crisis a redressable issue. Highlighting these past and future opportunities for success will hopefully ignite some much-needed optimism and initiative within the judiciary to play a role in remedying the climate crisis.

V. A CONSTITUTIONAL RIGHT TO A HABITABLE ENVIRONMENT AS SUBSTANTIVE DUE PROCESS

Even if more courts begin to address constitutional climate cases on their merits rather than improperly dismissing them on justiciability grounds, this does not guarantee that courts will find a constitutional right to a habitable environment. Therefore, this section will briefly summarize the primary arguments stemming from the *Juliana's* district court's and Judge Staton's opinions as to why such a right exists.

I use the term "habitable environment" to emphasize that what the *Juliana* plaintiffs seek is not a right to a perfectly pristine environment free from pollution, but merely a habitable one. The *Juliana* complaint's use of the term "stable climate system" is another way of framing this constitutional right in a way that is more specific to the plaintiffs' scenario. Although one may object that what constitutes a habitable environment will result in some inevitable grey areas (as do nearly all constitutional rights, enumerated or not), this does not mean that there will not be easy cases to decide. Whether the government can continue to take actions that will likely result in the sinking of entire cities is one such easy case.

Although the district court in *Juliana* invoked the public trust doctrine as it applies to oceans, this doctrine is not necessary to establish the right to a habitable environment. Such an approach risks getting caught in arguments regarding whether a federal public trust doctrine exists. Rather, the substantive due process test of whether the right to a habitable environment is (1) "deeply rooted in this Nation's history and tradition" or (2) "fundamental to our scheme of ordered liberty" is more than enough to establish this right.²²²This constitutional right easily fits into the latter category, as the district court noted in *Juliana*.²²³ Surely the right to a "climate system capable of sustaining human life" is even more fundamental to an ordered society than the right to marriage recognized in *Obergefell v. Hodges*.²²⁴

^{221.} See, e.g., LEGAL PATHWAYS TO DEEP DECARBONIZATION IN THE UNITED STATES: SUMMARY AND KEY RECOMMENDATIONS (Michael B. Gerrard & John C. Dernbach eds., 2018) (providing a comprehensive list of policy solutions to reduce GHG emissions by at least 80% from 1990 levels by 2050).

^{222.} McDonald v. City of Chicago, Ill., 561 U.S. 742, 767 (2010).

^{223.} Juliana v. United States, 217 F. Supp. 3d 1224, 1250 (D. Or. 2016), *rev'd* 947 F.3d 1159 (9th Cir. 2020).

^{224.} See id. (citing Obergefell v. Hodges, 576 U.S. 644 (2015)).

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In her *Juliana* dissent, Judge Staton powerfully reframed this right as Americans' right to the "perpetuity of the Republic," a principle which is both deeply rooted in the nation's history and fundamental to its scheme of ordered liberty.²²⁵ She wrote that "[m]uch like the right to vote," this principle "occupies a central role in our constitutional structure as a 'guardian of all other rights.²²⁶ As observed in Part IV, Judge Staton takes the threat of the climate crisis and plaintiffs' ability to survive it seriously, and therefore rightly notes that the collapse of the Republic this crisis threatens would void all the liberties the Constitution protects.²²⁷ Thus, the perpetuity principle is fundamental to the nation's scheme of ordered liberty, which includes the rights to life, liberty, and property that the climate crisis threatens.

Judge Staton cites ample evidence that the perpetuity principle is deeply rooted in the nation's history and tradition as well.²²⁸ For example, after obtaining independence, President George Washington wrote that "whatever measures have a tendency to dissolve the Union, or contribute to violate or lessen the Sovereign Authority, ought to be considered as hostile to the Liberty and Independenc[e] of America[.]"²²⁹ Without the Republic's preservation, Washington wrote, "there is a natural and necessary progression, from the extreme of anarchy to the extreme of Tyranny; and that arbitrary power is most easily established on the ruins of Liberty abused to licentiousness."²³⁰ Similarly, in his First Inaugural Address, President Abraham Lincoln said, "[T]he Union of these States is perpetual[,]" because "[p]erpetuity is implied, if not expressed, in the fundamental law of all national governments."²³¹

Turning to the Constitution, Judge Staton observed that the Preamble declares that the document is "intended to secure 'the Blessing of Liberty' not just for one generation, but for all future generations—our 'Posterity."²³² Additionally, Article IV, Section 4 stipulates that the "United States shall guarantee to every State in this Union a Republican Form of Government, and shall protect each of them against Invasion; and . . . against domestic Violence."²³³ Furthermore, in taking his or her oath of office, the President must vow to "*preserve*, protect and defend the Constitution of the United States."²³⁴ Importantly, the fact that the perpetuity principle is structural and implicit in the nation's system of governance does not render it unenforceable. Judge Staton quoted Supreme Court precedent

^{225.} See Juliana v. United States, 947 F.3d 1159, 1178 (9th Cir. 2020) (Staton, J., dissenting).

^{226.} Id. (quoting Plyer v. Doe, 457 U.S. 202, 217 n.15 (1982)).

^{227.} See id.

^{228.} See id.

^{229.} Id. (quoting President George Washington, Circular Letter of Farewell to the Army (June 8, 1783)).

^{230.} Id.

^{231.} Id. at 1179 (quoting President Abraham Lincoln, First Inaugural Address (Mar. 4, 1861)).

^{232.} Id. at 1178.

^{233.} Id. at 1178-79 (quoting U.S. Const. art. IV, § 4).

^{234.} Id. at 1179 (quoting U.S. Const. art. II, § 1, cl. 8) (emphasis added).

in noting that "[t]here are many [] constitutional doctrines that are not spelled out in the Constitution" but are still enforceable as "historically rooted principle[s] embedded in the text and structure of the Constitution,"²³⁵ such as judicial review,²³⁶ sovereign immunity outside of the Eleventh Amendment's restriction,²³⁷ the anti-commandeering doctrine,²³⁸ or the tiers of scrutiny applied to many constitutional rights.²³⁹

Rather than substantively engaging with her arguments as to why the right for the Republic to continue into perpetuity should be recognized as a fundamental right, the Ninth Circuit majority dismissed the right's existence by making the obvious observation that the Supreme Court has not explicitly recognized any such principle.²⁴⁰ This is akin to courts dismissing all same-sex marriage cases without further analysis just because the Supreme Court had not yet explicitly recognized such a fundamental right. The recognition of unenumerated fundamental rights must begin somewhere—namely, in the lower courts.

Furthermore, the Ninth Circuit's unwillingness to more seriously examine the perpetuity principle is yet another example of judicial nihilism. Again, Weaver and Kysar observe that for the nihilist, "the redress of harms depends on power, not principle."²⁴¹ By not engaging with Judge Staton's perpetuity principle and dismissing the *Juliana* suit for lack of redressability, even when the government is knowingly destroying the nation, the majority enshrines the political status quo that could itself be characterized as nihilistic in its rush to extract, cut down, and destroy. In this way, some courts exhibit more than just defeatism about their ability to redress the climate crisis—they also exhibit nihilism in refusing to draw upon any readily available principles to halt this destruction.

While a constitutional right to a habitable environment, or to a climate system capable of sustaining human life, or to the perpetuity of the nation may appear revolutionary to some, it is the contrary position that is far more radical. In denying these rights, a court would have to agree that the government could knowingly partake in actions that will destroy numerous U.S. cities and threaten the nation's foundation. Everything in our nation's history and Constitution suggests that such unmitigated tyrannical authority has no basis.

CONCLUSION

Courts should no longer hide behind the political question doctrine to avoid addressing the climate crisis. Under the relevant *Baker v. Carr* factors, (1) no textually demonstrable commitment to other political branches bars courts from

^{235.} Id. at 1179 (quoting Franchise Tax Bd. of California v. Hyatt, 139 S. Ct. 1485, 1498-99 (2019)).

^{236.} Id. (citing Marbury v. Madison, 5 U.S. (1 Cranch) 137, 176–77 (1803)).

^{237.} Id. (citing Alden v. Maine, 527 U.S. 706, 735-36 (1999)).

^{238.} Id. (citing Murphy v. NCAA, 138 S. Ct. 1461, 1477 (2018)).

^{239.} Id. (citing Turner Broad. Sys., Inc v. FCC, 512 U.S. 622, 641-42 (1994)).

^{240.} Id. at 1174.

^{241.} Weaver & Kysar, supra note 25, at 302.

addressing this crisis, (2) tort and constitutional law, along with science, provide judicially manageable and discoverable standards, and (3) deciding such cases does not require the courts to make an *initial* policy decision inappropriate for judicial discretion. Following the line of reasoning in *Urgenda*, as well as the district court's and Judge Staton's opinions in *Juliana*, it is the duty of courts to interpret and apply overriding constitutional commitments.

Furthermore, assuming a constitutional right to a habitable environment exists, U.S. courts have the legal power to order reductions in GHG emissions. The U.S. Supreme Court could craft an order leaving absolute discretion to the other branches regarding how to reduce GHG emissions, as the *Urgenda* court did. Contrary to the U.S. government's argument and Ninth Circuit's majority opinion in *Juliana*, the harms the climate crisis has caused and will cause are indeed redressable by such an order, even if only partially so. Other countries have demonstrated that significant decarbonization is possible through a combination of renewable and nuclear energy, and every reduction in GHG emissions contributes to a more habitable climate system. After all, if court orders cannot prevent two degrees of warming, they could still prevent three degrees or four degrees. Thus, while the legislative and executive branches must be left to determine exactly how to reduce GHG emissions, the contention that such an order would fail to have any impact not only smacks of toxic nihilism, but is also scientifically unsound.

Rather than preserving the legitimacy of the courts, continuing to make prudential punts on climate questions endangers their legitimacy and the rule of law itself. The climate crisis is a collective action problem, and it is as easy for the courts as it is for any other political body to reason that *they* did not cause the crisis and that *they* do not have a role to play in addressing it. The political question and redressability doctrines enable the courts to act as free riders while waiting for another actor to provide a solution. If courts and other branches allow the status quo to continue, humans may still survive, but the existence of civilization as we know it and respect for the law is, at the very least, questionable.

Finally, the right to a habitable environment is easily derived as a fundamental right under the Fifth Amendment's Due Process Clause. This right is both deeply rooted in our nation's history and traditions, as is evident from speeches by Presidents Washington and Lincoln, as well as the structure and text of the Constitution. Additionally, a habitable environment is obviously fundamental to our nation's scheme of ordered liberty. Without a habitable environment, the Republic will not continue, and the rights of life, liberty, and property guaranteed under the Constitution will not be preserved. Thus, a constitutional right to a habitable environment aligns with our nation's laws, history, and founding. The contrary position—that the government can knowingly destroy a climate system capable of sustaining human life—is the far more radical one. Indeed, it reflects the essence of nihilism, sanctioning the death march of reckless political power while abandoning traditional constitutional principles.

Therefore, courts must realize that they, like other institutions, have the power to remedy climate crisis harms. As *Urgenda* demonstrates, there are reasons for hope, and there are existing solutions that mitigate the damage this crisis has and will continue to cause in the future. If the courts do manage to transcend their own climate nihilism, perhaps U.S. law will one day finally reflect Edith Brown Weiss' theory of an intergenerational planetary trust and provide the remedies the child plaintiffs in *Juliana* deserve.