ARTICLES

THE TYRANNY OF BASELINES

by Jessica Owley, Karen Bradshaw, Keith Hirokawa, and Robin Kundis Craig

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SUMMARY-

Many environmental law paradigms focus on fixed points. Sometimes, the fixed points are in the past, and environmental laws call upon us to look at a baseline or previous state of nature and compare our actions against it. Other approaches call for us to consider an ideal state and develop strategies regarding how to reach it. In a 4° Celsius world, both strategies fail. Adhering to baselines is meaningless and striving for goals that are unachievable may lead to paralysis. This Article, excerpted from Adapting to High-Level Warming: Equity, Governance, and Law (ELI Press forthcoming 2024), explores an alternative mode for moving forward with an approach that minimizes suffering.

In summer 2021, members of the Environmental Law Collaborative (ELC) gathered to explore how we could carve a path forward for environmental law in the context of intense climatic change. We found ourselves repeatedly frustrated by both past and potential uses of laws in the climate change context. Although law should serve as a reliable tool to govern how we manage crises, we have struggled with both the role that law has played in facilitating the climate crisis and the potential of law to provide a thoughtful and protective response to climate change.

For example, initially environmental scholars, policymakers, and activists focused on slowing climate change through mitigation. We sought ways to reduce global warming through decarbonization strategies, geoengineering, and other ideas. Climate change mitigation remains critical and should not be set aside, but exclusive scholarly focus there has delayed discussion of climate change adaptation. Many mitigation efforts focused on saving the world we know, while adaptation has always accepted that the world we know is lost and that climate change is transforming the world into an unfamiliar and potentially hostile place. When people could still believe that mitigation efforts could completely avoid any need to adapt, discussing climate change adaptation was taboo because doing so acknowledged defeat. Suggesting that we would adapt to climate change instead of mitigating climate change rankled.

Perspectives have evolved. Mitigation now focuses on avoiding the worst aspects of climate change and on stabilizing the climate, eventually reducing greenhouse gas concentrations in the atmosphere; however, some amount of adaptation is now unavoidable. Nevertheless, even once ecological conditions made it clear that adaptation could be ignored no longer, discussions of adaptation were constrained by mitigation goals. As Robin Kundis Craig and J.B. Ruhl explain, our mitigation-centered adaptation approach constrained adaptation discussions to +2° Celsius (C) scenarios, even as we grew to understand that limiting warming to 2°C was unlikely.¹

While it is important to avert the climate crisis, we can't ignore the need for a legal regime that forces us to prepare for survival. The devastating effects of climate change are already happening—people are un-homed by wildfires, displaced by flooding, and dying from unprecedented heat. Climate change is here. It is brutal. And it is in large part the consequence of law. Our legal framework propels us toward high-level warming in large part because of our state-endorsed lack of action and because of laws that encourage emission-heavy consumption. We suffer climatic changes while the law fails to bear more than

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^{1.} J.B. Ruhl & Robin K. Craig, 4°C, 106 MINN. L. Rev. 191 (2021).

a hint of that crisis. Thus, an essential legal obstacle is the failure to face what's coming. The time has come to stop pumping the brakes and instead lean into the spin to minimize the damage.

This Article delves into a feature that permeates our environmental laws and conservation strategies: the environmental baseline. These baselines lie beneath our laws and policies and often interfere with, or even prevent, efforts to prepare for climate change. Baselines are counterproductive in the face of optimistically assumed warming of 1.5-2°C, and deeply dangerous in the context of highlevel warming.

Variously referred to as paradigms, ideals, and constructs, we employ environmental baselines in everyday life as a means of interacting with nature: baselines might help us to identify healthy relationships, favorite meals, or even unsafe driving conditions.² In environmental law, fixed points of reference in a living, ever-changing earth can be helpful in understanding human interactions with our natural environments. Sometimes, baselines serve as important descriptive markers for human health impacts and water quality standards or as the means to measure rates of change in the environment. Environmental baselines are, however, often used in a more unwitting, yet very dangerous way: we standardize picturesque landscapes, species populations, ecosystem processes, and other environmental circumstances to serve the purposes and goals of environmental law, thereby ignoring present circumstances and the unattainability of ideals.

Law, in this sense, is a maladaptation. This Article examines this circumstance of law, including the tendency in law to remain loyal to particular environmental baselines despite how counterproductive or damaging such loyalty might be. The fundamental question is: *Do baselines or ideal states of nature—including our present or recently past realities—make sense when we are making decisions for a world we can't yet envision?* We explore the benefits and problems with baselines, showing why conscious engagement with baselines is crucial to environmental policymaking in a climate change era. Baselines are counterproductive in the face of optimistically assumed warming of 1.5-2°C and deeply dangerous in the context of high-level warming.

I. Tyranny of the Baselines

Where do current legal structures fail us? This Article is not an attempt to outline all of the collective climate failures and challenges in law. Instead, it wrestles with one institutional failure that has proved particularly pernicious on multiple scales: the embedded use of environmental baselines, or ecological ideals, as a basis for valuing stasis and change in the environment. This section discusses the normative use of baselines in environmental law, illustrates the problems created by the baseline approach, and suggests some ways to counteract those problems.

A. Baseline Problem Number One: Status Quo Bias

A first baseline concern is how often we set the status quo as our baseline without confronting the appropriateness or the justice of the status quo. Arguably, the pressure and persuasion of the status quo underlies most deliberative practices. Thomas Kuhn, in his work on paradigm shifts and the self-perpetuating character of "normal science" in scientific discourse, argued that "a paradigm governs, in the first instance, not a subject matter but rather a group of practitioners."3 Acceptance of a paradigm constitutes induction into a profession, a process in which even new practitioners become defenders of the status quo. Hence, Timothy Luke describes the process of eco-managerialism, in which students seek out natural resource management training with an intention to engage in conservation, often prompted by a deep relationship with and respect for ecosystems, but quickly fall into line with an educational program designed to estimate the value of forests in terms of board-feet of lumber, water diversions in cubic feet per second, and wetland function in terms of mitigation ratios.⁴

In like manner, deliberative practices such as law generally condition participants to operate within the confines of a dominant paradigm. Without regard for the substance of the law and its relation to human and ecological needs, law uses rigid doctrines that break instead of bend. Moreover, law in the United States is premised on the idea that once an issue has been decided, it need not be revisited. This principle, known as *stare decisis*,⁵ facilitates a reliance on the stability of law, particularly the notion that law will be followed (and enforced) to protect the comforts that

^{2.} Arguably, the pervasiveness of nature ideals is in large part due to the manner in which we have equated nature with wild or wilderness and imbued the wilderness construct with values typically reserved for our most meaningful elements of identity; as Bill Cronon writes, "To gain such remarkable influence, the concept of wilderness had to become loaded with some of the deepest core values of the culture that created and idealized it: it had to become sacred." William Cronon, *The Trouble With Wilderness; Or, Getting Back to the Wrong Nature, in WILLIAM CRONON, UNCOMMON GROUND 69, 73 (1995).* Yet, sociologists Peter Berger and Thomas Luckmann have argued that reliance on "social constructions" is unavoidable, at least because we can never escape nature:

Man is biologically predestined to construct and inhabit a world with others. This world becomes for him the dominant and definitive reality. Its limits are set by nature, but once constructed, this world acts back upon nature. In the dialectic between nature and the socially constructed world, the human organism itself is transformed. In this same dialectic, man produces reality and thereby produces himself.

Peter L. Berger & Thomas Luckmann, The Social Construction of Reality 168 (1966).

^{3.} Thomas Kuhn, The Structure of Scientific Revolutions 180 (1962).

^{4.} Timothy W. Luke, Eco-Managerialism: Environmental Studies as a Power/ Knowledge Formation, Lecture at York University (Oct. 3, 2002) (transcript available at http://aurora.icaap.org/index.php/aurora/article/view/79/91). In the context of climate change, the work of Law Students for Climate Accountability makes transparent how prestigious law schools pipeline students to positions at private firms—high-paying and traditionally high status—that are deeply engaged in promoting the positions and interests of the status quo fossil fuel industry. Law Students for Climate Accountability, https://www.ls4ca.org/.

See John Paul Stevens, *The Life Span of a Judge-Made Rule*, 58 N.Y.U. L. REV. 1, 1 n.2 (1983) (explaining that the term comes from the phrase *stare decisis et non quieta movere*, translated as, "let the decision stand and do not disturb things which have been settled").

come with such expectations. In addition, legal educators train new lawyers to identify dominant law, rather than the way that law should (or could) be. 6

Nevertheless, as in the example of climate change, new information that challenges the dominant legal paradigm has assaulted the propriety of legal standards that brought us to the present moment. Climatic shifts-bringing drought, storms, sea-level rise, and ecosystem and human migration—appear to undermine the status quo as a result of the attribution of climate change to land use and pollution past practices. It is in the treatment of such emerging and realized needs that preservation of the status quo has a particularly pernicious impact on justice. As Allan Hutchinson explains, an approach to adjudication that does not challenge established baselines "deal[s] with the deprived and disadvantaged in society by simply pretending they do not exist."7 In contrast, thinking about the impacts of paradigm discourse in law can have a liberating effect, as Douglas Litowitz comments: "Changes in the law can be instigated by those willing to think of the other of the legal system, those who practice what Thomas Kuhn has called 'revolutionary science' by swimming against the tide of 'normal science.""8

Private land conservation and the rise of conservation easements illustrate how a status quo bias can limit creative solutions to environmental problems. For decades, the essential idea of a conservation easement was to preserve the status quo.⁹ Used chiefly as a tool to stop development, the essence of a conservation easement is keeping land in its current undeveloped state. Over time, conservationists have learned to use the tool more creatively, but it has been slow-going and the changes have not been radical.

For example, working landscapes are increasingly protected with conservation easements, forcing such agreements to acknowledge that there could be active uses of the land and changes to accommodate shifting agricultural practices or ecosystem needs.¹⁰ Such acknowledgments do not challenge the fundamental idea of a conservation easement as just keeping the current situation in place. Champions of the tool argue that treading water is sometimes the best we can do in the environmental realm.

This same dilemma applies to habitat conservation. In *Weyerhaeuser v. U.S. Fish & Wildlife Service*, the U.S. Supreme Court constrained the ability of conservation agencies to establish critical habitat in areas not currently occupied by the species.¹¹ The U.S. Fish and Wildlife Service (FWS) noted that the "near eradication" of the endangered dusky gopher frog habitat made it hard to find adequate critical habitat. For this reason, the FWS also included lands that could be made habitable in the future. In rejecting the FWS' anticipatory habitat protection approach, the Court called into question the ability of the FWS to plan for habitat protection in a changing world.¹² It tied the hands of an agency who might wish to incorporate future environmental conditions in its conservation regime.

Are we saving space for nature?¹³ Baseline biases can constrain our approach to habitat conservation. We seek to stem habitat destruction instead of working to expand habitat. But protecting current habitat is not enough in the face of climate change. Wildlife habitat is increasingly impacted by disasters like fires, floods, and droughts. Human migration and pressure on land for infrastructure could lead to even greater threats to habitat based on climate change pressures.¹⁴ Our current approach to mitigation for habitat loss often exacerbates this problem.

Notice the role of compensatory mitigation here. For example, the "no-net-loss-of-wetlands" policy suggests that we currently have the desired amount of wetlands. In general, 1:1 ratios for habitat conversion are only set up with the idea of preserving the status quo, not improving the status quo. And the truth is that a 1:1 ratio doesn't preserve the status quo.¹⁵ Created habitat is not guaranteed to be as high quality as lost habitat.¹⁶ We are only guessing (increasingly educated guesses) at how habitat will react to replacement strategies.

As Karrigan Börk explains, we have "left ourselves a narrow margin of safety in all kinds of systems, from infrastructure to agriculture to environmental protection."¹⁷ Our strategy can't be stuck on preserving what we currently have. Instead, we need to shift from preservation to building and maintaining rich natural environments. First,

- 16. Jessica Owley, *Preservation Is a Flawed Mitigation Strategy*, 42 ECOLOGY L. CURRENTS 1 (2015).
- 17. Börk, Leaving Room for Nature, supra note 13.

^{6.} See Duncan Kennedy, Legal Education and the Reproduction of Hierarchy: A Polemic Against the System (2004).

^{7.} Allan Hutchinson, *The Last Emperor?, in* Reading Dworkin Critically 21 (Alan Hunt ed., 1992).

^{8.} Douglas E. Litowitz, Postmodern Philosophy and Law 178 (1997).

See Jessica Owley, Neoliberal Land Conservation and Social Justice, 3 IUCN ACAD. ENV'T L. E-J 6 (2012); Jessica Owley, Changing Property in a Changing World: A Call for the End of Perpetual Conservation Easements, 30 STAN. ENV'T L.J. 121 (2011)

See, e.g., Jess R. Phelps & David P. Hoffer, California Carbon Offsets and Working Forest Conservation Easements, 38 UCLA J. ENV'T L. & POL'Y 61 (2020); Jessica Owley et al., Climate Change Challenges for Land Conservation: Rethinking Conservation Easements, Strategies, and Tools, 95 DENV. L. REV. 727, 747 (2018).

Weyerhaeuser Co. v. U.S. Fish & Wildlife Serv., 139 S. Ct. 361 (2018). See also Kelly Davis, An Unlikely Climate Hero? Experimental Populations Outside Their Historical Range, 53 ELR 10450 (June 2023); Carol J. Miller, "Experimental Populations" Final Rule: FWS' Response to Climate Change Threats, 54 ELR 10210 (Mar. 2024).

See J.B. Ruhl, What Is Habitat?, 34 NAT. RESOURCES & ENV'T 52 (2019); Isabella Kendrick, Critical Habitat Designations Under the Endangered Species Act in an Era of Climate Crisis, 121 COLUM. L. REV. 81 (2021).

Karrigan Börk, *Leaving Room for Nature*, *in* Karrigan Börk et al. (Environmental Law Collaborative), *Adapting to a 4°C World*, 52 ELR 10211, 10218 (Mar. 2022) [hereinafter Börk, *Leaving Room for Nature*].

^{14.} Jessica Owley, Climate-Induced Human Displacement and Conservation Lands, 58 Hous. L. Rev. 665 (2021).

^{15.} R. Eugene Turner et al., Count It by Acre or Function—Mitigation Adds Up to Net Loss of Wetlands, 23 NAT'L WETLANDS NEWSL. 5 (2001); see also Sophus Olav Sven Emil zu Ermgassen et al., Perspective, The Role of "No Net Loss" Policies in Conserving Biodiversity Threantened by the Global Infrastructure Boom, 1 ONE EARTH 305, 311 (2019) (discussing no-net-loss policies in the context of biodiversity offsets and finding evidence that:

offsetting policies have been designed by policymakers and influenced by the private sector to "sell" the narrative that infrastructural expansion and environmental protection can go hand in hand without a deep reflection on the considerable barriers to achieving true [no net loss] in practice or place-based nature of biodiversity and cultural value.

preserving what we have may be impossible, and it will be expensive. Second, preserving what we have may be undesirable. Our status quo has given privilege to certain communities and certain landscapes and has not been equitable or strategic.

B. Baseline Problem Number Two: They Perpetuate Inequalities

We fight to maintain the status quo, but the status quo is not where we should desire to be. Baselines that maintain the status quo are problematic as a matter of process, but they are especially sinister as a substantive concern. Adherence to a baseline grounds us in past models and seldom pushes us to go either behind or beyond the baseline. Sometimes, baselines are established that ignore inequalities. In both contexts, we need to reflect on the propriety of maintaining a status quo that was designed by the privileged to prop up the privileged.

At present, landownership statistics are best described as the result of generations of segregation and oppression. As Sarah Krakoff explains, law in the United States has "helped transform an all-indigenous landscape into a 'blank space' on the map."¹⁸ In the meantime, infrastructure and other public investments (such as hazardous waste facility siting) provide immense benefits to privileged communities, but are not equitably distributed to all communities. Our strategy should not focus on preserving current circumstances as the basis for a baseline, particularly when what we currently have isn't desirable. Indeed, even the law's current obsession with sustainability should make us pause and consider what it is that we are seeking to sustain.

In other instances, avoiding perpetuating inequality requires calling out current baselines as wrong. In a deeply complementary example of the dangers of problematic baselines, local histories championed in local comprehensive plans seldom celebrate the lives and accomplishments of people of color and disadvantaged communities: reading local comprehensive plans that illustrate the wonderful lives of those with privilege, but without also identifying non-privileged needs and histories, gives the impression that people of color do not even live there.¹⁹ In such a scenario, the question becomes how to replace expectations set on the past with competing visions for the future.

In general, any baseline that ignores a history of statesponsored inequities is likely to reproduce them. Avoiding consideration of redlining practices of the past might relieve us of the duty to reverse the discrimination that resulted in racialized and disadvantaged communities. Refusing to recognize the role of intergenerational wealth on mobility will leave us unprepared for both internal and external climate migration. Omitting the roles of people of color in the history of communities will punctuate a history of telling certain people that they do not belong. Baselines designed from a position of privilege tend to exclude the disadvantaged; such baselines do not serve disadvantaged communities.

C. Baseline Problem Number Three: We Spend Too Much Time Fighting Over Them

In many instances, U.S. environmental laws begin by establishing baseline conditions in the environment in which we live, work, and play. Under some laws, existing baseline conditions are protected by "anti-backsliding" policies²⁰ or set the basis for determining whether proposed changes conflict with or better serve background conditions.²¹ In other instances, baselines are used to establish critical habitat conditions for a given species for the purpose of restoration and species survival. In many (if not most) of these instances, the baseline is idealized and propped up as a regulatory goal.²² As a consequence, debates over metrics are complicated and mired in fears of the high costs of a baseline that is set too far into the past or future.

Occasionally, we end up stuck in the weeds of "how to measure" and use complication and complexity as excuses for not moving forward. One might recall decades of aggressive dialogue on the predictive capacity of our climate change models, the difficulties in measuring sea-level rise, or storm surge frequency in our futures.²³ Sometimes, baselines or metrics language have been used to manipulate projects so that they appear more or less impactful.²⁴

At a recent environmental law conference, the manager of a biodiversity conservation project complained about the time and money taken up by baseline assessment: "We got 5 years of funding for a project to protect biodiversity in northern Cambodia. Three years in and we have spent almost all of our time and money on just determining the baseline conditions." A lack of scientific information could mean that baseline studies are needed to understand conditions, but where the cost of the baseline studies leave no room for environmental protection efforts, the model is flawed.

Sarah Krakoff, Not Yet America's Best Idea: Law, Inequality, and Grand Canyon National Park, 91 U. COLO. L. REV. 559, 569 (2020).

See Keith H. Hirokawa, Race, Space, and Place: Interrogating Whiteness Through a Critical Approach to Place, 29 WM. & MARY J. ON RACE, GENDER, & Soc. JUST. 279, 305 (2023).

^{20.} As one example, the federal Clean Water Act (CWA) prohibits both "back-sliding" in permit renewals—that is, the use of less-stringent effluent limitations, 33 U.S.C. §1342(o), 40 C.F.R. §122.44(l)—and the loss of any use of a waterway that existed in 1975. 40 C.F.R. §\$131.12(a)(1) (prohibiting degradation that destroys an existing use), 131.3(e) (defining "existing uses" to be "those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards").

Keith H. Hirokawa, Making Sense of a "Misunderstanding of the Planning Process": Examining the Relationship Between Zoning and Rezoning Under the Change-or-Mistake Rule, 44 URB. LAW. 295, 304-05 (2012); Karen Bradshaw, Settling for Natural Resource Damages, 40 HARV. ENV'T L. REV. 211, 244 (2016).

^{22.} Melinda Taylor & Holly Doremus, *Habitat Conservation Plans and Climate Change: Recommendations for Policy*, 45 ELR 10863 (Sept. 2015).

Myles Allen et al., Scientific Challenges in the Attribution of Harm to Human Influence on Climate, 155 U. PA. L. REV. 1353 (2007).

^{24.} Todd S. Aagaard, *Environmental Harms, Use Conflicts, and Neutral Baselines in Environmental Law*, 60 DUKE L.J. 1505, 1523 (2011) (explaining that baselines are susceptible to manipulation).

To illustrate the complexity of baselines in the regulatory arena, consider an example from federal agencies and a local municipality working jointly to expand an airport. When trying to assess whether to add another runway to an airport, all agree that we need to assess the environmental impact of that new runway (as required by the National Environmental Policy Act (NEPA) and state law). But from where (or when) should we measure the probable changes that will occur from the expansion? Do we focus on the environmental impacts from the added air travel that will come with a new runway? Should we consider the baseline to be the current number of flights that navigate the airport in an exceptional year (full capacity), the average number of flights to and from the airport, or even global or national flight frequencies? Is the baseline to the number of flights anticipated if a new runway isn't built? As this example illustrates, there are often many metrics-or baselinesthat one can choose to define the scope of environmental impact from a project.

To make matters worse, we aren't even that good at baselines. Shifting baseline syndrome, discussed further below, illustrates one error we make with baselines when we misunderstand and underestimate previous environmental conditions. As Craig has explained, the law also biases what people view as natural versus unnatural conditions.²⁵ When a human-engineered environmental crisis happens, it creates undesirable changes, which forces us to figure out how to recover. Yet, when some environmental crises get labeled "natural," we consider them to be an acceptable part of the baseline conditions. The debate over whether climate change is natural or anthropogenic fits well into this conundrum. If we understand that climate change is having devastating effects on our socioecological systems, does it matter whether we put the label "natural" on it?

We do not have an amazing track record of understanding how our socioecological systems operate (consider poor understanding of oceans, failures at wetland restoration, etc.). Our environmental laws seem to be premised on an idea that we will be able to understand the world and obtain the information we need to make thoughtful decisions (see NEPA), but there is little support for those contentions on a broad scale. When we struggle to obtain the right information, baselines are unreliable.²⁶

D. Baseline Problem Number Four: Baselines Are Sticky

In part, fights over baselines are persistent and intractable because they are embedded into so many regulatory regimes in ways that determine the costs of regulatory compliance. That is, the baseline adopted can determine the outcome of the project, meaning the assessment of whether the environmental impact is an acceptable trade off for the social benefit of a project or the degree of mitigation that will reduce project impacts relative to the ideal ecological conditions.

Problems also emerge because decisionmakers often feel stuck with baselines established early in a project. A baseline freezes a standard at a fixed point of time, then stays constant over subsequent periods. Changed information or conditions can make the baselines adopted at early stages less relevant, or even inappropriate, as the project progresses. Yet, the mental tethering to written baselines can hinder creative, adaptive approaches that might better meet the needs of the evolved project over time.²⁷

For example, with respect to climate policy, when did +2°C become an acceptable goal for climate change mitigation? Many people believe it to be the wrong goal, but once established in the Paris Agreement (which says we agree on +2°C even though we think it should be +1.5°C), policymakers ran with it. Regardless of the initial debate, it is now the measurement we use. It is the goal of our policies even when we know that it is the wrong goal.

By agreeing to use a particular baseline for the Paris Agreement—such as +2°C—were negotiators being pragmatic?²⁸ How could one excuse the loss of human life and inequitably distributed harms from higher temperatures? Moreover, as Ruhl and Craig point out, this baseline for climate change *mitigation* very effectively bled into climate change *adaptation* as well, inducing governments at all levels to plan for—and invest in—adaptation as though a 2°C increase in global average temperature was some kind of hard limit on what their adaptation necessities will be.

II. Shifting Baselines—Changing the Goal Posts

A common technique used when facing a daunting goal or task is to set sights lower. Realizing I am not going to be able to run a full marathon by next year, perhaps I should shift my goal to a half marathon. If I do it right, I will even tell everyone that a half marathon was always my goal. I will get praised for what I accomplished, and no one will be disappointed that I didn't run the full marathon. Given some time, I may even convince myself that my goal was always just the half marathon. In our personal and professional lives, this realignment of goals may be a healthy and practical choice by making our goals more realistic and more achievable. But when we convince ourselves to stick to what we currently view as achievable policy goals and fail to push, we do harm.

Robin Kundis Craig, Perceiving Change and Knowing Nature: Shifting Baselines and Nature's Resiliency, in Environmental Law and Contrasting IDEAS OF NATURE: A CONSTRUCTIVIST APPROACH 87 (Keith Hirokawa ed., 2014).

See id. at 89; Bradley C. Karkkainen, Bottlenecks and Baselines: Tackling Information Deficits in Environmental Regulation, 86 Tex. L. Rev. 1409 (2008).

Richard Delgado, Our Better Natures: A Revisionist View of Joseph Sax's Public Trust Theory of Environmental Protection and Some Dark Thoughts on the Possibility of Law Reform, 44 VAND. L. REV. 1209, 1218-23 (1991).

See Arden Rowell & Josephine Van Zeben, A New Status Quo? The Psychological Impact of the Paris Agreement on Climate Change, 7 EUR. J. RISK REG. 49 (2017), doi:10.1017/S1867299X00005377 (explaining how the choice of 2 degrees set a "psychologically powerful baseline against which future policy failures can be measured").

Shifting baselines allow us to ignore reality. Paradoxically, they also let us respond to reality, by adjusting to what is achievable instead of chasing impossible goals. There is a constant tension between maintaining an ideal that forces us to heights that may otherwise not be possible: ("I will run the whole marathon") and pragmatically putting resources toward attainable outcomes: ("I will run a half marathon"). It is difficult, if not impossible, to retrospectively assess whether changing the baseline was the right decision. Had I tried to run the whole marathon, might I have suffered an injury from muscle over-use that would have prevented me from running at all? If I complete the half marathon, am I failing to fulfill my potential?

And consider the decisionmaking behind these baseline processes. In setting the +2°C goal for the Paris Agreement, developed countries focused on what level of sacrifice was tolerable for them. Developing countries fought back on the framing, arguing instead the discussion should have focused on what they need for survival. This highlights the complexity of baselines in the climate context: Do I decide to set my exercise goals or diet based on what is comfortable for me or do I base it on what my doctor tells me I need to do to stay healthy?

With baselines we can make the law both too easy and too hard to change. The choices complicate decisionmaking and hamper reaching the optimal solutions. This same pattern is a greater concern when it is a government entity making environmental policy. Consider some examples.

A. Contaminated Sites

Realizing the expense of cleaning up Rocky Flats (a contaminated area near the Denver airport), the federal government changed its goal of cleaning up the land to the level where it would be safe for residences.²⁹ Instead, they turned the area into a national wildlife refuge. This allowed the government to save cleanup costs because the standards for recreational use of the land are less stringent than those for residential use.

B. Carbon Reduction

When some countries realized that they would not meet their goals under the Kyoto Protocol, they changed their goals or decided to just drop out. Much like the wouldbe marathon runner who realizes they will not complete the race and thus, decides not to run it, Canada withdrew from the collective attempt to reduce emissions.³⁰ Canada decided it was better not to be a part of the treaty than to be violating it. There were no penalties because it was a voluntary agreement.

Russia and former Eastern bloc countries were able to meet their goals because of economic struggles during the recording/accounting periods.³¹ They met their first-round commitments,³² but they didn't undertake the systemic changes needed to address carbon emissions in the long term. When their economies improve, they emit high levels of pollution, skipping over the opportunity for a more environmentally promising pathway forward because the metrics/baselines didn't require it.

C. Fisheries

Fisheries provide a classic example of "shifting baseline syndrome," a phrase coined by Daniel Pauly in the 1990s.³³ Pauly described a phenomenon where each generation of fisheries scientists forgets what the oceans looked like in prior generations. The scientists accept their lot as given because they did not realize their potential. They collectively forget the amount of, how many types, and how big those fish used to be, and instead use the current status of fisheries in management decisions, such as in setting the total amount of fish that can be caught. The circumstance of truly robust fisheries is lost to generational amnesia, requiring historical reconstruction.

After being articulated by Pauly, many confirmed this trend in studies of various fisheries around the world. Pauly argued that the solution to the shifting baseline syndrome was more historical analysis and taking past conditions into account in planning. In some places, these historical analyses have indeed helped to change the goals of fisheries management—but in others they did not.³⁴ Did our laws create an obstacle to his recommended approach?

Over time as wildlife populations dwindle, we set our baselines at lower and lower population levels. The baselines that inform our policies reflect our limited memory of historic baselines, making current, low population levels seem "normal" and thus an acceptable basis for baselines. With species, we set a goal of not losing any more and only belatedly embrace the goal of ecosystem recovery.

Consider the McCloud River. After the 1940s, dams blocked the salmon returning to the river. There have not been salmon in the McCloud River for nearly 100 years.³⁵

^{29.} For a detailed personal history of the Rocky Flats site, see Kristen Iverson, Full Body Burden: Growing UP in the Nuclear Shadow of Rocky Flats (2012).

^{30.} Ernest C. Nwanguma, An Analysis of the Rationale for Canada's Withdrawal From the Kyoto Protocol and the Possible Impacts on the Canadian Oil and Gas Industry (2016) (dissertation, Memorial Univ. of Newfoundland), https://research.library.mun.ca/12407/1/thesis.pdf (asserting that Canada withdrew because it was unable to meet its commitments while exploiting its oil sands); Taylor Hathaway-Zepeda, *Qualifying Kyoto*, 26 HARV. INT'L REV. 30 (2004) (explaining that Canada was not likely going to be able to meet its commitments).

Kathryn Harrison & Lisa McIntosh Sundstrom, *The Comparative Politics of Climate Change*, 7 GLOBAL ENV'T POL. 1 (2007).

Igor Shishlov et al., Compliance of the Parties to the Kyoto Protocol in the First Commitment Period, 16 CLIMATE POL'Y 768 (2016), doi: 10.1080/14693062.2016.1164658.

^{33.} Daniel Pauly, Anecdotes and the Shifting Baseline Syndrome in Fisheries, 10 TRENDS ECOLOGY & EVOLUTION 430 (1995).

^{34.} In some areas, like the coral scientists in the Florida Keys, the phenomenon is not observed. Education and communication can help overcome this bias. Milton Muldrow et al., *Shifting Baseline Syndrome Among Coral Reef Scientists*, 7 HUMAN. & SOC. SCI. COMM. 1-8 (July 20, 2020), https://doi. org/10.1057/s41599-020-0526-0.

^{35.} California Dep't of Fish & Wildlife, Partners Return Winter-Run Chinook Salmon Eggs to McCloud River: Drought Action Moves Endangered Salmon Back Into Their Historical Habitat for First Time Since Construction of Shasta

Karen Bradshaw, a co-author here, is a fourth-generation resident of the small town near the river. Yet, despite this strong connection to the waterway and a keen interest in the ecology of the river, Bradshaw had no understanding that there were salmon in the river historically. In contrast, the Winnemem Wintu Indian Tribe, an Indigenous government, has retained a baseline understanding of the river that should include salmon. In 2022, the Winnemem Wintu worked with a group of state and federal agencies to restore salmon to the river. For the first time in 80 years, salmon will swim in the McCloud River.

This small example highlights a vital point in environmental policymaking—the importance of diverse inputs in baselines and policymaking more broadly. Although Bradshaw is an environmental expert in the academic sense and deeply invested in the McCloud River, her expertise did not include the traditional importance of the salmon on the river. Traditional ecological knowledge fills a vital gap in a broader understanding. Her ideas of baseline conditions and desired states was improved by information about how other community members viewed the river.

The Winnemem Wintu bring to the table information that an environmental law scholar did not have—an accurate understanding of the historic basis of what the river "should" look like. By incorporating diverse senses of expertise—that of agency biologists, for example, along with that of lawyers and adjacent landowners—stakeholders were able to co-create an understanding of the McCloud River's ecological health that incorporates salmon, something that many stakeholders did not even know was lost.

D. Vaccinations and the Regulatory Shifting Baseline Syndrome

In her recent article, Craig, one of the authors, identified another type of shifting baseline syndrome.³⁶ In the fisheries example, we saw that scientists, fishers, and policymakers gradually forget what a healthy fishery looks like. The opposite, however, can occur in some regulatory contexts. Using the example of measles, Craig explains that vaccines were a victim of their own success.

Because vaccines had so successfully controlled measles, some families began to question the value of vaccination, especially in contrast to risks—real or perceived—from the vaccine itself. Without a lived experience of how bad measles could be, the vaccination started to sound more dangerous than the disease it was designed to prevent.³⁷ Measles outbreaks in 2015 and 2019³⁸ and outbreaks of polio in September 2022 in New York³⁹ hopefully will remind legislatures that vaccination mandates continue to serve very real public health goals, and that it is only rarely (basically, only for smallpox)⁴⁰ that vaccines can eliminate a dread disease entirely.

In Craig's example, regulatory success led to a societal failure. The perverse result is that when we make the world better, people think calls for continued action—even, in some cases, to keep an existing regulatory regime in place—are overreacting. If I lose a lot of weight, do I decide I don't really need to keep exercising? If I see success from my antibiotics, do I stop taking them because they make my stomach hurt?

Craig draws upon this definition of generational amnesia: Individuals setting their perceptions from their own experience and failing to pass their experience onto future generations.⁴¹ Intergenerational memory or intergenerational forgetting relies not only on individuals, but also upon cultural practices (such as storytelling, oral histories, and ceremonies) that are at odds with capitalistic focus on short-term maximization. If one is pursuing the common neoliberal goal of deregulation, the question becomes how generational amnesia—the loss of collective memory serves to advance that goal.

Nevertheless, because law itself is a memory institution—a record of problems deemed bad enough to warrant legal intervention—Craig questions whether some are "rhetorically deploying the syndrome to ground their legal argument."⁴² From the Supreme Court's decisions on voting rights to the U.S. Congress' and other legislatures' decisions to deregulate businesses, we see evidence of arguments that "we solved the problem so we can move on to other things. Let's lift the restrictions." The regulatory shifting baseline syndrome also resonates with some privatization concerns, where the government stops paying attention to a problem because the private sector is working on it.⁴³

III. Avoiding Baselines

A. The Resiliency Conundrum

In rejection of past paradigms, scholars and policymakers have variously called for embracing sustainability and resiliency as alternative approaches to our current static laws.

Dam (July 12, 2022), https://wildlife.ca.gov/News/partners-return-winterrun-chinook-salmon-eggs-to-mccloud-river#gsc.tab=0.

Robin Kundis Craig, The Regulatory Shifting Baseline Syndrome: Vaccines, Generational Amnesia, and the Shifting Perception of Risk in Public Law Regimes, 21 YALE J. HEALTH POL'Y, L. & ETHICS 1 (2022).

^{37.} Id. at 22-47.

^{38.} Id. at 33-34.

^{39.} The cases involved unvaccinated individuals becoming infected by what is known as circulating vaccine-derived poliovirus, which "occurs when local immunity to poliovirus is low enough to allow prolonged transmission of

the original weakened virus in the oral polio vaccine. As the virus circulates and more genetic changes occur, the virus can regain its ability to infect the central nervous system and cause paralysis." *United States Confirmed as Country With Circulating Vaccine-Derived Poliovirus*, CTRS. FOR DISEASE CONTROL & PREVENTION (Sept. 13, 2022), https://www.cdc.gov/ media/releases/2022/s0913-polio.html. Notably, vaccination prevents this process, and hence the infections were evidence of the regulatory shifting baseline syndrome.

^{40.} Craig, *supra* note 36, at 31.

^{41.} Id. at 5-6.

^{42.} Id. at 21.

^{43.} See John D. Echeverria, Regulating Versus Paying Land Owners to Protect the Environment, 26 J. LAND RES. & ENV'T L. 1, 44 (2005) (explaining how the private tool of conservation easements can crowd out public conservation efforts).

The line between them is not always clear, and "sustainability" and "resilience" mean different things to different people. The choice of approach becomes even muddier because both approaches purport to rely on some of the same tools, such as adaptive management. While this Article cannot resolve the debate, it does note a primary distinction in assumptions between most approaches to sustainability especially sustainable development—and the resilience approaches founded on the Stockholm Center's ecological resilience models: resilience approaches far more readily embrace the fact that change is the baseline reality of both ecosystems and social-ecological systems, whereas sustainability tends to orient toward achievement of a steady-state reality that can be perpetuated indefinitely.⁴⁴

Resilient ecosystems have both the tolerance for change and the ability to recover from disturbance. Resilience thinking acknowledges that ecological (and social) systems are subject to both gradual changes and sudden disturbances.⁴⁵ Recognizing system complexity along with the interdependence of social and ecological systems, resilience thinking encourages consideration of different reactions and interactions that may take place.⁴⁶

This approach can work well in a 4°C world. Instead of trying to adhere a landscape to an established baseline, resilience thinking considers a shifting world within a set of parameters. It also recognizes differences among ecosystems. Resilience thinking instructs us to consider each landscape on its own terms, building an understanding of what changes are likely to occur and assessing the level of long-term impacts that could be triggered, acknowledging also that changes are occurring at multiple scales, e.g., soil microbes, vegetation, watershed, climate simultaneously.

Resilience thinking can also be limiting, however, especially when translated into management goals. For example, while ecological resilience models incorporate tipping points, ecological thresholds, and transformations into new states, "managing for resilience" often means attempting to enhance the resilience of the current ecosystem to maintain its current configuration in the face of increasing disturbance.⁴⁷ Thus, efforts are taken to maintain current ecosystem types and prevent "flipping the system." Additionally, while resilience thinking presumes change, it also assumes researchers understand socioecological systems well enough to set parameters that will foster resilient systems.

The ecological resilience model, however, just as easily allows for management based on guided transformation,

accepting the fact the systems *will* change in the near future and constructing management to help ensure that when ecosystems transform, they flip into alternate but still productive states. Viewed from this perspective, the question is not whether ecological resilience is the best framework but rather: Why have current managers failed to embrace their potentially crucial roles in transformations?

B. Environmental Assessment and Planning

This Article describes the way using fixed points, baselines, and the status quo in the law hamper our ability to do "the next right thing." We argue that we should set aside these frameworks that are keeping us frozen in place and instead develop new ideas that center goal-oriented collaboration. When we make personal decisions about our lives, we often think about what we want life to look like and then craft a plan for how to get there. Goals can be on a big scale (I want to be a veterinarian, I want to be able to retire at age 65) or small scale (I want to be able to go to the beach this weekend, I want to have shorter hair). With our goal in mind, we then set a path. We might not always reach our goals, or we might change our targets, but the goal is usually the starting point. The debate then can be about what is the right path to get there.

Others may take different, more measured approaches that focus on starting points (I don't know what career I want, but college seems a good place to start) or embrace the contingency of the future (I am not sure what my future holds, but maybe it is good to save money in case I want to use it for something). While this path-focused approach may work well, success is more frequent with a goal-oriented approach. Focusing on the path is dependent on the hope that the path itself determines the desired result, even if we don't know what that result may be.

As we move beyond the personal, we can think about environmental policies in similar ways. The Clean Water Act (CWA) is a goal-oriented law.⁴⁸ It sets a goal of fishable and swimmable waters. It then details mechanisms to achieve that goal. We can, of course, argue over whether the mechanisms are correct, but at least we know where it is headed. Judges and regulators frequently hearken back to the goal of the CWA when trying to assess the details. NEPA is a path-focused law—or at least it has become one. Courts have interpreted NEPA to impose only a procedural mandate.⁴⁹ Thus, we have no law that calls for maximizing environmental benefits.

Little in the law mandates the protection of ecosystem health or ecosystem services. Instead, we have mediaspecific (water/air) and agency-specific (organic) acts that give us real mandates. In environmental assessment, we fight over what the baseline should be so we can assess the impacts of our proposed projects. Maybe instead we should plan more holistically. What do we want our world to look

^{44.} MELINDA HARM BENSON & ROBIN KUNDIS CRAIG, THE END OF SUSTAIN-ABILITY: RESILIENCE OF THE FUTURE OF ENVIRONMENTAL GOVERNANCE IN THE ANTHROPOCENE 33-78 (2017). See also Jessica Owley, Property Constructs and Nature's Challenge to Perpetuity, in Environmental Law and CONTRASTING IDEAS OF NATURE: A CONSTRUCTIVIST APPROACH 64 (Keith Hirokawa ed., 2014).

^{45.} BRIAN WALKER & DAVID SALT, RESILIENCE PRACTICE 304 (2012).

Carl Folke, Resilience: The Emergence of a Perspective for Social-Ecological Systems Analyses, 16 GLOBAL ENV'T CHANGE 253 (2006).

^{47.} See, e.g., Craig R. Allen et al., Managing for Resilience, 17 WILDLIFE BIOL. 337, 341 (2011) (describing managing wildlife for resilience as seeking to maintain system identity even when subject to a wide range of conditions and increasing the ability of the system to cope with change).

^{48. 33} U.S.C. §1251(a) (2012).

Anglers of the Au Sable v. U.S. Fisheries Serv., 565 F. Supp. 812, 823 (E.D. Mich. 2008) ("NEPA's mandate is merely procedural; it does not require particular outcomes").

like? What are the projects that help us get there? How much does this project take us away from the goal?

We should measure environmental impacts by considering whether, and by how much, the project will advance or detract from our goal of a healthy environment. Instead of asking how much carbon a project emits or how many acres of open space will be lost compared to today's levels, let's do a planning process where we set our goals. How much will this reduction in open space hamper our goals? Of course, this is not a simple change to make and will require us to confront difficult but important questions of who sets the goals and how. Our current framework fails to interrogate how the goal of maintaining the status quo perpetuates inequalities. These concerns should be addressed explicitly.

C. Collaborative Governance as Path Forward

Old environmental laws were necessary for responding to the crises of their time but are often insufficient for dealing with the crisis of this moment, again noting that the portions of environmental law that keep toxics and other pollutants out of the environment remain critical to reducing stressors to overstressed systems. Even so, our current environmental laws almost entirely fail to address the climate crisis. How, then, should we move forward?

Law clearly needs to evolve to deal with climate change and a changing planet. It takes disciplined effort to distinguish those laws that keep us maladapted by embedding stasis from those—like vaccination mandates and limitations on how many toxics we release into the environment—that need to stay in place to produce the best future possible despite the changes that are coming. This doublevisioned perspective on how we evaluate existing law, however, allows for narrative competition and disagreements about which category certain laws fall into.

An alternative solution derives from traditional ecological knowledge, particularly Indigenous systems of maintaining historic information about the ecological conditions of a particular landscape over time. The oral histories, songs, dances, and traditions of some Indigenous groups maintain a collective memory of a historic baseline species population even if the population is largely diminished or even destroyed.⁵⁰ This preserved cultural memory of historic population levels avoids the problem of artificially lowered baselines, creating a historically rooted baseline across generations, even in periods of species decline. This fixed point creates an ideal place to return to for future generations.

In envisioning the possible amidst the climate reality, we can transcend the status quo and create new realities that encompass better conditions. To be clear, this is not an overly optimistic, Pollyanna-ish approach to environmental law. Many will suffer because of climate change effects. Nevertheless, when planning new futures, we should recognize the potential to achieve outcomes that restore and repair past harms, including harms that some may deny or refuse to acknowledge. Doing so relies upon more inclusive environmental policymaking.

Fortunately, pockets of scholarship examining different tools can be woven together to create a new, more comprehensive tapestry of "environmental law" to displace the status quo with a legal system that is more inclusive, comprehensive, and responsive to climate change. New governance, collaborative analysis, and collaborative governance are crucial stepping stones that link where we are to where we need to go.⁵¹ The time for moving from baselines to new, more expansive and flexible understandings of environmental outcomes and possibilities has arrived. Craig, for example, has already explored this possibility in the concept of "trickster law,"⁵² delineating three aspects to this new approach. First,

trickster law seeks not . . . to use natural resources to the maximum extent deemed possible and desirable, but rather . . . employs a precautionary approach to human use of natural resources and seeks to minimize anthropogenic stressors, such as pollution (especially nutrients and toxics), on social-ecological systems.⁵³

Second, "trickster law acknowledges that some transformations are and will increasingly become unavoidable . . . and thus encourages anticipation of, and planning for, these transformations before they become social-ecological crises."⁵⁴

Finally, building on the adaptive governance literature's emphasis on polycentricity, "trickster law creates space for new voices and new values that can help societies cope with a changing world."⁵⁵

Cinnamon Carlarne discussed boundaries in her contribution to ELC's collaborative essay, saying: "Law codifies and fixes boundaries."⁵⁶ She focuses on ecological boundar-

^{50.} For example, the WoLakota project of the Rosebud Sioux Indian Tribe seeks to restore buffalo to roaming freely across the landscape, as they did historically. See https://www.wolakotaproject.org/. Although no living member of the Rosebud Sioux Indian Tribe can remember a time when buffalo roamed freely across their lands, ceremonies, oral histories, and traditional education have maintained a collective memory of the time when this was the norm. Despite the intentional eradication of buffalo from the plains by colonial settlers—as a direct attempt to eradicate not only the buffalo, but also the Indigenous populations that relied upon them—the Sioux have maintained a baseline that includes the buffalo. This shared vision has informed current environmental policymaking of reintroducing buffalo to the plain in a manner consistent with wildlife (as opposed to livestock) that reflects an uninterrupted cultural understanding of a baseline.

^{51.} For a discussion in governance trends, see Karrigan Börk & Keith H. Hirokawa, *Trends in Local Ecosystem Governance*, 3 FRONTIERS CLIMATE 1 (2021).

^{52.} Robin Kundis Craig, *Trickster Law: Promoting Resilience and Adaptive Governance by Allowing Other Perspectives on Natural Resource Management*, 9 ARIZ. J. ENV'T L. & POL'Y 140, 149-56 (2019) (providing three examples of how new voices—including Indigenous voices—have changed natural resource management in beneficial ways).

^{53.} *Id.* at 148.

^{54.} *Id.* 55. *Id.*

Cinnamon P. Carlarne, The Mutable Boundaries of a Worst-Case Climate World, in Adapting to a 4°C World, supra note 13, at 10222.

ies, noting that "in a stubbornly stasis-oriented world,"⁵⁷ shifting boundaries of many types (political, ecological, psychological) challenge how we think about the role of law. How can we use the climate crisis to reimagine the role of law in addressing ecological challenges? How can we erode no-longer-fixed boundaries to reflect the changing, living earth?

In her ELC essay contribution, Bradshaw suggests that environmental law scholars look to the instruction from Disney movies to just "do the next right thing" in this period of crisis and uncertainty.⁵⁸ We exist in a time in which there are no predictable or objectively correct answers. Changes are unfolding faster than Congress or agencies can act, particularly with the seemingly perpetual litigation that comes with regulatory attempts. Dealing with disaster necessarily means "small groups of people working together in localized ways."⁵⁹

Stakeholder collaborations provide a model for moving forward. Localized solutions among divergent stakeholders can incorporate more diverse inputs into federal policymaking, produce innovative solutions, act responsively to rapidly changing conditions, and shield agency action from litigation that creates delays and drains resources from key objectives.⁶⁰ In this period of polarization, accepting that there are competing views and understanding but then moving on to solutions and shared visions is crucially necessary.

Luckily, there exist thousands of existing stakeholder collaborations and a robust legal framework for Congress, agencies, and courts relying upon the collaborative analysis created by this tool. They have long been undertheorized by environmental law and administrative law scholars focusing upon a few key laws, but collaborations may hold a key, missing component to climate adaptation. A crucial aspect of stakeholder collaborations is that they advance a goal we advocate for here: letting go of a single, fixed baseline and embracing values of ecological responsibility.

Ultimately, we suggest that too stubborn a hold to particular baselines renders law unable to do the work of mediating the human relationship with nature. Principles of ecological responsibility and ethics that recognize that humans are only one species among the many on this planet may be more useful than the scientifically oriented, number-driven laws of the past. Although such a proposal may be met with critiques of being "unscientific" or "touchy feely," collaborative responsibility may offer greater insights than we get from attempts to cling to unrealistic baselines and governance approaches that build from a small group of people. Indeed, a clear-eyed approach requires less exactitude and more engagement with the diverse, difficult, and fuzzy questions of how we as a species are supposed to interact with one another and our natural environments in these changing times.

Governance tools must focus on overcoming polarization through improved communication. Co-creating policy is crucial. Adversarial approaches (such as the "timber wars" pitting environmentalists against loggers) are wasteful and counterproductive, just as slashed-earth policy in family law cases wastes resources and harms everyone. Much in the way that family law experts advocate mediation instead of litigation, so too should environmental law policymakers consider the benefits of policymaking that shifts from time-consuming, expensive litigation toward collaborative solutions. Many in our community shudder at cooperating with industry, assuming that collaboration means acquiescence in a degraded world and industrial domination and destruction of the natural environment.

This is not the case. Instead, we argue, true collaboration incorporates voices that the past century of environmental policymaking has overlooked by incorporating environmental justice and traditional ecological knowledge as decisionmaking tools of equal validity as the long-favored economic considerations that have dominated cost-benefit driven environmental analysis. While they may have a way to go, resource collaborations have achieved this integration in ways that the political process has not.⁶¹ Mediation and negotiation strategies will be more fruitful than litigation and, in any event, will facilitate the stakeholder ownership of climate solutions in ways that competition cannot.

Now is the time to bring on the bold ideas. We must search for and embrace the unconventional. What we are doing isn't working. Clinging to the laws, worldviews, and governance tools that landed us in the present situation cannot produce the needed new answers. Many are too afraid to let go of the pieces we do have, leading to reactionary clinging to old and broken ideas. While people may critique environmental statutes, no one wants to get rid of them because of the fear of what may come next. We see the courts invoking the Framers to lock in a stagnant version of the U.S. Constitution instead of stopping to ask what would most serve our planetary needs. Let's step outside the worn and unproductive roads we've been walking.

If our goal is to minimize suffering and maximize flourishing given the climate reality, what does the law look like? Luckily, answers exist. There is some room for optimism: more inclusive decisionmaking that incorporates historically excluded perspectives can produce better outcomes. Ecofeminism incorporates notions of community and care that integrate feminist worldviews and perspectives into modern understandings of the interaction with the envi-

^{57.} Id. at 10224.

Karen Bradshaw, Climate Change Lessons From a Disney Princess, in Adapting to a 4°C World, supra note 13, at 10225.

^{59.} Id. at 10226.

^{60.} Keith H. Hirokawa & Jonathan Rosenbloom, *Local Variation to Lead the Disruption of Contemporary Environmental Law, in* ENVIRONMENTAL LAW, DISRUPTED 203 (Keith Hirokawa & Jessica Owley eds., 2021).

^{61.} See Karen Bradshaw, Stakeholder Collaboration as an Alternative to Cost-Benefit Analysis, 2019 B.Y.U. L. REV. 655, 661-69 (2020) (presenting a case study of the Western Arctic Caribou Herd Working Group stakeholder collaboration that is working to prevent caribou herd collapse whereas prior, top-down wildlife management efforts had failed); Charlie Facemire & Karen Bradshaw, Biodiversity Loss, Viewed Through the Lens of Mismatched Property Rights, 14 INT'L J. COMMONS 650, 656-57 (2020) (comparing topdown U.S. Bureau of Land Management wild horse management efforts with the FWS' use of stakeholder collaboration to manage wild horses).

ronment.⁶² Yet, ecofeminist constructs have been almost entirely excluded from federal law and policymaking.

Similarly, environmental justice studies have exposed the valuable insights of historically marginalized populations into how to improve their own—and broader—wellbeing, which are suppressed through racist, majoritarian policies.⁶³ Recent presidential efforts to incorporate traditional ecological knowledge into environmental policymaking suggest that federal agencies not only can, but must, incorporate indigenous understandings into modern laws.

New governance tools, laws, and legal pathways are also emerging to bridge where we are to where we need to go. The vast, but unrecognized, network of collaborative governance for public lands and natural resource management is increasingly influencing scholarly understanding of environmental law and administrative law. Private environmental governance allows corporations, trusts, nongovernmental organizations, and individuals to achieve valuable environmental aims without the sometimes time-constraining process of promulgating regulation or enacting laws.⁶⁴

IV. Conclusion

When the ELC met in 2021 to explore the paradigm shift of a +4°C world, a small group of legal scholars began the process of co-creating new environmental futures. This Article began with a framework for contemplating the role of baselines in a world defined by uncertainty. We posed a central question to guide it: Do baselines or ideal states of nature—including our present or recent past realities—make sense when making decisions for a world we can't yet envision?

In a stone-soup writing process that unfolded over the years, we drew upon our deep pockets of individual expertise across substantive topics to form an answer. An observation emerged that a fixation on a particular baseline might inaccurately reflect the potential of an ecosystem. The climate crisis invites and necessitates new approaches. We advocate for a forward-looking set of laws focused on goal setting, which might include historical understandings of individual landscapes informed by traditional ecological knowledge and science. Current American environmental laws call for "restoration" of previous states⁶⁵ alongside "protecting,"⁶⁶ "preserving," and "maintaining"⁶⁷ current conditions.⁶⁸ We seek to "eliminate" pollutants.⁶⁹ The law assumes that the current or previous states of being are the desirable ones. NEPA asks us to look at the no-action alternative (as though that would be the better environmental condition). While we acknowledge the benefits of restoration, protection, and maintenance, we seek to engage in a discussion of what it would look like if our laws instead used verbs like foster, support, enhance, or seek. How could we move to a more forward-looking state of action?

Ultimately, the future of environmental law might, like this Article, grow from a series of conversations of interested parties considering a single issue. Inspired by Ruhl and Craig, we started the conversation by asking how the law should adapt to a +4°C world. Next, we marshaled a group of scholars with diverse expertise and experiences to answer the related questions of how baselines help and hamper a world of change unfolding at multiple levels. Collectively, we have explored the status quo of law as it exists and imagined new environmental laws that might facilitate what is possible instead of merely maintaining what exists.

In this way, this examination—and the process underlying it—reflects the capacity of humans to explore new potentials and possibilities collectively and collaboratively. Like the outcome, the process argues that the work of our generation of environmental law thinkers is to employ new tools, methods, and mindsets to address the problems of our time.

^{62.} Cinnamon P. Carlarne, *Environmental Law & Feminism, in* The Oxford Handbook of Feminism and Law in the United States (Martha Chamallas et al. eds., 2022).

Clifford J. Villa, *Remaking Environmental Justice*, 66 Loy. L. Rev. 469 (2020).

^{64.} Sarah Light, *The Law of the Corporation as Environmental Law*, 71 STAN. L. REV. 137 (2019).

^{65.} See, e.g., Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §107(f), 42 U.S.C. §9607(f) (discussing natural resources restoration under CERCLA; U.S. EPA, NATURAL RESOURCES DAMAGES: A PRIMER, https://www.epa.gov/superfund/natural-resourcee damages-primer#restorations (last visited June 29, 2023) (stating that natural resource damage awards should only be used for "restoration or replacement of the injured natural resource" and explaining that restoration seeks to "return injured resources to baseline conditions."

^{66.} The 30 x 30 protected areas goal fits right into this paradigm as do many modes of park-like preservation actions. See Blanca Begert, 30 x 30 Is Conservation's Flashy New Goal. Now Countries Need to Figure Out What It Actually Means, GRIST (Jan. 9, 2023), https://grist.org/article/30x30-is-conservations-flashy-new-goal-now-countries-need-to-figure-out-what-it-actually-means/ (explaining that the goal of "protecting" land has been set without agreement on what we can and should be protecting).

^{67.} For example, the CWA's mission is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. §1251. See also Ahjond Garmestani et al., Untapped Capacity for Resilience in Environmental Law, 116 PROC. NAT'L ACAD. SCI. 19899, 19900 (2019) (pointing out the "mismatch between existing environmental laws and social-ecological systems" built on 1970s' laws seeking "to improve, preserve, and maintain ecosystems in current or historic regimes").

^{68.} The National Park Service Organic Act for example calls for conserving park resources so they can be enjoyed in the same way as current users with a goal of leaving them "unimpaired for the enjoyment of future generations." Act to Establish a National Park Service (Organic Act) of 1916, 39 Stat. 535, 54 U.S.C. §100101.

^{69. 33} U.S.C. §1251.

AVOIDING PERFORMATIVE CLIMATE JUSTICE

by Katrina Fischer Kuh

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SUMMARY-

Today's climate impacts and those on the horizon increasingly infuse mitigation and adaptation efforts with urgency, causing policymakers to contemplate or issue formal declarations of a climate emergency and to streamline review processes to aid rapid development of mitigation and adaptation infrastructure and technology. Yet, this urgency and need have the potential to create injustice and sideline or overwhelm efforts to reduce existing injustice. The key question in the climate justice context is whether the commitment to justice today, and the provisions to protect justice that are adopted to advance that commitment, can and will endure as the pressures of high-level warming intensify. This Article, excerpted from Adapting to High-Level Warming: Equity, Governance, and Law (ELI Press forthcoming 2024), proposes a precommitments strategy to help make a present-day commitment to climate justice more enduring.

pen-eyed assessment of the potential for and on-the-ground realities of high-level warming (significantly beyond 2 degrees Celsius (2°C)) supports implementation of extraordinary and immediate mitigation and adaptation measures and portends that even with such measures, climate impacts will strain adaptive capacity to the breaking point and beyond, resulting in significant societal dislocation and loss and damage. In the context of adaptation to high-level warming, societies will transition from a steady state punctuated by the need to manage periodic emergencies to a near-constant state of managing extreme conditions.

Today's climate impacts and those on the horizon increasingly infuse mitigation and adaptation efforts with urgency, causing policymakers to contemplate or issue formal declarations of a climate emergency and to streamline review processes to aid rapid deployment of mitigation and adaptation infrastructure and technology. In both contexts—the implementation of extraordinary mitigation measures and adaptation to high-level warming—urgency and need have the potential to create injustice and sideline or overwhelm efforts to reduce existing injustice.¹

Emergency as the contextual backdrop for law and policymaking-whether experienced, formally declared, or simply perceived and anticipated-can create or exacerbate injustice. High-level warming will produce successive, deepening domestic climate emergencies (resulting in internal displacement, food insecurity, and political instability), triggering scarcity and struggle that could sap the motivation and capacity to attend to justice. The best intentions-for example, to manage internal migration to support successful relocation by low-income communities, avoid climate gentrification, and prevent receiving locations from adopting discriminatory policies, tricky tasks in the best of times-may yield to the urgency of other, more pressing adaptation needs. Justice may be treated, as described aptly by Clifford Villa in "Environmental Justice Beyond 2°C," as a "luxury that requires letting go."

At least for now, exhortations to climate justice abound. We are in a moment of intense climate policymaking, and

Author's Note: With many thanks to readers and editors, including Cinnamon Carlarne, Keith Hirokawa, Frederick Mauhs, Gabrielle Mickel, Michele Okoh, and Clifford Villa.

^{1.} As other chapters in this effort, including those authored by Cinnamon Carlarne and Keith Hirokawa, Robin Kundis Craig, and Clifford Villa at-

test, it is challenging to precisely define justice and injustice in the context of climate change. Broadly, "climate justice fundamentally is about paying attention to how climate change impacts people differently, unevenly, and disproportionately, as well as redressing the resultant injustices in fair and equitable ways." Farhana Sultana, *Critical Climate Justice*, 188 GEOGR. J. 118 (2022).

Climate change, standing alone, is a profound injustice. Indigenous peoples are being subjected to the unintended, but catastrophic consequences of a colonial system of extraction and capitalism that has already deeply harmed them. In thinking about justice and high-level warming, this Article uses the term "justice" broadly with particular concern for how highlevel warming and our responses to it may exacerbate existing injustice produced by colonization; racial, gender, and other forms of discrimination; and economic inequality—and/or complicate efforts to remedy it.

justice is often central in these discussions and the laws and policies they produce.² But today's concern for justice and the adoption of justice provisions may not be sufficient. The key question is whether the commitment to justice today, and the provisions to protect justice that are adopted to advance that commitment, can and will endure as the pressures of high-level warming intensify. Without staying power, justice measures in climate policy may prove to be performative gestures that make us feel better today but do little to substantively advance justice tomorrow—and in particular under high-level warming.

Incorporating precommitments to rough justice into mitigation and adaptation law, triggered and enforceable through automatic processes and made in the relative cool of now as opposed to the heat of later, could help to make a present-day commitment to climate justice more enduring (stickier). Key aspects of a precommitment might include that it should be: (1) sticky (not easily reversed-set out in statute as opposed to an executive order, for example); (2) automatic (trigger a clear and measurable outcome or duty that is not dependent on the exercise of discretion); and (3) early (the commitment should be made prior to the circumstance(s) in which it would be implemented). Such "precommitment strategies"³ are unlikely to achieve fully just outcomes and should be accompanied by myriad other mechanisms for advancing justice, but they could help to prevent least-just outcomes.

The precommitment strategy discussed here seeks to maximize the effectiveness of efforts to advance justice in climate change policy, while also acknowledging that they are incremental and, standing alone, likely insufficient. Climate change law, the focus here, is an area of rapid and significant lawmaking where the nexus to climate change is obvious and there are serious efforts being made to respect and advance climate justice in new laws. Ultimately, however, the prerogative to gird our laws and policies for the uphill climb for justice under high-level warming extends far more broadly and will need to incorporate broader social policy, such as entitlement reform.⁴

Another approach to limit injustice in the turmoil to come is to strive to enter it with the least amount of carryover injustice, or injustice that we produced and tolerated even in times of relative stability and relative plenty, by focusing on achieving what Robin Kundis Craig refers to as "day-to-day" equity.⁵ This suggests the promise of approaching climate change through a social justice lens in the style of the Green New Deal, and also the need for more radical social and legal reforms.

The justice provisions embodied in climate change policy and examined in this Article are incremental in that they attempt to advance justice within traditional legal and policy frameworks. It may be that much stronger medicine is needed to meaningfully advance justice, particularly in the context of high-level warming, and that these incremental approaches have an opportunity cost in that they "forestall[]... serious consideration" of necessary but deeper change.⁶ However, if the justice aspects of current climate policy—incremental though they be—are *also* ineffective, that would compound the harm.

The Article first sketches the contours of precommitment strategies by identifying examples of precommitment strategies in existing climate change law, and contrasting them with other approaches for advancing justice that are not sticky, automatic, and early, and thus would not be considered precommitments. It then contemplates whether and why sticky, automatic, and early precommitments to justice may be an important strategy to advance justice goals in anticipation of and at high levels of warming. It concludes by analyzing the use of precommitments to justice in the context of the expedited siting and construction of renewable energy infrastructure.

I. What Is a Precommitment to Justice?

Many climate change laws and policies reference and seek to advance justice goals.⁷ The approaches to incorporating justice goals into climate change law vary widely, however, and not all measures constitute a precommitment to justice. A precommitment to justice should be sticky (not easily reversed—set out in statute as opposed to in an executive order, for example), automatic (trigger a clear and measurable outcome or duty that is not dependent on the exercise of discretion), and early (the commitment should be made prior to the circumstance(s) in which it would be implemented).

E.g., Alexandria E. Dolezal, Power to the People: Distributing the Benefits of a Clean Energy Transition Through Equitable Policy, Legislation, and Energy Justice Initiatives, 106 MINN. L. REV. 2441 (2022).

^{3.} Richard Lazarus uses the term precommitment strategies to describe asymmetric institutional design features that he recommends incorporating into federal climate change legislation to prevent the repeal or weakening of mitigation commitments. Richard J. Lazarus, *Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future*, 40 ELR 10749 (Aug. 2010). This Article explores the basic concept of a precommitment strategy—making policy commitments harder to overlook or undo in the future—in the context of climate change justice, including at the subnational level.

Andrew Hammond, On Fires, Floods, and Federalism, 111 CAL. L. REV. 1067 (2023) (discussing climate adaptation of public benefit programs).

^{5.} Robin Kundis Craig, Survival Equity and Climate Change Triage: How to Decide Who Lives and Who Dies, in ADAPTING TO HIGH-LEVEL WARMING:

EQUITY, GOVERNANCE, AND LAW (Katrina Kuh & Shannon Roesler, eds., forthcoming 2024).

Richard Delgado, Our Better Natures: A Revisionist View of Joseph Sax's Public Trust Theory of Environmental Protection, and Some Dark Thoughts on the Possibility of Law Reform, 44 VAND. L. REV. 1209, 1226 (1991). See also id. at 1221:

Most serious reform movements fail because society prefers incremental rather than wide-ranging change. In a version of the maxim that "bad money drives out good," we are almost invariably drawn to doomed, moderate approaches . . . when society needs more sweeping, ambitious ones. We resist precisely the medicine that could save us. We turn to strong solutions only when it is either too late, or when our thinking has advanced so far that the solutions seem commonplace and tame.

^{7.} For example, the legislative findings prefacing New York's Climate Leadership and Community Protection Act exhort that "[a]ctions undertaken by New York State to mitigate greenhouse gas emissions should prioritize the safety and health of disadvantaged communities, control potential regressive impacts of future climate change mitigation and adaptation policies on these communities, and prioritize the allocation of public investments in these areas." N.Y. ENVTL. CONSERV. LAW §43-B, art. 75, Refs & Annos (McKinney 2021).

These three attributes—stickiness, automaticity, and earliness—may help to create precommitments to justice that are more likely to endure as we seek to advance justice in laws and policies being designed now to mitigate and adapt to climate change. Each of these attributes is further explained and connected to the climate exigency/justice nexus below.

A. Sticky

The stickier a measure is, the less easily it can be reneged on. This may be important to make it harder to trade off justice to achieve other goals, including mitigation and adaptation, as described more fully *infra*. Evaluating the stickiness of different mechanisms for adopting climate justice policies is easy at a high level of generality and much trickier when examined more closely. In broad strokes, it is easy to see that a statute requires greater time, political will, and process to undo or bypass than an executive order or agency guidance and constrains the scope of permissible agency regulation. Agency regulations are also somewhat enduring, tethered to the permissible interpretation of an authorizing statute and subject to process and judicial review for their amendment.

Even a statute can, of course, be waived or changed, particularly in the face of perceived emergency (see the example of the border wall *infra*). Constitutions are harder to change than statutes. Federal or state constitutions could be amended to explicitly advance climate justice. This is perhaps possible in some states, but extremely unlikely at the federal level. Climate justice might also be advanced through interpretations of existing state or federal constitutional text, although the room for climate justice within existing understandings of the scope of federal constitutional rights is questionable.⁸

On the face of it, a measure designed to advance climate justice would probably be more enduring in a statute than in a regulation and in a regulation than in an executive order. But it is complicated. A statute may be readily undone by new legislation in the face of shifting public priorities after a climate disaster. Are there ways to orient or draft statutes to make it less likely that the political winds will shift against them? Regulations, too, can sometimes be "sticky," or difficult to rescind.⁹

Even executive orders, easily undone with the stroke of a pen by a governor or president, can sometimes prove enduring. No administration, even those the overall posture of which has not seemed particularly supportive of environmental justice, has withdrawn the executive order on environmental justice first issued by President William J. Clinton: Executive Order No. 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (EJ EO).¹⁰ And, although the robustness with which the EJ EO has been implemented has waxed and waned significantly over time, it can be understood as an important part of a broader and ongoing instantiation of environmental justice (EJ) principles.¹¹ In some contexts, measures may be most enduring when they inculcate values, perspectives, and expectations that cannot be readily altered through changes in the text of specific laws or policies.

Thus, while stickiness is an important attribute to aspire to in adopting climate justice measures, understanding what is most likely to be sticky or enduring warrants thoughtful interrogation. One important consideration may be to recognize, pulling from Joshua Galperin's analyses in "4Cs at 4°C: Counting, Contestation, Communication, and Consideration for Collectively Constructing Concepts of Climate Change," the value of democratic process. Although no measure is truly enduring for all time, putting in place processes that surface, define, make clear, and allow for democratic input on trade offs to the greatest extent possible may have great value.¹²

B. Automatic

Automatic measures are clear and concrete. The more automatic a measure is, the less dependent its implementation is on the exercise of discretion. This will make it harder for a measure to be slighted in implementation, both because agencies presumably try to satisfy clear requirements and because noncompliance will be easier to discern and enforce. This may become particularly important as governments and agencies find themselves running to stay in place, stretching budgets and expending significant effort to satisfy minimum obligations in the face of climate chaos.

Katrina Fischer Kuh & James R. May, *Can the Constitution Save the Planet?*, *in* Democracy in a Hotter Time: Climate Change and Democratic Transformation (David W. Orr ed., MIT Press 2023).

^{9.} Richard J. Lazarus, *The Super Wicked Problem of Donald Trump*, 73 VAND. L. REV. 1811, 1836 (2020) (describing various ways in which executive climate action, including agency rulemakings, produced during the Barack Obama Administration had "significant staying power and, unlike presidential executive orders, cannot be so easily reversed"); Aaron L. Nielson, *Sticky Regulations*, 85 U. CHI. L. REV. 85, 116 (2018) (explaining how the procedures attendant in rulemaking can make regulations enduring or sticky because "even if the agency wanted to change the scheme in the future, it would be difficult to do so—the same procedures that make it hard to create policy also make it hard to rescind policy") (citation omitted).

^{10.} Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 59 Fed. Reg. 76299 (Feb. 16, 1994): ("[E]ach Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.") [hereinafter Environmental Justice].

^{11.} For an account of the progressive development and strength of EJ despite a lack of explicit grounding in federal environmental statutes, see Clifford J. Villa, No "Box to Be Checked": Environmental Justice in Modern Legal Practice, 30 N.Y.U. ENV'T L.J. 157, 180 (2022) (describing the "emergence of legal principles for environmental justice, including the requirement for conducting an adequate EJ analysis") [hereinafter Villa, No "Box to Be Checked"].

^{12.} Josh Galperin, 4Cs at 4°C: Counting, Contestation, Communication, and Consideration for Collectively Constructing Concepts of Climate Change, in ADAPTING TO HIGH-LEVEL WARMING: EQUITY, GOVERNANCE, AND LAW (Katrina Kuh & Shannon Roesler, eds., forthcoming 2024). See generally Keith H. Hirokawa & David Dickinson, The Costs of Climate Disruption in the Trade Offs of Community Resilience, 41 W. NEW ENG. L. REV. 455, 461 (2019) (emphasizing the importance of anticipating and identifying trade offs in the context of ecosystem services).

The federal EJ EO provides a useful example of how discretion in implementation can limit effectiveness. The EJ EO exhorts agencies to "make achieving environmental justice part of its mission," but has few automatic, or clear and substantive, requirements.13 While EJ principles have continued to develop, increasingly finding a foothold in subnational laws, environmental reviews, statutes, and constitutional law,14 the EJ EO itself has proved difficult to directly implement and enforce, particularly under less enthusiastic administrations.¹⁵ The U.S. Inspector General lamented in 2004 that "EPA has not fully implemented Executive Order 12898 nor consistently integrated environmental justice into its day-to-day operations,"16 and the U.S. Government Accountability Office (GAO) observed, in 2019, that most agencies "have not shown clear progress toward achieving their environmental justice goals and the purpose of the executive order."¹⁷

C. Early

And a commitment that is adopted early, before the full pressure of exigency arises, is less likely to bargain-down justice by unfairly weighing it against crisis needs.18 Requirements to immediately direct funding to EJ communities (like the establishment of mandatory statutory minima in terms of the share of benefits to be provided to disadvantaged communities, as employed in both New York's Climate Leadership and Community Protection Act (CLCPA), discussed below and the Inflation Reduction Act)¹⁹ can be understood to be early in the sense that the funding, and the benefits it creates, happen now and cannot be clawed back. The allocation of such funds advances not only climate justice, but also day-to-day equity. Successful green job uptake that produces economic benefits can help to reduce greenhouse gas (GHG) emissions and make communities more resilient to climate impacts.

Taken together, the criteria of automaticity and earliness caution against relying on balancing tests in implementing approaches designed to protect justice. A statutory provision allowing an agency to forego fulsome EJ participation requirements upon finding that the need for the construction of mitigation infrastructure significantly outweighs potential disparate impacts may grow from a rarely used exception to the default as urgency increases and agencies race to meet statutory deadlines.

Moreover, engaging with justice earlier in time may help forecast future trade offs between justice and other values that-at least in anticipation of crisis as opposed to within it—appear sufficiently unpalatable that simply recognizing the future trade off creates impetus to avoid the need for trade off in the first instance. One important contextual aspect of the timing dynamic here is that it is the fact that we are *already very late* in our mitigation efforts, which creates the need for extraordinary (fast, without fulsome participation and review, reliant on unproven technologies with potential risks) mitigation and adaptation and raises the specter of sacrificing justice to avoid other harms. An even deeper and earlier approach to justice would have been to start mitigating seriously decades ago or to have remedied existing societal injustices because "[t]he best way to prevent social disadvantage from becoming deadly during disasters is to eliminate the disadvantage, rather than merely focusing on the disaster situation."20

D. Identifying Precommitments

This section surveys approaches to justice embedded within climate change law and policy from different states to identify and contrast approaches that do and do not constitute precommitments to justice. New York's CLCPA provides both an example of a precommitment to justice and examples of more typical efforts to advance justice that might prove less durable in the face of high-level warming. The statute provides that disadvantaged communities "shall receive no less than thirty-five percent of the overall benefits of spending on clean energy and energy efficiency programs," giving statutory force to the recognition that EJ includes equitable distribution of benefits.²¹ This precommitment is automatic, sticky, and early—a clear duty, enshrined in statute, and decided prior to the distribution of funds.²²

The CLCPA's establishment of mandatory statutory minima in terms of the share of benefits to be provided to disadvantaged communities offers an interesting way of incorporating automaticity into climate justice measures. There can be a tension between clear and objective legal mandates and the need for flexibility in policy to adapt to a

^{13.} See Environmental Justice, supra note 10, at 76299.

^{14.} Villa, *No "Box to Be Checked," supra* note 11, at 191 ("While there is still no federal regulation that requires agencies to conduct an EJ analysis, courts have invalidated federal and state actions for failure to fully analyze EJ concerns and incorporate EJ analysis into decision-making.").

Uma Outka, Fairness in the Low-Carbon Shift Learning From Environmental Justice, 82 ВROOK. L. REV. 789, 804 (2017) ("The lack of integration between environmental justice and substantive law and policy has allowed EJ to be positioned as a secondary—even cursory—concern, addressed as a matter of procedure.").

OFFICE OF INSPECTOR GENERAL, U.S. EPA, EPA NEEDS TO CONSISTENTLY IMPLEMENT THE INTENT OF THE EXECUTIVE ORDER ON ENVIRONMENTAL JUSTICE i (Mar. 1, 2004), https://www.epa.gov/office-inspector-general/report-epa-needs-consistently-implement-intent-executive-order (last visited July 21, 2022).

U.S. GAO, Environmental Justice Federal Efforts Need Better Planning, Coordination, and Methods to Assess Progress 17 (Sept. 2019).

See generally Uma Outka, Fairness in the Low-Carbon Shift Learning From Environmental Justice, 82 BROOK. L. REV. 789, 792 (2017) ("[E]nvironmental justice can and should inform the transition's trajectory early to achieve robust integration of the movement's core principles with legal and physical infrastructures for a low-carbon energy sector.").

For a summary of Inflation Reduction Act provisions directing benefits to disadvantaged communities, see Environmental Justice (EJ) Provisions of the 2022 Inflation Reduction Act, Harvard Environmental & Energy Law Program, https://eelp.law.harvard.edu/2022/08/ira-ej-provisions/ (last visited Apr. 4, 2023).

^{20.} Daniel A. Farber, *Disaster Law and Inequality*, 25 Law & INEQ. 297, 320 (2007).

^{21.} N.Y. Envtl. Conserv. Law §75-0117 (McKinney 2021).

^{22.} This is not to say that the statutory command is entirely clear and automatic. For example, it is proving complicated to define which communities are considered "disadvantaged communities" and how to define and count benefits.

changing climate. The CLCPA's mandatory statutory minima, however, preserves significant flexibility in terms of the scope and type of mitigation and adaptation measures, while protecting just distribution of benefits. Below, I raise the possibility of using a similar approach to prevent the disproportionate siting of industrial-scale renewable energy in EJ communities by setting a statutory ceiling.

The CLCPA contains many other mechanisms for incorporating justice into mitigation and adaptation policy, some of which come close to a precommitment to justice by mandating a relatively clear duty and others that require too much judgment or discretion in their application to be considered automatic. For example, in developing regulations to implement statewide GHG emission limits, the New York State Department of Environmental Conservation (NYSDEC) is required to "[e]nsure that activities undertaken to comply with the regulations do not result in a net increase in co-pollutant emissions."23 Because facilities that produce GHGs and co-pollutants are disproportionately located in EJ communities, this requirement should help to avoid a situation where climate mitigation measures exacerbate existing injustice by exposing those populations to even more non-GHG pollution. The bar on an increase in co-pollutants constitutes a relatively clear statutory command, but the need to evaluate whether and how the department's regulations prompt an increase in co-pollutants introduces some uncertainty about the automaticity of the command—whether its violation would be clear and the command readily enforceable. The provision nonetheless comes close to a precommitment to justice.

The statute also exhorts the department to "[p]rioritize measures to maximize net reductions of greenhouse gas emissions and co-pollutants in disadvantaged communities."²⁴ This charge is not sufficiently clear to constitute a precommitment. (Perhaps use of the statutory minimum strategy described above—requiring that a set percentage of net reductions occur in disadvantaged communities—would be a more reliably effective alternative?) All of the CLCPA's efforts to advance justice through mitigation and adaptation policy are laudatory and welcome; provisions that satisfy the elements of a precommitment may, however, prove especially durable and valuable as we face high-level warming.

Massachusetts' climate statutes provide other examples.²⁵ Some approaches from Massachusetts do not (at least fully (yet)) satisfy the criteria for a precommitment to justice, but there is a clear trend over time toward strengthening of justice measures and reason to be optimistic that broad, statutory justice commitments may become embedded in more automatic regulatory provisions. For example, the 2008 Global Warming Solutions Act requires the submission of road map plans for how the state will meet identified emission reduction limits, and in 2021, Massachusetts amended the law through the Next Generation Roadmap Act to require that the plans shall "summarize the steps taken by the commonwealth to improve or mitigate economic, environmental and public health impacts on low- or moderate-income individuals and environmental justice populations."²⁶ It also directs the Energy and Environmental Affairs secretary to develop programs and issue rules to meet emission limits and implement the road map and provides that these "regulations shall achieve required emissions reductions equitably and in a manner that protects low- and moderate-income persons and environmental justice populations."²⁷

These commands reside within statutory text, but they are vague and defer details to development through agency regulation. This renders the statutory justice policy neither sticky nor automatic. The state regulatory process may, of course, lead to the development of rules that implement the statute in a justice-enhancing manner. The *Massachusetts Clean Energy and Climate Plan for 2025 and 2030* includes a full chapter on *Ensuring Just Transition in the Commonwealth*, identifies numerous policies designed to advance climate justice (such as community-based air quality monitoring), and explains that "[e]very policy designed to achieve the GHG emissions reduction targets has been developed with a lens that focuses on delivering positive outcomes for environmental justice populations."²⁸

Similarly, the Clean Energy and Climate Plan for 2050 includes as Chapter 2 *Centering Environmental Justice* and outlines an intention to "set a minimum threshold for investments that benefit EJ populations and low- to moderate-income residents."²⁹ The broad statutory command may ultimately produce a regulatory regime that satisfies more of the criteria of a precommitment to justice; the likelihood of this is increased by the strong justice provisions governing environmental review. Thus, at present, the statutes alone do not create a precommitment but there is reason to be optimistic that the broad statutory commands will sharpen into strong and specific regulation.

Other aspects of Massachusetts' statutory climate law come closer to or could be considered precommitments to justice. The Next Generation Roadmap Act significantly enhances the consideration of EJ in environmental review. It requires the preparation of an environmental impact report for projects likely to cause damage to the environment that are located within one mile of an EJ population (five miles for projects that impact air quality); prohibits categorical exemptions from review for projects "located in a neighborhood that has an environmental justice pop-

^{23.} N.Y. ENVTL. CONSERV. LAW §75-0109 (McKinney 2021).

^{24.} Id.

^{25.} Massachusetts passed the Global Warming Solutions Act in 2008, 2008 Mass. Acts ch. 298, and has since built on that statute, including most notably through An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy, 2021 Mass. Acts ch. 28, and An Act Driving Clean Energy and Offshore Wind, 2022 Mass. Acts ch. 179.

^{26.} Mass. Gen. Laws Ann. ch. 21N, §5 (West 2022).

^{27.} Id. §6.

MASSACHUSETTS CLEAN ENERGY AND CLIMATE PLAN FOR 2025 AND 2030, xi (June 30, 2022), https://www.mass.gov/info-details/ massachusetts-clean-energy-and-climate-plan-for-2025-and-2030.

^{29.} MASSACHUSETTS CLEAN ENERGY AND CLIMATE PLAN FOR 2050, 12 (Dec. 2022), https://www.mass.gov/info-details/massachusetts-clean-energy-and-climate-plan-for-2050.

ulation"; and mandates that reports consider cumulative impacts (existing unfair or inequitable environmental burdens on the EJ population). 30

The law augments these enduring, automatic, and early procedural requirements with additional measures related to environmental review which, while not independently rising to the level of precommitments to justice, are strengthened by the fact that they are anchored in the precommitment to conduct EJ-sensitive review. The additional measures include broad exhortations to the secretary to "consider the environmental justice principles . . . [and] reduce the potential for unfair or inequitable effects upon an environmental justice population" and to "establish standards and guidelines for the implementation, administration and periodic review of environmental justice principles by the executive office of energy and environmental affairs and its agencies."³¹

The law also specifies a source and minimum amount of funding (at least \$12 million annually) to be directed to the Massachusetts Clean Energy Center (MassCEC), a quasi-public economic development agency.³² The funding is to be used to implement a clean energy equity workforce and market development program for certified minorityowned and women-owned small business enterprises, individuals residing within an EJ community, and current and former workers from the fossil fuel industry. The source and amount of funding are specified in the statute; thus, despite the necessity of the MassCEC developing details for disbursement, the core justice function is thus largely enduring and automatic because disbursement must conform to the statutory parameters. It is also early in the sense that equitable distribution of the benefits of the green energy transition is considered coincident with the adoption of policy spurring that transition. This provision thus satisfies the prerequisites of a precommitment to justice.

This review of different measures incorporating justice goals into climate change law and policy reveals a variety of approaches. Some measures incorporate justice in a way that is sticky, automatic, and early and can thus be considered precommitments to justice. Other measures reference and seek to advance justice but lack one or more of the attributes of a precommitment. The next section offers reasons why efforts to advance justice in the context of highlevel warming may be most likely to endure and produce benefits if structured as precommitments to justice.

II. Why Precommitments Are Important Under High-Level Warming

The three identified attributes of a precommitment to justice-that it be sticky, automatic, and early-may help to protect justice goals from ceding to exigency. Climate exigency will take many forms and, in all of them, will be more pronounced for high-level warming. The prospect of high-level warming, underscored by the dislocation of the climate impacts that will precede it, renders immediate, large-scale, and effective mitigation interventions urgent and paramount. Sudden climate disasters (fires, floods, heatwaves) will become increasingly frequent and severe and generate immediate, overwhelming needs. And slower-moving climate-caused or climate-exacerbated phenomena (such as desertification, drought, migration, sealevel rise) will create other emergencies—conflict, border pressure, famine. We will find ourselves running to stand still, spending ever more time, attention, and resources fixing what we've broken (transplanting individual branches of coral by hand as reefs diminish, fortifying dams to withstand unpredictable and unprecedented snow melts).

High-level warming and the path to it will thus exert pressures on society, resources, and institutions that are acute, intense, and grinding. By the time we reach highlevel warming, our society and governing institutions will be under immense strain: "Each disaster compounds pressures on vulnerable populations, fractures the foundations of already weakened social and political systems, exposes the limits of the rule of law, and reveals the cumulative impact of intersecting social, political, economic, and ecological crises."³³ And experience suggests that exigency readily overwhelms justice.

Sacrifice of justice is regularly accepted as a trade off in the context of preparing for, avoiding, or addressing future disaster or emergency, particularly when government action is infused with a sense of urgency. The perceived need for immediate government action to address a pressing policy issue can cause decisionmakers to bypass procedural and other safeguards designed to protect justice values.

For example, the perceived need for border security led to the passage of legislation authorizing the Secretary of the U.S. Department of Homeland Security (DHS) to "waive all legal requirements . . . to ensure expeditious construction of the barriers" along the U.S.-Mexican border,³⁴ as well as a presidential declaration of emergency "that the southern border presents a border security and humanitarian crisis that threatens core national security interests and constitutes a national emergency" because "[t]he southern border is a major entry point for criminals, gang members, and illicit narcotics."³⁵ DHS has repeat-

^{30.} Mass. Gen. Laws Ann. ch. 30, §62B, E.

^{31.} Id. ch. 30, §62K. EJ principles are defined as principles that support protection from environmental pollution and the ability to live in and enjoy a clean and healthy environment, regardless of race, color, income, class, handicap, gender identity, sexual orientation, national origin, ethnicity or ancestry, religious belief or English language proficiency, which includes: (i) the meaningful involvement of all people with respect to the development, implementation and enforcement of environmental laws, regulations and policies, including climate change policies; and (ii) the equitable distribution of energy and environmental benefits and environmental burdens.

Id. ch. 30, §62.

^{32.} Id. ch. 23J, §13.

Cinnamon P. Carlarne, From Covid-19 to Climate Change: Disaster & Inequality at the Crossroads, 12 SAN DIEGO J. CLIMATE & ENERGY L. 19, 27 (2021) [hereinafter From Covid-19 to Climate Change].

^{34.} REAL ID Act of 2005, Pub. L. No. 109-13, div. B, tit. I, §102, 119 Stat. 231, 306.

^{35.} Declaring a National Emergency Concerning the Southern Border of the United States, 84 Fed. Reg. 4949 (Feb. 15, 2019), terminated by Termination of Emergency With Respect to the Southern Border of the United States and Redi-

edly invoked its authority to waive the requirements of environmental and other statutes when constructing sections of border wall.³⁶ The construction has caused significant environmental impacts and spurred outcry from Indigenous groups who contend that it interferes with their religious and cultural practices.³⁷

When such trade offs in the face of exigency occur, the welfare of marginalized communities and individuals is often the easiest to give up. Disadvantaged communities may be sacrificed to prevent harm to wealthier white communities:

Putting the vulnerable in harm's way to protect the privileged is a common theme in the history of disasters. During the Great Mississippi Flood of 1927, as floodwaters threatened New Orleans and levees protecting the city faltered, city elders met to devise a plan to save New Orleans. At their urging, Louisiana's Governor ordered levees downstream of New Orleans dynamited, sparing the city by diverting flooding into the predominantly poor, Black communities to the south.³⁸

A similar dynamic is at play when communities with greater political voice and means construct sea walls or other flood controls that displace water onto less powerful neighboring communities. Post-disaster, EJ communities are vulnerable to being saddled with hosting debris landfills and other locally undesirable land uses related to cleanup and rebuilding efforts.³⁹

More generally, it is easy to imagine that the trade offs occasioned by government resource scarcity will tend to exacerbate injustice. Governments faced with mounting costs to maintain basic infrastructure and services (bridges, roads, power) may see social support programs, crucial to vulnerable populations, as dispensable, or at least more so.⁴⁰ And agencies faced with time and resource constraints and struggling to meet core, mandatory tasks may find it easier to neglect or short time-consuming processes aimed at protecting justice, particularly to the extent that they are not mandatory or subject to significant discretion, than to falter on more clearly defined deliverables.

The easy acceptance of trade offs that disproportionately impact disadvantaged communities and individuals mirrors the tacit acceptance of existing inequity, which shapes the disproportionate impacts from disaster and its aftermath and gives rise to other sobering incursions on justice. As has been frequently recognized, poor and historically disadvantaged communities will have fewer resources and opportunities to protect themselves from harm, recover from losses, and/or access government aid. In the words of Cinnamon Carlarne, whose own piece, with Keith Hirokawa, explores justice through the lens of climate dominance, "disaster streams along existing pathways of inequality, deepening those inequalities as it flows."⁴¹

Breakdowns in civil authority in the immediate wake of disaster can be particularly dangerous for racial minorities. After Hurricane Katrina, town police officers in the majority-white community of Gretna fired their weapons over the heads of evacuees attempting to flee New Orleans on foot by crossing a bridge to Gretna, blocking access to thousands. As described by the *Chicago Tribune*: "Atop the bridge to Gretna, under the strain of an unprecedented crisis, the thin veneer of American civilization peeled back for a moment to reveal the atavistic, tribally protective impulses coursing beneath."⁴²

"No one in America today can realize the collapse of civil authority that happened in this area after Katrina," said Ronnie Harris, Gretna's mayor for the past 23 years. "People think, 'That can't happen here.' Well, it did happen. It was a return to basic human nature, a clannish feeling. You clung to people you know, people you trust and what's familiar and comfortable to you."⁴³ Although officials offered race-neutral explanations for the decision, such as Gretna's lack of supplies, racial geography provides important context:

[T]he Gretna incident can be understood not simply as intentional discrimination against the evacuees, but as a racially territorial defense of Gretna's white space. . . . [S]patial context helps to structure the social meaning and consequences of race itself. Because at the time of the hurricane, New Orleans was predominantly black and Gretna was mostly white, the officials on the bridge likely

rection of Funds Diverted to Border Wall Construction, Pres. Proclamation No. 9844, 85 Fed. Reg. 8715 (Jan. 15, 2021).

^{36.} E.g., Determination Pursuant to Section 102 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, as amended, 83 Fed. Reg. 3012-01 (May 15, 2020): ("Accordingly, pursuant to section 102(c) of IIRIRA, I hereby waive in their entirety, with respect to the construction of roads and physical barriers... the following statutes."). The Determination goes on to explicitly waive application of 24 statutes, including the National Environmental Policy Act, Archeological Resources Protection Act, Safe Drinking Water Act, Administrative Procedure Act, Native American Graves Protection and Repatriation Act, and the American Indian Religious Freedom Act.

^{37.} Manzanita Band of Kumeyaay Nation v. Wolf, 496 F. Supp. 3d 257, 269 (D.D.C. 2020) (declining to grant a preliminary injunction to prevent construction of border wall after waiver of statutory review requirements; "[o]n this record, the Court finds no reason to deviate from the clear intent of the IIRIRA to ensure expeditious construction of the barrier projects. The court acknowledges the Kumeyaay's efforts to preserve their culture and religious practices."). See also Teo Armus, "You Don't Control the Border": Indigenous Groups Protesting Wall Construction Clash With Federal Agents, WASH. Posr, Sept. 23, 2020, https://www.washingtonpost.com/nation/2020/09/23/border-wall-construction-protests/ (last visited July 5, 2022).

Lisa Grow et al., Disaster Vulnerability, 63 B.C. L. Rev. 957, 1020 (2022) (citations omitted).

^{39.} Id. at 1022: ("Because they typically have less political voice, vulnerable neighborhoods are often targeted for disaster-related, undesirable land uses, such as new landfills necessitated by debris clean-up, which aggravate existing environmental justice issues, or temporary post-disaster housing, which taxes already strained infrastructure.") (citations omitted).

^{40.} Imagine budgetary choices between after school programs and funding needed to upgrade or repair storm-damaged highways. The U.S. Congress already experienced long delays authorizing disaster welfare funding after a series of climate-fueled natural disasters in 2018. *See* Hammond, *supra* note 4 (describing delays in congressional appropriations for disaster relief and the practice of now requiring budget offsets for relief spending).

^{41.} See From Covid-19 to Climate Change, supra note 33, at 39.

Howard Witt, Katrina Aftermath Still Roils Gretna, CHI. TRIB., Sept. 4, 2008, https://www.chicagotribune.com/nation-world/chi-gretna_wittsep04story.html (last visited June 29, 2022).

^{43.} Id.

assumed that the black evacuees were not from Gretna. The racial meaning of the two places allowed the police to sort who did and did not "belong" on the bridge according to their racialized spatial grouping and in a way that reinforced cultural norms of white privilege and power.

[R]acially identifiable space triggers racial associations that incite a sense of belonging and proprietary power. Space takes on social and cultural meaning that in turn stimulates territorial reactions. Thus, the racialized associations with New Orleans itself helped to construct the image of the evacuees as (poor, black) "looters." Prior to the incident on the bridge, New Orleans was stereotyped by Gretna officials as a site of black poverty and crime. This racial stigma was then mapped onto the Katrina evacuees, creating perceptions that they were a racial horde encroaching on the white space of Gretna, rather than people merely seeking safety and dry land. Coming from a black space that had been stamped as "dangerous," the black evacuees-at least in the eyes of Gretna officials-became presumptively dangerous themselves. Race, therefore, surfaces in the town officials' class-loaded efforts to keep a particular kind of black person out of Gretna-the poor who come from the dangerous black city. The evacuees' racial profile is partially constructed based on their presumed geographical association with (poor, black) New Orleans.44

Notably, "[m]uch of the violence that actually occurred following Katrina was committed by individuals [vigilantes and police] who subscribed to the myth that their neighbors and fellow citizens would degenerate into animals and who thus employed violent measures to protect themselves—or their property—against this perceived threat," and who "believed that the largely poor, black survivors of Katrina were all potential looters and rapists."⁴⁵ And it is not uncommon for entire groups, often racial minorities, to be scapegoated in the face of societal challenges.

All of this suggests that the strain and exigencies of high-level warming will exacerbate existing injustice, give rise to new challenges to justice, and make it even harder to commit resources and orient law toward preventing and rectifying injustice. That should prompt us to structure institutions, laws, and programs to create a precommitment to justice that is more likely to endure.

III. Expedited Renewables Siting and a Precommitment to Justice

New York adopted the Accelerated Renewable Energy Growth and Community Benefit Act of 2020, also known as "New York's expedited renewables siting law," to expedite the siting of major renewable energy projects, or those with capacity of 25 megawatts or more.⁴⁶ The effort to speed the deployment of renewable energy projects is motivated by the recognized urgency of rapid climate mitigation, and exemplifies the types of trade offs that extraordinary mitigation will increasingly reflect.⁴⁷ As explained below, the law reflects a clear concern for justice as evidenced by numerous justice provisions, but the nature of those provisions creates some doubt about their durability and strength, i.e., whether they will prove to be empty gestures or meaningful commitments to justice.

To expedite siting and development of major renewable energy projects, New York's expedited renewables siting law creates a streamlined permit process and also establishes a program (the Build-Ready Program) through which a state agency will identify sites, prepare them for renewable energy projects, and auction development rights to private renewable energy developers.48 With respect to permit application and review, the statute mandates a strict timeline for application review, exempts major renewable energy projects from myriad state laws (including environmental review under New York's environmental review statute), preempts local authority and zoning if the implementing agency (the Office of Renewable Energy Siting (ORES)) determines that it is unduly burdensome "in view of the CLCPA targets and the environmental benefits of the proposed major renewable energy facility,"49 and limits judicial review of ORES decisions.50

The law directs ORES to promulgate regulations setting installation standards and conditions for similar installations. With respect to government site identification and preparation, the statute authorizes the New York State

49. Section 94-c, Subsection (5)(e)):

50. N.Y. Exec. Law §94-c (McKinney 2021):

Elise C. Boddie, *Racial Territoriality*, 58 UCLA L. Rev. 401, 408-09, 450 (2010) (citations omitted).

^{45.} Lisa Grow Sun, *Disaster Mythology and the Law*, 96 CORNELL L. Rev. 1131, 1148 (2011).

^{46.} L. 2020, c. 58, pt. JJJ, §1, codified as N.Y. PUB. AUTH. §1900. (Apr. 3, 2020).

^{47.} See generally J.B. Ruhl & James Salzman, What Happens When the Green New Deal Meets the Old Green Laws?, 44 VT. L. REV. 693, 718 (2020) (identifying the "trade offs that will be necessary" in the energy transition and admonishing that we "must acknowledge that these trade offs exist and integrate solutions at the front end of the mobilization. Waiting for them to become salient and deciding what to do about them then is simply poor governance."); Shelley Welton & Joel Eisen, Clean Energy Justice: Charting an Emerging Agenda, 43 HARV. ENV'T L. REV. 307, 359 (2019) (explaining how expedited siting laws for renewables reduce traditional process methods of protecting EJ).

The Build-Ready Program is slated to sunset (expire and be deemed repealed) on December 31, 2030.

[[]T]he office may elect not to apply, in whole or in part, any local law or ordinance which would otherwise be applicable if it makes a finding that, as applied to the proposed major renewable energy facility, it is unreasonably burdensome in view of the CLCPA targets and the environmental benefits of the proposed major renewable energy facility.

Notwithstanding any other provision of law, including without limitation article eight of the environmental conservation law and article seven of the public service law, no other state agency, department or authority, or any municipality or political subdivision or any agency thereof may, except as expressly authorized under this section or the rules and regulations promulgated under this section, require any approval, consent, permit, certificate, contract, agreement, or other condition for the development, design, construction, operation, or decommissioning of a major renewable energy facility with respect to which an application for a siting permit has been filed. . . .

energy research and development authority (NYSERDA) to prepare "build-ready sites," or sites teed up for quick construction of a renewable energy facility because all permits, property interests, agreements, and/or other authorizations necessary have already been obtained.

A. Build-Ready Sites

Large wind and solar installations typically need significant acreage, which would tend to direct them away from some EJ communities in urban areas. Nonetheless, the statute provides that priority shall be given to "previously developed sites, existing or abandoned commercial sites, including without limitation brownfields, landfills, former commercial or industrial sites, dormant electric generating sites, or otherwise underutilized sites," which could encourage the creation of build-ready sites at locations in EJ communities.⁵¹ The long history of siting locally undesirable land uses disproportionately in EJ communities suggests the need for caution. The statute and implementing regulations evidence sensitivity to EJ concerns. The justice-oriented measures are not, however, sufficiently enduring, automatic, or early to constitute a precommitment to justice.

In selecting build-ready sites, the statute provides that one consideration "may include" the "potential impacts of development on environmental justice"52 and the statement of legislative intent identifies "protect[ing] environmental justice areas from adverse environmental impacts" as a goal of the relevant programs.53 The statute directs NYSERDA to develop procedures and protocols for the establishment and transfer of build-ready sites which must include "a preliminary screening process to determine, in consultation with the department of environmental conservation, whether the potential build-ready site is located in or near an environmental justice area and whether an environmental justice area would be adversely affected by development of a build-ready site."54 The statute further directs NYSERDA to "assess the need for and availability of workforce training in the local area of build-ready sites to support green jobs development with special attention to environmental justice communities," but programs and financial support for the local workforce and under-employed populations are left "subject to available funding."55

These justice provisions, while laudable in spirit and intent, recognize justice, but it is not clear that they create an enduring commitment to protect it. The provisions are relatively sticky, in the sense that they are contained directly in the statutory text. But they leave significant discretion to the agency in implementation; that is, they are not automatic.

It is perhaps little solace that NYSERDA will identify adverse effects on EJ communities when selecting buildready sites, since it is only invited (not mandated) to weigh those effects. Fast-forward and imagine an agency pressed to meet increasingly steep deliverables on renewables construction to satisfy ever more urgent mitigation efforts and it is not hard to envision justice falling by the wayside. And the exhortation to give "special attention to environmental justice communities" in providing workforce training is somewhat hollow if contingent upon the availability of funding which, for the reasons discussed above, we can expect to be in increasingly short supply over time.⁵⁶

B. Permit Application and Review

The justice protections are also limited for permitting, which would include sites selected and leased by project developers from willing landowners outside of the build-ready program. The expedited permit rubric set forth in the statute does not mandate EJ constraints, representing a significant change from the preexisting siting regime. Under the siting regime previously applicable to major renewable energy projects, and still applicable to fossil fuel power plants, the underlying statute explicitly required EJ review and cumulative impact analysis for air quality.⁵⁷ New York's expedited renewables siting law doesn't have a similar requirement.

Moreover, New York has since significantly strengthened its EJ requirements, both substantively and procedurally,⁵⁸ and now prohibits issuance of a permit for a new project if "the project will cause or contribute more than a de minimis amount of pollution to a disproportionate pollution burden on the disadvantaged community."⁵⁹ But, as noted above, New York's expedited renewables siting law exempts major renewable energy projects from these requirements.⁶⁰ This further enlarges the gulf between the limited EJ review required for large renewable projects and that required for other projects subject to SEQRA.

ORES promulgated a *regulation* requiring that an appendix analyzing EJ be included in every permit application.⁶¹ But there isn't anything in the statute compelling EJ review. The code provision setting forth the major renewable energy development program, which instantiates the expedited review process for major renewable energy projects,

See generally Uma Outka, Renewable Energy Siting for the Critical Decade, 69 U. KAN. L. REV. 857, 866-67 (2021)):

This kind of development can revitalize areas with long dormant sites, including those with a history of contamination. . . . At the same time, it can have the effect of bringing facilities closer to more populated areas, raising equity considerations in some instances and increasing the likelihood of local opposition, depending on the size and scale of the project proposed.

^{52.} N.Y. Pub. Auth. Law §1902.

^{53.} Id. §1900.

^{54.} Id. §1902.

^{55.} Id.

^{56.} Contrast this with the statute's creation of a dedicated endangered and threatened species mitigation bank fund to be filled with proceeds from "revenues received pursuant to the provisions of section 11-0535-c of the environmental conservation law." N.Y. STATE FIN. LAW §99-hh (McKinney 2021).

^{57.} N.Y. Pub. Serv. Law §164 (McKinney 2021).

For an overview of these changes, see Michael B. Gerrard & Edward Mc-Tiernan, New York Adopts Nation's Strongest Environmental Justice Law, N.Y.L.J. (May 10, 2023), https://scholarship.law.columbia.edu/faculty_ scholarship/3936 (last visited May 19, 2023).

^{59.} Environmental Conservation Law (ECL) §70-0118.

^{60.} N.Y. Exec. Law §94-c(6) (McKinney 2021).

^{61.} N.Y. Comp. Codes R. & Regs. tit. 19, §900-2.20.

does not explicitly reference EJ. The statutory text directs ORES to adopt "a set of uniform standards and conditions for the siting, design, construction and operation of each type of major renewable energy facility" and instructs that these standards and conditions "be designed to avoid or minimize, to the maximum extent practicable, any potential significant adverse environmental impacts related to the siting, design, construction and operation of a major renewable energy facility."

The law references a public comment period,⁶³ and states that judicial review shall be permitted for, among other things, determining whether the siting decision was "[m]ade pursuant to a process that afforded meaningful involvement of citizens affected by the facility regardless of age, race, color, national origin and income."⁶⁴ The statute also requires that a "host community benefit" be provided to the host community, but leaves it to the public service commission to establish a procedure that will determine what the host community benefit will be in any particular instance.⁶⁵ Protections for EJ communities are therefore anchored in the ORES regulation and specifically the requirement that applicants include an EJ appendix with their application for a permit.

Review of the required EJ appendix prepared and submitted by applicants suffers from a lack of automaticity. Applicants must file an exhibit that identifies and evaluates "significant and adverse disproportionate environmental impacts of the facility on an Environmental Justice (EJ) area"; identifies "specific measures the applicant proposes to take" to avoid, minimize, and offset such impacts "to the maximum extent practicable"; and includes "[a] qualitative and, where possible, quantitative analysis demonstrating that the scope of avoidance, mitigation and offset measures is appropriate given the scope of significant and adverse disproportionate environmental impacts of the facility resulting from its construction and operation."66 Since there is no justice-specific charge to ORES in the statute, ORES retains wide discretion to decide whether the avoidance, mitigation, and offset measures are "appropriate" and whether and how to weigh impacts on EJ communities in application determinations.

Despite the lack of compulsory statutory protection, there are good reasons to expect that at least in the near-term, NYSERDA and ORES will be attentive to justice considerations. There is a strong culture of concern for EJ in New York, which is reflected in and buttressed by myriad laws and policies. New York adopted the strongest EJ law in the country in 2023 (although major renewable energy projects are exempted from its requirements),⁶⁷ New York law calls for the establishment of a permanent EJ advisory group,⁶⁸ state agencies in New York have long been required by law to develop and be "guided" by an EJ policy,⁶⁹ and the NYSDEC's environmental permit review process and application of the State Environmental Quality Review Act must consider EJ under Commissioner Policy 29 adopted in 2003.⁷⁰ A Climate Justice Working Group is advising on implementation of the Climate Leadership and Community Protection Act, New York's core climate mitigation law, which, as explained above, contains important precommitments to justice.

Yet, in the context of siting major renewable energy facilities, the legal anchor for EJ slipped from a statutory mandate to ORES' regulatory discretion. This may be indicative of the tendency, predicted above, that EJ values may cede as concern over global warming grows. Indeed, the slippage occurred-that is, New York's expedited renewables siting law was enacted-at a time when the New York Legislature and the governor were extremely concerned that the existing legal infrastructure for siting renewable energy projects was overly solicitous of local concerns, that valuable time in the renewables build-out had been lost, and that the process was in urgent need of "streamlining."71 Here, the trade off is reduced community process and, since the adoption of New York's 2023 EJ law, reduced protection from disproportionate impacts in disadvantaged communities in favor of speed of renewables build-out.

This weakening of justice protections in the context of renewable energy siting in New York may not be unduly troubling even to those deeply concerned about preventing environmental injustice for a variety of reasons. There is a widespread sense that the need for justice protections is low in this context because renewables projects, for reasons of geography, are unlikely to gravitate toward traditional EJ communities and, if they do, to have few locally undesirable impacts. There is also confidence in New York's strong culture of concern for EJ and a sense that the political landscape is unlikely to change dramatically. And fast renewables deployment may prove beneficial to EJ communities by causing earlier retirement of fossil fuel-fired plants and limiting the harms of climate change, to which such communities are especially vulnerable.

You do not have to disagree with these intuitions (indeed, I share the sense that expedited renewables siting in New York is ultimately likely to be (overall) beneficial for traditional EJ communities!) to be concerned about how the slippage of justice protections occurred. Instead of setting out the abovedescribed considerations explicitly, thereby allowing the under-

^{62.} N.Y. Exec. Law §94-c (McKinney 2021).

^{63.} E.g., id., §§5(c) and (d).

^{64.} Id. §5(g)(2)(F).

^{65.} Accelerated Renewable Energy Growth and Community Benefit Act (AREGCBA) §20(c)(2)) provides:

Such [Public Service Commission] proceeding shall determine the amount of such discount, credit, compensatory or environmental benefit based on all factors deemed appropriate by the commission, including the expected average electrical output of the facility, the average number of customers within the renewable host community, and the expected aggregate annual electric consumption within such renewable host community, *the potential impact on disadvantaged communities*, and the role of utilities, if any, in implementing any aspect of such program. (emphasis added).

^{66.} N.Y. Сомр. Содев R. & Regs. tit. 19, §900-2.20.

Cumulative Impacts Bill, ch. 49, 2023 N.Y. Laws; N.Y. Senate Bill No. 8830, §9, 246th Sess. (2023) (enacted); Env't Conserv. §§8-0105, 8-0109, 8-0113, 70-0107, 70-0118.

^{68.} N.Y. Envtl. Conserv. Law §48-0105.

^{69.} Id. §48-0109.

NSYDEC, COMMISSIONER POLICY 29 ENVIRONMENTAL JUSTICE AND PER-MITTING (Mar. 19, 2003), https://www.dec.ny.gov/regulations/36951.html (last visited May 18, 2023).

^{71.} See Frederic M. Mauhs, Preempting Local Zoning Codes Fuels Opposition to Renewable Energy in New York, 94 NYSBAJ 44, 45 (Mar./Apr. 2022) (describing how New York's expedited renewables siting law was born out of Albany's frustration with local opposition to renewable energy projects, stymying their buildout).

lying intuitions to be challenged and tested, the adoption and structure of the expedited siting law obscured the loss of justice protections, effectively employing gestures to justice to gloss over the loss of more meaningful protections. This creates a few potential harms, including the possibility that the same justice trade off approach will be uncritically imported into other contexts thereby allowing for the expedited siting (without strong justice protections) of other more worrisome infrastructure; that comfort with this type of approach will encourage misplaced reliance on "soft" justice protections likely to erode over time; and that the failure to acknowledge the loss of justice protections forestalled creative thinking about ways to avoid the need for trade off (in this case, preserve strong justice protections without slowing renewables deployment).

There is a risk that New York might adopt the same exemption approach to the siting of other climate infrastructure without fully recognizing the justice implications of doing so. Even if there is no real on-the-ground harm from the loss of justice protections in the context of renewable energy siting, we should be very careful not to copy and paste this exemptionstyle approach to other contexts, like the siting of transmission lines, that have far greater local impacts.

Additionally, we should be wary of relying on "soft" protections, grounded in culture and prevailing political commitments, particularly over longer time periods. Even though New York's culture of respecting justice is strong, there are countervailing pressures on agencies facing monumental mitigation tasks on strict deadlines. It is imperative to consider the implementation of mitigation laws in the years and decades to come, as the urgency of the transition to renewables heightens, demands on government multiply, budgets shrink, and on-the-ground conditions deteriorate.

Finally, obscuring the loss of justice protections with gestures toward justice prevents creative thinking about ways to strengthen justice protections without unduly slowing renewable project development. For example, with respect to New York's expedited renewables siting law, the requirement for applicants to describe EJ impacts could, without jeopardizing time and creating undue delay, be enshrined in the statute instead of resting on a requirement set forth in regulation. The statute could also identify a ceiling (indexed to the proportion of build-ready sites or permits authorized in EJ areas), the exceedance of which would automatically trigger review by the Climate Justice Working Group.

After all, if you are *really* confident that these facilities won't be disproportionately sited in EJ communities, this shouldn't slow anything down, right? And there is no drag on renewables deployment that would be created by providing for dedicated funding commitments—the promise of job training could be coupled with identification of a dedicated funding source. We should take advantage of the existence of political will to advance EJ principles in the relative "cool" of now to lock in meaningful precommitments to justice instead of settling for gestures toward justice that may not endure.

IV. Conclusion

Significant lawmaking is underway to build climate change policy, particularly at the state level. Advancing climate justice is often understood as a key goal of these efforts. Mounting climate exigency will, however, make it progressively harder to attend to justice. This suggests the need to pay special attention (now) to designing measures to advance climate justice that will be more likely to endure in the face of increasing urgency, shifting priorities, resource scarcity, and societal strain. Otherwise, we risk adopting climate policy with gestures toward justice that make us feel better today but do little to protect justice tomorrow.

Specific recommendations from applying a precommitment lens include embedding automatic guardrails into statutory text (like the CLCPA's establishment of mandatory statutory minima in terms of the share of benefits to be provided to disadvantaged communities); embracing approaches that provide immediate funding to EJ communities; avoiding balancing tests; and locking in reliable funding streams for justice measures. The precommitment lens would also encourage continued efforts to strengthen justice policies as they evolve over time. Even without a clear statutory command, a wellreasoned rulemaking can produce regulations that endure. As Villa describes, over time, even the most fragile legal foothold (an executive order) can grow and evolve into extensive and more meaningful laws, policies, and practices.⁷²

^{72.} See Villa, No "Box to Be Checked," supra note 11 (describing the legal and practical evolution of environmental justice).