

Our Children’s Future: Applying Intergenerational Equity to Public Land Management

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“As members of the present generation,
we hold the earth in trust for future generations.”¹

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¹ Edith Brown Weiss, *Our Rights and Obligations to Future Generations for the Environment*, 84 AM. J. INT’L L. 198, 199 (1990).

INTRODUCTION

As Americans face the consequences of climate catastrophe almost every day, the time has come to rethink the legal framework that shapes government decision making. The human species now has the power to change the global environment irreversibly and is doing so as a result of emissions of carbon dioxide and other greenhouse gases. This reality demands that decisions made by the current generation respect the rights of future generations. Without mechanisms to enforce the rights of those who follow, we destroy our children's future.

Around the world, scholars have discussed intergenerational equity for several decades. In the United States, many have promoted the idea of a constitutional amendment providing an inalienable right to a healthy environment. Such a right would require current generations to act in a way that protects a healthy environment for future generations. Some state constitutions contain such a right. Yet, even in states with such a constitutional provision, government decisions are not regularly shaped by a right to a healthy environment. Reliance on agency discretion has not delivered the results our children need and deserve.

The nation's public lands play a critical role in addressing climate change. While not a complete solution, managing America's public lands according to principles of intergenerational equity can go a long way to preserve a prosperous future for our children. The Article first addresses reasons for protecting public lands, including principles of intergenerational equity. Next, the Article discusses what today's circumstances demand from a federal land management framework. Finally, the Article explores how to provide a legal framework for managing public lands based on intergenerational equity. It discusses the necessary elements of a new comprehensive statutory framework while also explaining how new interpretations of existing laws can protect our children's future.

I. WHY DO WE PROTECT PUBLIC LANDS?

Different philosophies have shaped American federal land management over time. Indigenous societies generally view themselves as connected within, rather than apart from, their environment. In the words of Chief Seattle:

This we know: the earth does not belong to man: man belongs to the earth . . . Whatever befalls the earth, befalls the sons of

the earth. Man did not weave the web of life: he is merely a strand in it. Whatever he does to the web, he does to himself.²

With colonialization of the American landscape, an anthropocentric philosophy replaced this biocentric one. From 1776 to the end of the nineteenth century, the nation embarked on an era of land disposition. As states formed, each received federal land grants as part of its enabling act passed by Congress.³ In the interest of settling and developing western lands, Congress enacted several laws granting federal land to private owners. The Homestead Act of 1862 granted ownership of up to 160 acres to any family head or anyone over twenty-one years of age who was a citizen of the United States or had declared an intention to become a citizen.⁴ Such person simply needed to prove that he had resided upon and cultivated the land for five years. The Enlarged Homestead Act of 1909 enabled acquisition of homesteads of 320 acres in the nine western states and territories of Arizona, Colorado, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.⁵ And, of course, there is the General Mining Law of 1872 which remains in effect today. This Act conveys federal land to private owners who stake claims to hardrock minerals, such as gold and silver.⁶

Circumstances today, however, call for a very different approach to how the nation manages the irreplaceable common assets that are our public lands. The era of disposition of federal land has shifted to one of retention. Congress passed laws like the Antiquities Act⁷ and the National

² *Id.* at 198. Letter from Chief Seattle, patriarch of the Duwamish and Squamish Indians of Puget Sound to U.S. President Franklin Pierce (1855). Although the letter appears in numerous anthologies, the original has never been located.

³ *See, e.g.*, Ohio Enabling Act of 1802 (2 Stat. 173). It turns out, in an interesting twist of history, that Ohio was not officially admitted to the Union until 1953. Despite passing Ohio's Enabling Act, Congress failed to ratify the state's constitution. Teachers travelling to Washington, D.C., in preparation to celebrate Ohio's sesquicentennial, discovered that the Library of Congress lacked the legislation admitting the state to the Union. On January 13, 1953, Congressman George H. Bender introduced legislation to grant statehood to Ohio. On May 19, the House voted to grant statehood to Ohio, retroactive to March 1, 1803. Tim Pawlak, *Ohio: The 48th State?*, OHIO HIST. COLLECTION (Mar. 15, 2018), <https://www.ohiohistory.org/learn/education-and-outreach/teachers-toolbox/march-2018/ohio-the-48th-state>.

⁴ Act of May 20, 1862, ch. 75, 12 Stat. 639 (repealed 1976).

⁵ An Act to provide for an enlarged homestead, Act of February 19, 1909, ch. 160, 35 Stat. 639 (repealed 1976).

⁶ An Act to promote the development of the mining resources of the United States, Act of May 10, 1872, ch. 152, 17 Stat. 91 (1872).

⁷ Antiquities Act of 1906, 16 U.S.C. § 431 (1906).; *see also* Mark Squillace, *The Monumental Legacy of the Antiquities Act of 1906*, 37 GA. L. REV. 473 (2003).

Park Service's Organic Act.⁸ A forester and wildlife biologist, Aldo Leopold introduced the idea of a "land ethic" into resource management. Leopold recognized, "a system of conservation based solely on economic self-interest is hopelessly lopsided."⁹ He recognized that the individual is a member of interdependent parts.¹⁰ For Leopold, "[t]he land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land."¹¹

Leopold's land ethic is no longer sufficient. We need legal mechanisms that enforce interconnection over time as well as space. While the human species has always had the capacity to destroy the local environment, never before have we had such capacity to destroy the global environment as we do today. Both morality and self-preservation demand that we incorporate intergenerational equity into government decision making.

Intergenerational equity utilizes a "veil of ignorance."¹² This veil of ignorance traditionally asks each of us to decide what kind of society we would want to live in if we had no way of knowing beforehand who we would be in that society—rich or poor, male or female, young or old, black or white. Intergenerational equity adds the component of time. It asks what kind of society we would want if we were ignorant of when we would be living.¹³ In addition to rules that ensure basic dignity and rights for all members of society, under this paradigm, most of us would want the rights of future generations to limit the actions of current ones. None of us would know whether we would be living now or later.¹⁴

As Weiss articulated, the rights of future generations impose a trust responsibility on the current generation. Certain gifts of nature—air, water, healthy ecosystems—belong to everyone and cannot be appropriated for exclusively private use.¹⁵ The trustee has a fiduciary responsibility to manage these assets (the principal of the trust) for the benefit of yet unborn beneficiaries. The current generation can spend

⁸ 54 U.S.C. § 100101 (2018).

⁹ ALDO LEOPOLD, *A SAND COUNTY ALMANAC* 251 (1949).

¹⁰ *Id.* at 238.

¹¹ *Id.* at 239.

¹² JOHN RAWLS, *A THEORY OF JUSTICE* 136–38 (1971).

¹³ Weiss, *supra* note 1, at 200.

¹⁴ *Id.*; see also Zena Hadjiargyrou, *A Conceptual and Practical Evaluation of Intergenerational Equity in International Environmental Law*, 18 INT'L COMM. L. REV. 248, 251 (2016).

¹⁵ Joseph Sax, *The Public Trust Doctrine in Natural Resources Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471 (1969); see also Charles Wilkinson, *Headwaters of the Public Trust: Some of the Traditional Doctrine*, 19 ENVTL. LAW 425 (1989).

dividends generated by the principal but cannot spend down the principal itself.¹⁶

Some have tried to apply this trust responsibility to all major government decisions.¹⁷ As the consequences of climate change worsen, courts may enforce such broad responsibility. In the meantime, applying the principles of intergenerational equity and the trust responsibilities that flow from them to America's public lands represents a critical and achievable step in this direction. Action by Congress to enact a new comprehensive federal framework governing public lands would help, but it is not necessary. The "public interest" standards in the existing laws that govern management of America's public lands require agency action consistent with intergenerational equity.

II. WHAT DO WE NEED FROM A LEGAL FRAMEWORK?

Today's circumstances demand something different than what the federal agencies managing America's public lands have delivered. Most of the nation's public lands are in the eleven western states and Alaska.¹⁸ The West is not only the fastest growing area in the country, but it has also become the most urban region.¹⁹ Eighty percent of western residents now live in metropolitan areas (cities of 50,000 or more and the adjacent counties with close economic ties).²⁰ As a result of the growing population, Americans ask much more of their public lands than ever before. Water resources are becoming more limited and variable.²¹ President Donald Trump is promoting a public land agenda of "energy

¹⁶ Robert L. Glicksman, *Sustainable Federal Land Management: Protecting Ecological Integrity and Preserving Environmental Principal*, 44 TULSA L. REV. 147, 150 (2008).

¹⁷ See, e.g., *Juliana v. United States*, 947 F.3d 1159 (9th Cir. 2020).

¹⁸ CAROL HARDY VINCENT ET AL., CONG. RESEARCH SERV., FEDERAL LAND OWNERSHIP: OVERVIEW AND DATA 7 (2017) (federal lands account for twenty-eight percent of all land in the United States; over ninety percent of these lands are located in Montana, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Idaho, California, Oregon, Washington, and Alaska).

¹⁹ See, e.g., *Fastest Growing States 2020*, WORLD POPULATION REVIEW (Feb. 15, 2020), <http://worldpopulationreview.com/states/fastest-growing-states/> (Nevada and Idaho are the two fastest growing states in the country); Carl Abbott, *The Real West is an Urban West*, ORIGINS (Sept. 2008), <https://origins.osu.edu/history-news/real-west-urban-west>.

²⁰ See Abbott, *supra* note 19.

²¹ Robert B. Keiter & Matthew McKinney, *Public Land and Resources Law in the American West: Time for Another Comprehensive Review?*, 49 ENVTL. L. 1, 8–9 (2019).

dominance.”²² In addition, various recreational demands have strained public land resources.²³

Yet, the biggest change facing our public lands today is the reality of climate change and the catastrophic fires, flooding, and drought it is already triggering. Federal oil, gas, and coal leasing is contributing significantly to greenhouse gas emissions accelerating climate change.²⁴ Moreover, the rapidly changing climate will alter ecological resources and processes on public lands.²⁵ Congress enacted public land management laws on the assumption of a stable climate, a reality that no longer holds true.

Current times demand new legal mechanisms for managing America’s public lands. We need to integrate decision making across ownership and jurisdictional lines. We need to collect, organize, and deploy information so that we can quickly adjust our decisions as circumstances change. We need to include the increasing number and diversity of interests that value our public lands.

III. HOW DO WE DO IT?

A. New Comprehensive Land Management Framework

Our public lands need to be seen and managed as an integrated whole. Different agencies can have different roles, but they must work within a single comprehensive framework. This framework must be based on sustainability. The framework would provide (1) standards to shape agency decisions, (2) mechanisms to supply information and resources, and (3) accountability. Congress should deliver this critical framework through a new comprehensive land management statute.

1. Sustainability Standards

As discussed above, the limits of our public land resources demand that we act today in a way that respects the rights of our children. Scholars

²² Eric Lipton & Hiroko Tabuchi, *Driven By Trump Policy Changes, Fracking Booms on Public Lands*, N.Y. TIMES (Oct. 27, 2018), <https://www.nytimes.com/2018/10/27/climate/trump-fracking-drilling-oil-gas.html>.

²³ Keiter & McKinney, *supra* note 21, at 17–18.

²⁴ MATHEW MERRILL ET AL., U.S. GEOLOGICAL SURVEY, FEDERAL LANDS GREENHOUSE GAS EMISSIONS AND SEQUESTRATION IN THE UNITED STATES: ESTIMATES FOR 2005–14 at 19 (2018).

²⁵ Keiter & McKinney, *supra* note 21, at 18–19.

have discussed intergenerational equity in international law. It is time to apply the concept to the management of America's public lands.

One mechanism to apply intergenerational equity is to create a statutory right to a healthy environment. In the words of John F. Kennedy, "prosperity is not enough when there is no equal opportunity to share in it; when economic progress means overcrowded cities, abandoned farms, technological unemployment, polluted air and water, and littered parks and country sides."²⁶ From the beginning, American society has been grounded in the idea of certain inalienable rights. In *Rights of Man*, Thomas Paine explained how both "reason" and "the universal order of things" warranted separating from England.²⁷ These principles became embodied in the Declaration of Independence.²⁸

Many have written about adding a right to a healthy environment to the U.S. Constitution or interpreting it as written to include this right as inalienable.²⁹ To date, federal courts have declined to enforce a constitutional right to a healthy environment.³⁰ However, two factors make it possible that courts could take a different approach now. First, the federal agencies to whom we look to provide a healthy environment—including the U.S. Environmental Protection Agency and the Department of the Interior—have abdicated their responsibilities. Previously, courts deferred to agency expertise to deliver public good. Ignoring both science and facts, agencies have consistently acted to promote private, more than public, good under President Trump.³¹ Second, the federal government's

²⁶ See Adam Rome, "Give Earth a Chance": *The Environmental Movement and the Sixties*, 90 J. Am. Hist. 525, 531 (2003).

²⁷ THOMAS PAINE, COMMON SENSE 9, 27 (Peter Eckler Publ'g Co., 1914) (1776) (when rejecting the notion of kings, observing how "exalting one man so greatly above the rest cannot be justified on the equal rights of nature").

²⁸ See generally PAULINE MAIER, AMERICAN SCRIPTURE: MAKING THE DECLARATION OF INDEPENDENCE (1997).

²⁹ See, e.g., MAYA VAN ROSSUM, THE GREEN AMENDMENT: SECURING OUR RIGHT TO A HEALTHY ENVIRONMENT (2017); Carole L. Gallagher, *The Movement to Create an Environmental Bill of Rights: From Earth Day, 1970 to the Present*, 9 FORDHAM ENVTL. L.J. 107 (1997); Sam Kalen, *An Essay: An Aspirational Right to a Healthy Environment?* 34 UCLA J. ENVTL. L. & POL'Y 156 (2016); Bruce Ledewitz, *Establishing a Federal Constitutional Right to a Healthy Environment in Us and in Our Posterity*, 68 MISS. L.J. 565 (1998).

³⁰ See, e.g., *Del. Riverkeeper Network v. FERC*, 895 F.3d 102, 108 (D.C. Cir. 2018) (Pennsylvania state environmental rights do not create federally protected interest); *Clean Air Council v. United States*, 362 F.Supp.3d 237, 250–51 (E.D. Pa. 2019); *Tanner v. Armco Steel Corp.*, 340 F.Supp. 532, 537 (S.D. Tex. 1972). See also Daveed Gartenstein-Ross, *An Analysis of the Rights-Based Justification for Federal Intervention in Environmental Regulation*, 14 DUKE ENVTL. L. & POL'Y F. 185, 194–95 (2003).

³¹ See, e.g., Jacob Carter et al., *The Trump Administration Has Attacked Science 100 Times . . . and Counting*, SCIENTIFIC AMERICAN (May 29, 2019),

failure to address climate change means that more people are suffering greater immediate environmental harm. Flooded homes, wildfires, and disease have made climate change real today. Those suffering the consequences are demanding action. Youth are also demanding action in growing numbers as they see the possibility that their futures may be much worse than the prosperity the current generation has enjoyed.

Judges may be less willing to sit on the sidelines while climate change and agency inaction imperils their children's future. The Ninth Circuit came close to acting in response to agency failure in its recent decision in *Juliana v. United States*.³² In this case, twenty-one young citizens alleged violations of their constitutional rights to life, liberty, and property resulting from excess carbon dioxide in the atmosphere from the federal government's actions promoting burning of fossil fuels. Quoting Barry McGuire's 1960's song, "Eve of Destruction," the court found that plaintiffs "have presented compelling evidence that climate change has brought that eve nearer."³³ In the court's words, "[a]bsent some action, the destabilizing climate will bury cities, spawn life-threatening natural disasters, and jeopardize critical food and water supplies."³⁴

Despite acknowledging the critical issues at stake, the Ninth Circuit held that the *Juliana* plaintiffs lacked standing to pursue their claims. The court recognized both the "concrete and particularized injuries" suffered by plaintiffs and the causal link between the federal defendants' actions and these injuries, but stopped short of its ability to remedy the injuries.³⁵ While the court found that "[t]here is much to recommend the adoption of a comprehensive scheme to decrease fossil fuel emissions and combat climate change . . . a matter of national survival," such a scheme was beyond the ability of the court to design and enforce.³⁶ In the words of the court, "any effective plan would necessarily require a host of complex policy decisions entrusted, for better or worse, to the wisdom and discretion of the executive and legislative branches."³⁷

While closing the door on the *Juliana* case, the Ninth Circuit's decision leaves open a path to judicial enforcement of the constitutional

<https://blogs.scientificamerican.com/observations/the-trump-administration-has-attacked-science-100-times-and-counting/>. For a discussion of a similar trend in Canada of agency discretion's failure to deliver environmental protection, see Lynda Collins & Lorne Sossin, *In Search of an Ecological Approach to Constitutional Principles and Environmental Discretion in Canada*, 52 U.B.C.L. REV. 293 (2019).

³² *Juliana v. United States*, 947 F.3d 1159 (9th Cir. 2020).

³³ *Id.* at 1164.

³⁴ *Id.* at 1166.

³⁵ *Id.* at 1168–69.

³⁶ *Id.* at 1171.

³⁷ *Id.*

rights claimed by the plaintiffs. One of the obstacles the *Juliana* plaintiffs faced was the breadth of remedy they sought. As the Ninth Circuit said, “the plaintiffs here do not contend that their injuries were caused by a few isolated agency decisions.”³⁸ In addition to seeking an injunction requiring the government to cease permitting, authorizing, and subsidizing fossil fuel use, Plaintiffs sought an order compelling the government to prepare a plan subject to judicial approval to draw down harmful emissions.³⁹ It is the second affirmative piece that the court seemed unable to comprehend completing. Plaintiffs may have more success in overcoming the redressability hurdle for establishing standing by limiting the relief they seek to an injunction forcing the federal government to cease actions supporting fossil fuel development.

Regardless of the possibility of relief under the Constitution, any new statutory framework for public land management should include a right to a healthy environment. Congress considered such a right when debating the National Environmental Policy Act (“NEPA”) in the 1960s. The original version of the Act, S. 1075, introduced by Senator Henry “Scoop” Jackson included such right:

The Congress recognizes that each person has a fundamental and inalienable right to a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.⁴⁰

The version of NEPA signed into law did not contain such language providing an explicit inalienable right.⁴¹ Rather than read a right to a healthy environment into NEPA, courts have chosen to focus on enforcing NEPA’s procedural requirements for environmental review and public participation.⁴² The time has come for Congress to correct this failure to provide residents of the United States with an explicit and judicially enforceable right to a healthy environment.

³⁸ *Id.* at 1169.

³⁹ *Id.* at 1170.

⁴⁰ 115 CONG. REC. 29,088 (1969).

⁴¹ *See* 42 U.S.C. § 4331(c) (2020) (“The Congress recognizes that each person should enjoy a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.”).

⁴² *Winter v. Nat. Res. Def. Council*, 555 U.S. 7, 23 (2008) (quoting *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989) (“[I]t is now well settled that NEPA itself does not mandate particular results, but simply prescribes the necessary process.”)).

2. *Information and Resources*

Technology empowers society with a tremendous amount of information. Geographic information systems allow for the collection, analysis, and presentation of data critical to sustaining the various resources America's public lands hold. For example, the U.S. Geological Survey has developed a Protected Areas Database of the United States to provide a single, continuously updated geospatial database providing exact boundaries and essential attribute information for every public park and other protected area in the United States.⁴³ Congress should include funding for data collection and integration in any new comprehensive land management framework.

Datasets exist which identify ecosystems, land cover, species habitat and range, flood hazards, and more.⁴⁴ Recently, NatureServe, a nonprofit organization of biodiversity scientists, released its Map of Biological Diversity Importance.⁴⁵ This living atlas identifies areas critical to sustaining the nation's rich biodiversity. By cataloging plants and animals close to extinction—mapping where these species live—and listing the protected status of such habitat, the Map of Biological Diversity Importance provides both public and private landowners information to make good stewardship decisions.⁴⁶ The challenge is to ensure that such information is available to those who are making decisions about public land use.

Congress should require monitoring and mitigation so that land managers can respond effectively to rapidly changing conditions on public lands. As the climate changes, species populations and distributions will change. Forests may change to grasslands. Water resources may shift. Federal land managers now have access to tools that can help them adapt to a changing future. The U.S. Department of Agriculture has collected

⁴³ *Protected Areas Database of the United States (PAD-US) 2.0*, U.S. GEOLOGICAL SURVEY (Sept. 30, 2018), <https://doi.org/10.5066/P955KPLE>; see also *Gap Analysis Project: Protected Areas*, U.S. GEOLOGICAL SURVEY, <https://www.usgs.gov/core-science-systems/science-analytics-and-synthesis/gap/science/protected-areas> (last visited Feb. 16, 2020) (overview of the project and its data and uses).

⁴⁴ *National Geospatial Data Asset (NGDA) Portfolio*, GEOPLATFORM.GOV, <https://communities.geoplatform.gov/ngda-portfolio/ngda-portfolio/> (last visited Feb. 16, 2020).

⁴⁵ *Map of Biodiversity Importance*, NATURESERVE, <https://www.natureserve.org/conservation-tools/projects/map-biodiversity-importance> (last visited Feb. 16, 2020).

⁴⁶ Sean Breyer, *US Map of Biological Importance Now Available in ArcGIS Living Atlas*, ARCGIS BLOG (Feb. 11, 2020), <https://www.esri.com/arcgis-blog/products/arcgis-living-atlas/natural-resources/us-map-of-biodiversity-importance-now-available-in-arcgis-living-atlas>.

various resources to respond to climate change, including an adaptation workbook to allow land managers to design land management and conservation actions that can help prepare for changing conditions.⁴⁷ Various web applications provide land managers near-term climate forecasts and vegetation dynamics simulations for a user-specified area.⁴⁸ Some federal land managers are working to combine social and ecological vulnerability assessments to adapt to climate change effectively.⁴⁹ A new comprehensive land management framework could provide incentives for the development and distribution of these tools, as well as training to deploy the tools effectively.

3. Accountability

The success of any comprehensive land management framework depends on accountability. Traditional accountability mechanisms have produced significant success. Citizen suit provisions in the Clean Water and Clean Air Acts, for example, have helped ensure that both private and public actors follow the protections provided by these laws. Likewise, the right to judicial review of agency action under the Administrative Procedure Act ("APA") has allowed citizens to invalidate actions that are "arbitrary and capricious or not in accordance with the law." In several recent APA decisions, courts struck down agency decisions to lease federal coal, oil, and gas for failure to consider the climate change impacts of burning these fossil fuels.

Such mechanisms, however, have not delivered all that is needed. The Federal Energy Regulatory Commission ("FERC") has consistently failed to assess a region's need for additional natural gas that proposed pipelines would deliver.⁵⁰ This failure to assess whether new gas is needed before authorizing new pipelines is locking in a dependence on fossil fuels that

⁴⁷ Climate Change Resource Center, *Adaptation Workbook*, U.S. FOREST SERV., <https://www.fs.usda.gov/ccrc/tools/adaptation-workbook> (last visited Feb. 16, 2020).

⁴⁸ See, e.g., John B. Bradford et al., *Anticipatory Natural Resource Science and Management for a Changing Future*, 16 FRONTIERS ECOLOGY & ENV'T 295 (2018); Chad Zanocco et al., *Great Basin Land Managers Provide Detailed Feedback About Usefulness of Two Climate Information Web Applications*, 20 CLIMATE RISK MGMT. 78 (2018).

⁴⁹ See Shannon M. McNeeley et al., *Expanding Vulnerability Assessment for Public Lands: The Social Complement to Ecological Approaches*, 16 CLIMATE RISK MGMT. 106 (2017).

⁵⁰ See Rich Glick & Matthew Christiansen, *FERC and Climate Change*, 40 ENERGY L.J. 1, 39 (2019). Rich Glick is currently a FERC Commissioner and has dissented each time FERC has approved a new natural gas pipeline. Transcontinental Gas Pipe Line Company, LLC, 167 FERC 61,110 (2019) (Glick, Comm'r, dissenting). Prior to construction of any natural gas pipeline crossing state lines, FERC must issue a certificate of public convenience and necessity. 15 U.S.C. § 717f(c) (2018).

the nation cannot afford.⁵¹ The Department of the Interior continues to lease the public's lands for oil, gas, and coal despite the fragmentation of the landscape such energy development causes and the catastrophic climate consequences to which the burning of these fossil fuels contributes. In fiscal year 2018 alone, the Bureau of Land Management ("BLM") leased over one million acres of public land for oil and gas drilling in eight western states.⁵²

What is missing is the accountability that comes from local, lasting relationships. Those who see each other every day at the grocery store or in church are more likely to work together to find solutions for threats to shared resources, such as the nearby national forest.⁵³ Rather than relying on agency expertise to find the single best solution, collaboration among various stakeholders aims to discover ways forward that are better than the status quo.⁵⁴ When the status quo is not working for anyone—as is increasingly the case today—collaborative solutions and accountability to one's neighbors can help fill the gap left by agency failure to protect the rights of future generations.

For collaboration to deliver the sustainability that the nation needs, collaborative efforts should occur within a framework of enforceable standards. At times, local problem solving has sparked controversy.⁵⁵

⁵¹ Bruce Nilles & Mark Dyson, *Rethinking Future Investments in Natural Gas Infrastructure*, GREENTECH MEDIA (Nov. 8, 2019), <https://www.greentechmedia.com/articles/read/rethinking-future-investments-in-natural-gas-infrastructure> (there is emerging evidence that in order to meet international climate targets, the U.S. cannot afford to lock in future carbon emissions by investing in gas or other fossil fuel infrastructure); Brad Plumer, *As Coal Fades in the U.S., Natural Gas Becomes the Climate Battleground*, NEW YORK TIMES (June 26, 2019), <https://www.nytimes.com/2019/06/26/climate/natural-gas-renewables-fight.html>. FERC decisions are currently guided by a 1999 Natural Gas Policy Statement. The Commission initiated a review of this statement in April 2018, but has to date taken no action to revise it. See FED. ENERGY REG. COMM'N, 163 FERC 61,042, CERTIFICATION OF NEW INTERSTATE NATURAL GAS FACILITIES: NOTICE OF INQUIRY (2018).

⁵² *Oil and Gas Statistics: Acreage in New Leases Issued*, BLM (Oct. 3, 2018), <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/oil-and-gas-statistics>. Over half of this land was in Wyoming alone. See also Emily Holden, *Trump "Turns Back the Clock" by Luring Drilling Companies to Pristine Lands*, GUARDIAN (Feb. 12, 2020, 2:00 AM), <https://www.theguardian.com/environment/2020/feb/12/trumps-legacy-drilled-public-lands-and-the-resulting-carbon-emissions>.

⁵³ Kirk Emerson et al., *An Integrative Framework for Collaborative Governance*, 22 J. PUBL. ADM. RES. THEOR. 1, 14 (2012).

⁵⁴ Matthew McKinney, *Whither Public Participation in Federal Land Management? Replicating Homegrown Innovations in Shared Problem Solving*, 48 ENVTL. L. REP.: NEWS & ANALYSIS 10015, 10023 (2018).

⁵⁵ Martin Nie & Peter Metcalf, *National Forest Management: The Contested Use of Collaboration and Litigation*, 46 ENVTL. L. REP. NEWS & ANALYSIS 10208, 10215 (2016);

Critics have complained of unequal seats at the negotiating table, with extractive profit-making interests holding more leverage than others.⁵⁶ In addition, discussions at times fail to include all those with legitimate interests.⁵⁷ Sometimes, collaboration turns into endless discussion with no results. Others have criticized local collaboration for circumventing federal environmental protections.⁵⁸ Collaboration should not involve turning over management to local voices, but instead look to stakeholders to find ways to solve problems together.

In addition to clear standards against which to measure collaboration outcomes, Congress should provide communities with funding and other resources to promote shared problem-solving. In 1998, Congress created the U.S. Institute for Environmental Conflict Resolution (known today as the John McCain III National Center for Conflict Resolution).⁵⁹ Located in Tucson, Arizona, it assists parties in resolving environmental conflicts around the country that involve federal agencies or interests. The Center provides mediators and facilitators as well as training for those interested in participating in or leading a collaborative effort.⁶⁰ In 2012, two arms of the White House—the Office of Management and Budget and the Council on Environmental Quality (“CEQ”)—issued a joint Memorandum on Environmental Collaboration and Conflict Resolution. This Memorandum provides guidance for shared problem solving, including an appendix of mechanisms and strategies used by various federal agencies. Our public lands and the communities that rely upon them need more of this support. Unfortunately, the current president seems more interested in inciting conflict rather than resolving it.⁶¹

George C. Coggins, *Regulating Federal Natural Resources: A Summary Case Against Devolved Collaboration*, 25 *ECOLOGY L. Q.* 602 (1999); Michael McCloskey, *The Skeptic: Collaboration Has Its Limits*, *HIGH COUNTRY NEWS* (May 13, 1996), <https://www.hcn.org/issues/59/1839>.

⁵⁶ Nie & Metcalf, *supra* note 55, at 10215.

⁵⁷ See Jane Braxton Little, *Quincy Library Group Bars Outsiders*, *HIGH COUNTRY NEWS* (Apr. 26, 1999), <https://www.hcn.org/issues/153/4957>.

⁵⁸ George Cameron Coggins, “Devolution” in *Federal Land and Law Abdication by Any Other Name*, 3 *HASTINGS W.N.W. J. ENVTL. L. & POL’Y* 485, 490 (2008).

⁵⁹ *John McCain III National Center for Environmental Conflict Resolution*, UDALL FOUND., <https://www.udall.gov/ourprograms/institute/institute.aspx> (last visited February 17, 2020).

⁶⁰ *Id.*

⁶¹ See, e.g., *infra* note 71 and accompanying text (discussing proposed CEQ changes to its regulations implementing NEPA).

B. Breathing New Life into Existing Laws

Ideally, Congress will act to create a new comprehensive federal framework for managing our public lands. In the meantime, new interpretations of existing laws can further intergenerational equity. Many of our environmental laws explicitly speak to the responsibilities that the current generation owes future generations. NEPA, for example, holds the federal government responsible for “fulfill[ing] the social, economic, and other requirements of present and future generations of Americans.”⁶² Various land management statutes require decisions that take into account long-term needs. As discussed below, existing statutes contain words promoting intergenerational equity. The breakdown of indispensable natural systems—such as a stable climate—demands that we breathe new meaning into them.

1. NEPA’s Substantive Mandate

Even though NEPA lacks an explicit right to a healthy environment, it promises Americans more than what the agencies and the courts have delivered. The Act states that “each person should enjoy a healthful environment.”⁶³ NEPA requires the federal government “to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.”⁶⁴ NEPA provides that it is the continuing responsibility of the federal government “to fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.”⁶⁵

Currently, federal agencies are failing to meet NEPA’s mandate. FERC, for example, continues to approve pipelines and associated infrastructure to facilitate extraction of natural gas.⁶⁶ Approving such pipelines is arguably inconsistent with the mandate NEPA imposes on FERC to act as a “trustee of the environment for succeeding generations.”⁶⁷ Expanding beyond existing gas development breaks our carbon budget. Emissions from developed reserves of oil, gas, and coal

⁶² 42 U.S.C. § 4331(a).

⁶³ *Id.*

⁶⁴ *Id.* § 4331(a).

⁶⁵ *Id.* § 4331(b)(1).

⁶⁶ *See, e.g.*, Natural Gas Pipeline Company of America LLC., 170 FERC ¶ 61,147 (2020) (approval of increased compressor capacity in Texas); Columbia Gas Transmission, LLC., 170 FERC ¶ 61,045 (2020) (construction and operation of new pipeline in Ohio and West Virginia).

⁶⁷ 42 U.S.C. § 4331(b)(1).

would already push the world far beyond the 1.5 °C of warming target included in the Paris Agreement ratified by over 170 nations.⁶⁸ The world cannot afford to build new infrastructure to develop new fossil fuel reserves.

Likewise, the Department of the Interior is accelerating oil and gas drilling on public lands.⁶⁹ Such action is contributing to climate change, associated health complications, and other impacts. Rather than helping solve climate change, the Department's decisions are fueling it. Contrary to NEPA's mandate, such decisions fail to "fulfill the social, economic, and other requirements of present and future generations of Americans."⁷⁰

The CEQ—the very entity created by NEPA to ensure federal compliance with the statute's mandates—has proposed changes⁷¹ to its regulations that would destroy rather than create the "conditions under which man and nature can exist in productive harmony."⁷² The proposal, for example, changes the definition of "effects" to exclude those that are "indirect" and "cumulative."⁷³ It is hard to see how this is consistent with NEPA's statutory requirement to provide a "detailed statement" on "the relationship between local short term uses of man's environment and the maintenance and enhancement of long-term productivity."⁷⁴ Climate change is exactly the kind of issue that agencies need to address to ensure "long-term productivity," yet CEQ's proposed changes allow agencies to avoid this analysis.

Today's circumstances demand a reworking of how the courts and agencies have interpreted NEPA. Courts, understandably, initially focused on agency compliance with NEPA's procedural requirements. It was easier for judges to understand and implement the explicit requirement to

⁶⁸ *Burning the Gas 'Bridge-Fuel' Myth: Why Gas is Not Clean, Cheap or Necessary*, OIL CHANGE INT'L (May 30, 2019), <http://priceofoil.org/2019/05/30/gas-is-not-a-bridge-fuel/>. See also David Roberts, *More Natural Gas Isn't A 'Middle Ground' – It's A Climate Disaster*, VOX (May 30, 2019, 10:10 AM EDT), <https://www.vox.com/energy-and-environment/2019/5/30/18643819/climate-change-natural-gas-middle-ground>; Plumer, *supra* note 51.

⁶⁹ Matthew Brown, *Oil From Federal Lands Tops 1B Barrels As Trump Eases Rules*, ASSOCIATED PRESS (Feb. 11, 2020), <https://apnews.com/d5db4dbf99e8c443b7f437fe602f4591> (production from U.S.-managed lands and waters was up more than thirteen percent from 2018).

⁷⁰ 42 U.S.C. § 4331(a).

⁷¹ Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act, 85 Fed. Reg. 1684 (January 10, 2020) [hereafter "CEQ Proposed Rule Changes"].

⁷² 42 U.S.C. § 4331(a).

⁷³ CEQ Proposed Rule Changes, *supra* note 71, at 1699.

⁷⁴ 42 U.S.C. § 4332(C)(iv).

prepare a “detailed statement” on the “environmental impact of the proposed action” and “alternatives to the proposed action.”⁷⁵ Understanding exactly what NEPA’s substantive mandate required of agencies was more difficult. Such difficulty, however, does not excuse judicial failure to give meaning to the sustainability mandate of NEPA’s plain language. Agencies, like the Department of the Interior, have even less excuse for this failure given their substantive expertise.

As courts dug into deciding the adequacy of agency environmental analysis, judges and lawyers lost sight of the purposes the analysis and procedures were designed to serve. In early NEPA decisions, courts seemed to assume that satisfaction of NEPA’s procedural requirements would achieve the statute’s substantive mandates. In the U.S. Supreme Court’s words, “[t]he sweeping policy goals announced in § 101 of NEPA are thus realized through a set of ‘action-forcing’ procedures that require that agencies take a ‘hard look’ at environmental consequences.”⁷⁶ But language also crept into decisions stating that “NEPA prohibits uninformed—not unwise—agency action.” In *Robertson*, the Court stated, “it is now well settled that NEPA itself does not mandate particular results, but simply prescribes the necessary process.”⁷⁷

While NEPA may not compel a particular result, its language does limit the possible results to those that are consistent with the Act’s purpose and intent. The APA prohibits agency action that is “not in accordance with the law.”⁷⁸ NEPA provides that it is the continuing responsibility of the federal government “to fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.”⁷⁹ Actions focused solely on today without taking into account impacts on the future violate NEPA’s plain language.

2. “Public Interest” Standards

In addition to NEPA, American land management statutes contain language that can deliver intergenerational equity. While the level of protection varies according to statute and land classification, the laws that govern management of the nation’s public lands all contain some form of a public interest standard.

⁷⁵ *Id.* § 4332(C)(i)(iii).

⁷⁶ *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989) (citations omitted).

⁷⁷ *Id.*

⁷⁸ 5 U.S.C. § 706(2)(A) (2018).

⁷⁹ 42 U.S.C. § 4331(a).

Certain lands—like our national parks and certain monuments—are set aside “to conserve the scenery, natural and historic objects and the wild life.”⁸⁰ Created in 1916 as a bureau within the Department of the Interior, the National Park Service must manage the lands it oversees “in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”⁸¹

Conservation also governs management of the National Wildlife Refuge System. As the agency responsible for the National Wildlife Refuge System, the U.S. Fish and Wildlife Service (“FWS”) administers “a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of the present and future generations of Americans.”⁸²

Much of the large estate that makes up our public lands, however, is outside of our national parks and refuges. BLM oversees three times the amount of land within the National Park System. BLM manages 247.3 million acres in twenty states, including the deserts of California, the red rock canyons of Utah, the plains of Montana, and the Iditarod Trail in Alaska. While managing some lands for specific purposes, BLM generally applies a “multiple-use” standard in its oversight of the public lands.

Even lands managed for “multiple use” cannot be used in ways that deny their benefits to future generations. The statute governing BLM’s management defines “multiple use” as “harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment.”⁸³

Congress required that BLM manage the public’s lands so they are “utilized in the combination that will best meet the present and future needs of the American people.”⁸⁴ In the development and revision of land use plans, the Secretary of the Interior shall “weigh long-term benefits to the public against short-term benefits.”⁸⁵ Moreover, “in managing the public lands the Secretary shall by regulation or otherwise take any action required to prevent unnecessary or undue degradation of the lands and their resources.”⁸⁶

⁸⁰ 54 U.S.C. § 100101(a).

⁸¹ *Id.*

⁸² 16 U.S.C. § 668dd(a)(2) (2018).

⁸³ Federal Land Policy and Management Act (FLPMA) of 1976, 43 U.S.C. § 1702 (2018); *see also* 43 C.F.R. § 1601.0-5 (2019).

⁸⁴ 43 U.S.C. § 1702.

⁸⁵ 43 U.S.C. § 1712 (2018).

⁸⁶ 43 U.S.C. § 1782(c) (2018).

While not explicitly referring to “future generations,” the laws governing America’s national forests also define multiple use in terms of non-impairment of productivity.⁸⁷ Moreover, the Forest Service must apply a “public interest” standard when acquiring, conveying, or exchanging land.⁸⁸ In the last decade, the Forest Service has defined its mission around intergenerational equity. The mission of the Forest Service is “to sustain the health, diversity, and productivity of the Nation’s forests and grasslands to meet the needs of present and future generations.”⁸⁹ In the words of former Agriculture Secretary Tom Vilsack, “[i]t is time for a change in the way we view and manage America’s forestlands with an eye towards the future. This will require a new approach that engages the American people and stakeholders in conserving and restoring both our National Forests and our privately owned forests.”⁹⁰

The 2012 Forest Service planning rules aim to ensure that the plans governing national forests and grasslands provide for the “sustainability of ecosystems and resources.”⁹¹ The rules define sustainability in ecological, economic, and social terms. The rules recognize that all three types of sustainability are necessary “to protect resources” and “maintain the flow of goods and services from NFS lands . . . over time.”⁹²

Despite the “public interest” standards in America’s public land management laws, federal agencies are falling short of what intergenerational equity requires. Natural disasters tied to climate change are increasing in both number and intensity.⁹³ Water resources are becoming scarce and unpredictable. Biodiversity continues to decline at alarming rates. An increasing divide exists between rural and urban

⁸⁷ 16 U.S.C. § 531 (2018).

⁸⁸ 16 U.S.C. § 473 (2018) (“The President of the United States is authorized and empowered to revoke, modify, or suspend any and all Executive orders and proclamations or any part thereof issued under section 471 of this title, from time to time as he shall deem best for the public interests. By such modification he may reduce the area or change the boundary lines or may vacate altogether any order creating a national forest.”); 16 U.S.C. § 479a (2000) (conveyance of National Forest System lands for educational purposes); 16 U.S.C. § 479 (2012) (conveyance of National Forest System lands for educational purposes); 16 U.S.C. § 485 (2012) (exchange of lands in national forests).

⁸⁹ National Forest System Land Management Planning, 77 Fed. Reg. 21162 (Apr. 9, 2012) (to be codified at 36 C.F.R. pt. 219).

⁹⁰ *Id.* at 21163.

⁹¹ *Id.* at 21162.

⁹² *Id.* at 21163.

⁹³ See, e.g., Kristiane Huber, *Record heat was a broken record for the 2010s*, CTR. FOR CLIMATE & ENERGY SOLUTIONS (Jan. 21, 2020), <https://www.c2es.org/2020/01/record-heat-was-a-broken-record-for-the-2010s/>.

populations.⁹⁴ Short-sighted management by the very federal agencies entrusted to preserve resources for the future is accelerating these consequences.

Traditionally, courts have deferred to agency expertise in determining what is in the “public interest.”⁹⁵ Neither the Federal Land Policy and Management Act nor the National Forest Management Act contain a right to judicial review. The ability of citizens to sue the BLM and the Forest Service over agency actions comes from the APA. Any person “suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action within the meaning of a relevant statute, is entitled to judicial review.”⁹⁶ Under the APA, the courts “shall compel agency action unlawfully withheld or unreasonably delayed.”⁹⁷ In addition, courts shall “hold unlawful and set aside agency action, findings, and conclusions found to be—arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.”⁹⁸ As long as agencies exercised professional expertise in a reasonable manner, judges have not substituted their own choices for those of the agencies.⁹⁹

The time has come for citizens and the courts to hold federal agencies accountable to the public interest as Congress mandated in existing land management statutes. Agency decisions should be measured against evidence that the resources they manage will not be available for future generations to enjoy. The decisions should be measured against the mounting scientific evidence that more nature must be protected more effectively if the nation, and the world, have any hope of avoiding climate catastrophe.

Courts have the power under existing law to apply principles of intergenerational equity to federal land management decisions. Congress

⁹⁴ PATRICK FIELD ET AL., *THE FUTURE OF FEDERAL PUBLIC LAND AND RESOURCES* 8 (Nov. 2017), <https://naturalresourcespolicy.org/docs/Federal-Public-Land-Needs-Assessment-Final-20171.pdf>.

⁹⁵ *See, e.g.*, *Norton v. S. Utah Wilderness All.*, 542 U.S. 55, 66 (2004); *Gardner v. U.S. Bureau of Land Mgmt.*, 638 F.3d 1217, 1222 (9th Cir. 2011); *Theodore Roosevelt Conservation P'ship v. Salazar*, 616 F.3d 497, 518 (D.C. Cir. 2010) (“Though the Bureau must manage the Atlantic Rim Project Area under the principles of multiple use and sustained yield, the Bureau has wide discretion to determine how those principles should be applied. We are satisfied the Atlantic Rim Project reflects those principles.”) (citations omitted).

⁹⁶ 5 U.S.C. § 702 (2018).

⁹⁷ 5 U.S.C. § 706(1).

⁹⁸ *Id.* § 706(2)(A).

⁹⁹ *Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 844 (1984) (absent plain statutory language, “a court may not substitute its own construction of a statutory provision for a reasonable interpretation made by the administrator of an agency”).

did not make protecting future generations optional. Under the Federal Land Policy and Management Act, for example, BLM “shall” manage the lands it oversees for “sustained yield.”¹⁰⁰ “Sustained yield” means “the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the public lands consistent with multiple use.”¹⁰¹ Without taking into account climate change impacts, BLM plows blindly and unlawfully ahead with actions such as continued leasing of federal oil, gas, and coal that cause the net loss of public land resources over time.

When agencies fail to act according to principles of intergenerational equity, courts can enjoin such action. If BLM continues to lease oil, gas, and coal when undisputed evidence demonstrates such action harms rather than improves our children’s future, citizens can halt this action in court. If the Forest Service allows clearcutting when undisputed evidence demonstrates that mature trees and healthy soils are needed for carbon sequestration, citizens can halt this action in court. The APA provides that courts “shall . . . hold unlawful and set aside agency action . . . found to be arbitrary, capricious or otherwise not in accordance with the law.”¹⁰²

Under the “public interest” standard in the nation’s land management laws, courts should measure agency actions against Edith Weiss Brown’s three principles of intergenerational equity.¹⁰³ First, does the action conserve options for future generations? Future generations have the right to diversity of the natural and cultural resource base so that our children have choices about how to use them, just as we have had such choices. Second, does the action conserve quality? Future generations have a right to a planet no worse off than that which previous generations enjoyed. Third, does the action conserve access? Future generations have the right of equitable access to natural and cultural resources unlimited by race,

¹⁰⁰ 43 U.S.C. § 1732(a) (2018). *See* Nat. Res. Def. Council, Inc. v. Hodel, 618 F.Supp. 848, 857 (E.D. Cal. 1985).

¹⁰¹ 43 U.S.C. § 1702(h).

¹⁰² 5 U.S.C. § 706(2)(A). *See, e.g.*, *Western Watersheds Project v. Zinke*, No. 1:18-cv-00187-REB, 2020 WL 959242 (D. Idaho Feb. 27, 2020) (court sets aside oil and gas leases); *Indigenous Environmental Network v. U.S. Dep’t of State*, 347 F.Supp.3d 561, 590 (D. Mt. 2018) (court invalidates permit for Keystone XL pipeline); *S. Utah Wilderness Alliance v. Norton*, 457 F.Supp.3d 1253 (D. Utah 2006) (court invalidates 16 oil and gas leases for failure to comply with NEPA). *Cf.* *Standing Rock Sioux Tribe v. U.S. Army Corps of Eng’rs*, 282 F.Supp.3d 91 (D.D.C. 2017) (court does not vacate Environmental Assessment for Dakota Access pipeline even though agency violated NEPA).

¹⁰³ Edith Brown Weiss, *In Fairness to Future Generations and Sustainable Development*, 8 AM. U. J. INT’L L. & POL’Y 19 (1992); Edith Brown Weiss, *The Planetary Trust: Conservation and Intergenerational Equity*, 11 ECOLOGY L.Q. 495 (1984).

ethnic background, class, or income. If the answer is no to any of these three questions, the agency action should not stand.

CONCLUSION

We have entered an era where the future will not necessarily be better than the past. In fact, youth across the country are protesting climate inaction because their future looks much worse than the past. How we use the public lands today is a key factor in our children's future. We must manage America's public lands in a way that helps solve climate change, rather than fuel it.

A new comprehensive federal framework can help integrate and inform public land management as conditions rapidly change. But we cannot—and need not—wait for Congress to enact new legislation. Existing laws contain the principles of intergenerational equity. It is up to us to breathe new life into them if we care about our children's future.