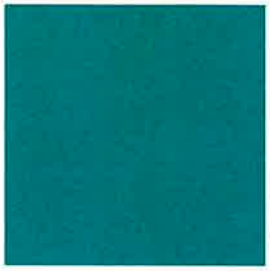
UNDERSTANDING NEPA LITIGATION

A SYSTEMATIC REVIEW OF RECENT NEPA-RELATED APPELLATE COURT CASES



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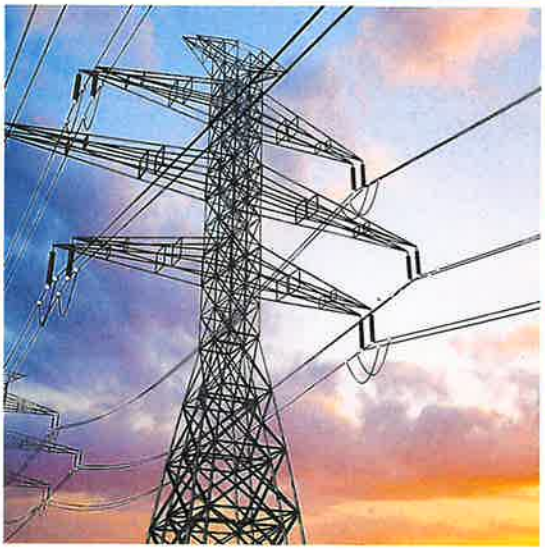

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EXECUTIVE SUMMARY

Ongoing permitting reform debates in Washington, DC, have mostly orbited around the National Environmental Policy Act (NEPA). A procedural environmental regulatory "umbrella law," NEPA creates significant and complex requirements for all major infrastructure projects and federal activities affecting the environment.

Broadly, NEPA requires that federal agencies conduct environmental reviews of proposed activities and their potential effects. For complex projects, agencies can either prepare an environmental impact statement (EIS) or an environmental assessment (EA). Alternatively, simpler projects can be afforded a categorical exclusion (CE) which fast-tracks the review process. After permits are granted through these review mechanisms, they may be challenged in the judicial system. The courts then have the authority to reaffirm, bolster, or otherwise improve the project plan to prevent or limit environmental damage. Of course, lawsuits to challenge EISs, EAs, and CEs necessarily extend project timelines. Particularly in the wake of the Infrastructure Investment and Jobs Act (2021), the Inflation Reduction Act (2022), and the CHIPS and Science Act (2022), federal policymakers and policy advocates have drawn increased attention to the regulatory burden and delay imposed by this judicial review.

However, the NEPA litigation debate has suffered from a deficit of empirical evidence. Our analysis helps fill this knowledge gap, documenting and sorting hundreds of NEPA litigation cases to assess trends, patterns, and impacts on various types of major infrastructure projects.

Breakthrough Institute analysts, in collaboration with legal experts at Holland & Knight, compiled and analyzed 387 NEPA cases brought to the U.S. appellate court system over the 2013-2022 period and categorized them by project type, environmental review, length of judicial review, federal agency, and plaintiff. Our results indicate that NEPA litigation overwhelmingly functions as a form of delay, as most cases take years before courts ultimately rule in favor of the defending federal agency.

As Congress deliberates reforms to NEPA, it is essential that policymakers recognize the degree to which the legal status quo prioritizes procedure over outcomes. To enable more effective environmental review, reforms should minimize the potential for extended, unproductive legal battles while still promoting the fair assessment of environmental impacts.

Key findings:

- Between 2013 and 2022, circuit courts heard approximately 39 NEPA appeals cases per year, a 56% increase over the rate from 2001 to 2015.[2]
- Agencies won about 80% of the 2013-2022 appeals cases, 11% more per year than from 2001 to 2004, 8% more than from 2001 to 2008, and 4% less than from 2009 to 2015.[3] The rate at which agencies' reviews are upheld is high, meaning these environmental reviews are seldom changed as a result of litigation.
- On average, 4.2 years elapsed between publication of an environmental impact statement or environmental assessment and conclusion of the corresponding legal challenge at the appellate level. Of these appealed cases, 84% were closed less than six years after the contested permit was published, and 39% were closed in less than three.
- Among the challenges, 42% contested environmental impact statements, and 36% contested environmental assessments. Agencies won about 80% of challenges to both.
- NGOs instigated 72% of the total challenges. Of those, just 10 organizations initiated 35% and had a success rate of just 26%, merely 6% higher than the average for all types of plaintiffs.
- Only 2.8% of NEPA litigations pertained to agency assessment of environmental justice issues.
- Public lands management projects were the most common subject of litigation (37%), the greatest share of which (47%) challenged forest management projects. Just 10 groups filed 67% of the challenges to forest management projects and collectively won only 23% of those cases, adding 3.7 years on average to the process of implementing the 77% of projects on cases they lost.
- Energy projects were the second most common subject of litigation (29%). Litigation delayed fossil fuel and clean energy project implementation by 3.9 years on average, despite the fact that agencies won 71% of those challenges. NGOs filed 74% of energy cases, with just 10 organizations responsible for 48% of challenges.

INTRODUCTION

President Richard Nixon signed the National Environmental Policy Act (NEPA) into law in 1970, institutionalizing environmental protection as a matter of national importance. The law's initial decree was simple: federal agencies must consider the environmental impacts of their decisions before taking action. In the decades following, agency responsibility ballooned.

In 1981, the Council on Environmental Quality contended that an environmental impact statement (EIS) would take less than 12 months to complete. In 2022, it took about four years.[4] These lengthy review processes delay infrastructure projects of all varieties, including power lines and wildfire mitigation projects.

In the wake of the passage of the 2022 Inflation Reduction Act, members of Congress and President Biden have expressed concern that NEPA will slow the decarbonization process. Despite general consensus that NEPA needs to be reformed, Congress has struggled to reach consensus on significant reforms.

Of the many facets of permitting reform, NEPA litigation has become the most hotly contested and the least understood. Researchers have published only a handful of studies capable of informing evidence-based reform. Among those few, most narrowly assert that the burden of NEPA litigation is not large enough to merit reform. Ruple and Race, for example, claim that the burden is minimal because less than 1% of all federal civil litigation pertains to NEPA.[5] Adelman and Glicksman similarly assert the burden is small because only a small share of environmental review documents are litigated.[6] While both illustrate that NEPA litigation is rare in the grand scheme of federal responsibility, they conflate aggregate burden with the scale of an agency's obligations.

Agencies definitively struggle to keep up with their NEPA-related obligations. A complex, quantitative study is not needed to identify that. Agency staff have made it clear since 1997.[7] The U.S. Forest Service, the agency that shoulders the greatest NEPA burden, provides a prime example. By its own admission, excessive environmental reviews have prevented the Forest Service from effectively managing forests, at one point consuming almost 40% of the agency's budget.[8] Such efforts are in no small part driven by fear of litigation. Forest managers habitually prepare more complex environmental reviews in hopes of avoiding legal challenges.[9]

Understanding that NEPA and the threat of litigation impose a sizable burden on agencies, this analysis shifts the question of burden away from scale and instead toward outcomes. Our study analyzed 387 NEPA cases filed at District Court and then appealed to a Circuit Court—in effect, the cases most burdened by NEPA litigation—between 2013 and 2022.

Our findings suggest that NEPA litigation at this level rarely changes environmental outcomes or protects environmental justice communities. Instead, judicial review of NEPA decisions largely serves as an advocacy tool for a small number of well-organized nonprofits to stall projects that do not align with their values.

The burden of NEPA litigation has increased while its impact on environmental outcomes has decreased.

Between 2013 and 2022, Circuit Courts heard approximately 39 NEPA appeals cases per year, a 56% increase over the average annual rate from 2001 to 2015.[10] By contrast, the number of final environmental impact statements (FEISs) in the same time periods dropped. Between 2001 and 2015, 210 FEISs were published on average per year in the EPA's EIS database, while 132 were published between 2013 and 2022.[11] While EISs represent a small share of environmental documents produced, they attracted the most litigation, comprising 42% of the challenges in our dataset. Thus, both the sheer number of legal challenges filed and the rate at which EISs faced challenges at the appellate level increased in the most recent decade.

Agencies won about 80% of the appeals from 2013 to 2022, 11% more per year than from 2001 to 2004, 8% more than from 2001 to 2008, and 4% less than from 2009 to 2015.[12] The rate at which agencies' reviews are upheld is high, meaning these environmental reviews are seldom changed as a result of litigation.

On average, 4.2 years elapsed between when an environmental review was published and a legal challenge at the appellate level was settled.

Under current procedure, challengers can contest NEPA-related decisions for up to six years following publication under the Administrative Procedures Act. Appeals, however, are not time-bound in the same way. Still, 84% of appealed cases in the last decade were closed less than six years after the contested permit was published, and 39% were closed in less than three years. Length of time to resolution varied by project category (Table 1).

Table 1: Environmental assessment and environmental impact statement appeal cases by category with time to resolution, 2013–2022.

Project category	Number of cases	Minimum days	Maximum days	Average days	Median days
Energy	70	110	5,032	1,415	1,159
Infrastructure	45	91	3,456	1,250	1,127
Other	37	210	3,648	1,531	1,511
Public lands	106	98	6,942	1,744	1,486
		Minimum	**Maximum**	**Average**	**Median**
Total categories in days	–	91	6,942	1,538	1,365
Total categories in years	–	0.2	19.0	4.2	3.7

Note: This table includes data only from the 258 cases contesting EAs and EISs, as data on CEs and other reviews is rarely accessible. Some Records of Decision and Findings of No Significant Impact provided only the month and year of publication; we coded those cases using the first day of the given month.

Thus, the window for eligible challenges to environmental review could be shortened substantially without meaningfully affecting environmental outcomes.

Agencies fulfilled their responsibilities under NEPA with exceptional accuracy, regardless of the level of review required.

Table 2: Appeals and agency win-rates for all NEPA reviews by document type and total, 2013–2022.

Document type	Number of cases	% of total cases	Agency win-rate
Categorical exclusion	19	4.9%	73.7%
Environmental assessment	139	35.8%	79.1%
Environmental impact statement	162	41.8%	79.6%
N/A	67	17.5%	82.1%
Total	**387**		**79.6%**

Note: N/A refers to cases in which a NEPA review was not conducted, but plaintiffs argue one should be.

Overall, while there were slight differences in win-rates across document types, agencies prevailed in about 80% of challenges filed against both EAs and EISs (Table 2). This finding is remarkable because both the substance of and arguments brought against the two documents differ substantially across agencies and project types.

An EA assesses if a proposed project will impact the environment. An EIS is generally conducted once an EA has determined a project will impact the environment and evaluates how to minimize that impact. By virtue of their complexity, EISs create more opportunities for litigation. While challengers often argue that agencies erred in not elevating an EA to an EIS, they're able to argue that an EIS did not consider any number of alternative actions. Still, agencies prevail in challenges to both EISs and EAs at the same rate, suggesting agency decision-making rarely needs oversight when it comes to NEPA compliance.

Major national environmental NGOs instigated a disproportionate share of this litigation.

Consistent with trends observed in the previous decade, NGOs in 2013-2022 accounted for a sizable majority of NEPA-related appeals (72%), with state and local governments, individuals, companies, and other stakeholders filing far lower shares of appealed cases (Table 3).[13] However, these nonprofit organizations lost appeals in 2013-2022 at a marginally higher rate than in previous periods, with a 13% increase in losses compared to 2001 to 2005 and a 5% increase compared to 2001 to 2015.[14]

Despite their expertise and concentrated staff capacity, NGOs weren't substantially more successful than other plaintiffs in their appeals. Plaintiffs won 16% of cases that did not involve NGOs, a 7% lower success rate than those that did. This finding diverges from an earlier analysis that found environmental plaintiffs prevailed between 17% and 13% more often than other groups in Circuit Courts.[15]

Table 3: Appeals and success rates of all NEPA reviews by plaintiff type, 2013–2022.

Plaintiff type	Number of cases	% of total cases	% sole plaintiff	Success rate
NGO	279	72.1%	54.3%	22.2%
Individual(s)	62	16.0%	5.2%	11.3%
Local government	32	8.3%	4.9%	18.8%
Tribal government	29	7.5%	3.1%	31.0%
Company	23	5.9%	3.4%	8.7%
Industry association	19	4.9%	0.8%	21.1%
State(s)	15	3.9%	0.3%	20.0%
Union	3	0.8%	0.0%	0.0%
Church	1	0.3%	0.0%	100.0%
All types				20.4%

Even the most well-resourced NGOs rarely won cases when challenging NEPA decisions. Just 10 NGOs initiated 35% of the total challenges (Table 4), and they had a success rate of just 26%, merely 6% higher than the average success rate for all types of plaintiffs. That's less than in prior decades, when prominent environmental groups won 35% of their appeals.[16]

Yet, these organizations pride themselves on being experts in environmental litigation. The Sierra Club advertises itself as having "perfected the art of campaign litigation and 'lawyer-organizing.'"[17] The Center for Biological Diversity claims that it melds "cutting-edge legal strategies with grassroots organizing."[18] The Natural Resources Defense Council helped start the environmental legal movement and maintains significant litigation activities today.[19]

These and other groups make clear that their NEPA litigation is not solely utilized to improve environmental outcomes associated with infrastructure projects, but to obstruct and delay projects themselves, often for the purpose of preventing the project from ever moving forward at all.

Table 4: Appeals cases brought by top 10 NGO plaintiffs, 2013–2022.

Plaintiff-appellants	Number of cases	% of all NEPA cases
Sierra Club and local chapters	55	14.2%
Center for Biological Diversity	30	7.8%
WildEarth Guardians	16	4.1%
Natural Resources Defense Council	15	3.9%
Alliance for the Wild Rockies	15	3.9%
Cascadia Wildlands	13	3.4%
Oregon Wild	12	3.1%
Defenders of Wildlife	10	2.6%
The Wilderness Society	9	2.3%
Western Watersheds Project	8	2.1%

Energy and infrastructure projects in particular are more likely to face cancellation if challenged under NEPA.[20] While project cancellation is not the intent of the statute, litigation represents a creative and effective strategy to stop projects plaintiffs believe will do substantial harm. But these groups frequently contest projects that serve national policy objectives set by elected officials, calling the purpose and societal benefit of judicial review in its current form into question.

NEPA litigation has rarely focused on environmental justice.

Environmental nonprofits and decision-makers alike have vocally highlighted the perceived threat NEPA reform would impose on marginalized communities.[21] The Center for Biological Diversity even accused a member of Congress of "trying to silence communities of color and poor communities in places like Louisiana's Cancer Alley,"[22] after proposing a bill that would reduce the amount of time in which an environmental review can be challenged. However, a meager 2.8% of challenges in our 2013-2022 dataset related to environmental justice issues. In fact, NEPA has never played a large role in protecting environmental justice communities at all.[23]

In part, that's because agencies don't have clear statutory authority in that realm.[24] Executive Orders (E.O. 12898 of February 11, 1994, and more recently E.O. 14096 of April 21, 2023) have encouraged agencies to incorporate environmental justice into the NEPA process, but cannot legally set enforceable standards.

And even if those parameters and responsibilities were precisely defined, NEPA would not provide an effective protection mechanism. NEPA is a technology-agnostic procedural law, made to evaluate and mitigate environmental impacts. The law is not designed to stop, replace, or relocate projects. Such considerations remain a matter of national policy that federal lawmakers are already working to address under the Inflation Reduction Act, the Justice40 Initiative, and other laws.

Forest management projects were the most common subject of litigation.

Despite public outcry over NEPA's impact on clean energy deployment, energy projects don't constitute the largest share of legal challenges in this dataset. Instead, the majority (37%) of total NEPA challenges contested public lands management projects.

The U.S. Forest Service and Bureau of Land Management together manage the majority of federally owned land in the United States, about 437 million acres.[25] A NEPA review is required whenever these agencies perform management activities, like removing dead trees or building roads. This highlights a key distinction between the requirements NEPA imposes on public lands management agencies and those that focus on building infrastructure. Where NEPA acts as a mechanism to regulate private industry activity when permitting mines or wind farms, it also governs how land management agencies execute their core, legislatively mandated responsibilities. Thus, NEPA litigation poses a unique challenge for these agencies, allowing the public to contest the minutiae of their every decision.

Table 5: Appeals of public lands management reviews by type of project, 2013–2022.

Public lands management project type	Number of cases	Agency win-rate	% of total land management cases
Forest management	66	78.8%	46.5%
Species management	38	76.3%	26.8%
Other	20	80.0%	14.1%
River/lake management	12	83.3%	8.5%
Refuge management	6	100.0%	4.2%
Total	**142**	**79.6%**	

In this dataset, forest management projects were most often the subject of appeals (Table 5), constituting 47% of land management cases and 17% of cases overall. Just 10 organizations filed 67% of these cases (Table 6), underscoring that NEPA litigation often originates from activism efforts advanced by a small number of NGOs. Collectively, this group of organizations won only 23% of their cases, while adding about 3.7 years on average to the process of implementing projects on cases they lost.

Table 6: Top 10 organizations that filed most forest management appeals, 2013–2022.

Rank	Plaintiff	Number of cases	% of total forest management cases
1	Alliance for the Wild Rockies	15	22.4%
2	Cascadia Wildlands	12	17.9%
3	Oregon Wild	10	14.9%
4	Klamath-Siskiyou Wildlands Center	8	11.9%
5	Center for Biological Diversity	8	11.9%
6	Native Ecosystems Council	7	10.5%
7	Conservation Congress	5	7.5%
8	Greenpeace	4	6.0%
9	Earth Island Institute	4	6.0%
10	WildEarth Guardians	3	4.5%

Within the forest management category, plaintiffs challenged timber harvest and fuel management projects the most frequently (Table 7). Timber sales on public land have long generated controversy, both inside and outside the context of NEPA. While the notion of timber harvesting often conjures images of profit-driven logging companies decimating pristine forests, land management agencies can use harvests to improve wildlife habitat and reduce fire risk.[26] In fact, almost half of the contested timber harvesting projects in this dataset were also part of a fuel management project. This finding underscores one of the most concerning challenges imposed on land management agencies by NEPA: obstruction of wildfire mitigation efforts.

Table 7: Types of forest management appeals, 2013–2022.

Type	Number of cases	% of total forest management cases
Timber harvest	26	38.8%
Fuel management	26	38.8%
Roads/vehicle use	10	14.9%
Salvage logging	5	7.5%
Grazing	4	6.0%

Note: Forest management cases are multifaceted and thus cannot be categorized by a single variable. This table shows the number of cases that address various types, but each category is not mutually exclusive, so percentages total more than 100%.

Scientists and forest managers have made clear that fuel reduction is the most effective way to decrease wildfire risk.[27] As the wildfire crisis has escalated in the United States, the need for fuel reduction has only grown. Unfortunately, the Forest Service spends 3.6 to 4.7 years on paperwork before a fuel management project can start.[28] NEPA allows plaintiffs to stall projects even further with litigation, which can add over a year to the process.[29] In this dataset, an average of three years elapsed between an agency's issuing a permit for a fuel reduction project and the end of litigation. Notably though, agencies won 93% of cases related to fuel reduction projects, 96% of which were brought by NGOs.

NEPA litigation added 3.9 years on average to energy project development.

In this dataset, 29% of total NEPA appeals cases contested energy projects. The distribution of contested projects shows a balance among challenges to projects involving fossil fuel infrastructure (37%), clean energy production (33%), and fossil fuel extraction (22%) (Table 8). This balance challenges the common narrative that only certain types of projects face legal opposition.

Instead, it underscores the reality that legal challenges are an inherent aspect of energy development, regardless of the energy source involved. At the same time, different technologies trigger NEPA compliance reviews at different rates. For example, under 10% of utility-scale solar projects built since 2010 underwent the NEPA environmental impact statement process (because most solar projects are on state or private rather than federal land), compared to 100% of offshore wind projects.[30] The true burden of litigation relates to the rate at which projects are reviewed and then contested, which was not measured in our study.

Instead, these findings highlight the impact of NEPA litigation on energy project outcomes. Litigation delayed project implementation by 3.9 years on average, despite the fact that agencies won 71% of these challenges. NGOs filed 74% of energy cases, with just 10 organizations responsible for 48% of these challenges.

Plaintiffs rarely won cases against fossil fuel infrastructure projects (26% success rate) or clean energy production projects (24%). However, challengers won cases against fossil fuel extraction projects at a notably higher rate (40%). The distinction can be explained in part by the kinds of groups challenging projects.

Table 8: Energy project appeals by category and project type, 2013–2022.

Energy category	Project type	Number of cases	% of total energy cases	Agency win-rate
Fossil fuel infrastructure		42	37.2%	73.8%
	Oil and gas pipeline	29	25.7%	
	Natural gas compressor	4	3.5%	
	LNG facility	4	3.5%	
	Pipeline and LNG facility	1	0.9%	
	Offshore oil and gas extraction	1	0.9%	
	LPG facility	1	0.9%	
	Coal to natural gas plant conversion	1	0.9%	
	Coal plant	1	0.9%	
Clean energy production		37	32.7%	75.7%
	Wind	12	10.6%	
	Nuclear	12	10.6%	
	Hydroelectric	9	8.0%	
	Geothermal	3	2.7%	
	Solar	1	0.9%	
Fossil fuel extraction		25	22.1%	60.0%
	Oil and gas extraction	19	16.8%	
	Offshore oil and gas extraction	3	2.7%	
	Coal lease	3	2.7%	
Transmission		5	4.4%	40.0%
Regulation		3	2.7%	100.0%
	Oil spill plan	1	0.9%	
	Natural gas export	1	0.9%	
	Federal coal management program	1	0.9%	

Fossil fuel extraction projects were mostly contested by large, national NGOs. That's because the cases largely focused on oil and gas leases, which are concentrated on public land with few directly impacted stakeholders. Typically, only organizations with the capacity to monitor and understand the legal complexities of the fossil fuel extraction process can pursue such challenges, inherently limiting the number of viable plaintiffs. Plaintiffs didn't win fossil fuel extraction cases at a higher rate because of such expertise, though. The five groups most involved in these cases (Table 9) had a 28% win-rate across categories, not particularly higher than the average win-rate for all categories. Rather, extraction cases may be easier for challengers to win, though further research is needed to confirm such dynamics.

By contrast, fossil fuel infrastructure projects and clean energy production projects were challenged by a combination of national and regional NGOs and were won by them at a similar rate. Oil and gas pipelines run through communities in multiple states, which increases visibility and the number of impacted stakeholders that can file challenges. The Sierra Club, for example, partnered with Delaware Riverkeeper Network, Wild Virginia, and Appalachian Voices to file challenges to pipelines in each organization's territory. Clean energy projects are similarly localized, drawing challenges from a wide variety of national and regional organizations. While national NGOs were involved in the greatest share of cases, they accounted for a smaller share (8%) than in the case of fossil fuels.

Table 9: Top energy project appellants by category, 2013–2022.

Energy category	Plaintiff	Number of cases	% of total energy cases
Fossil fuel infrastructure	Total	42	38.1%
	Sierra Club and local chapters	12	28.6%
	Delaware Riverkeeper Network	4	9.5%
	Wild Virginia	3	7.1%
	Appalachian Voices	3	7.1%
	Standing Rock Sioux Tribe	2	4.8%
Clean energy production	Total	37	32.7%
	Natural Resources Defense Council	3	8.1%
	Sierra Club and local chapters	3	8.1%
	Save Medicine Lake Coalition	2	5.4%
	Protect Our Communities Foundation	2	5.4%
	Pit River Tribe	2	5.4%
Fossil fuel extraction	Total	25	21.2%
	Sierra Club and local chapters	12	48.0%
	Center for Biological Diversity	10	40.0%
	Defenders of Wildlife	6	24.0%
	Natural Resources Defense Council	5	20.0%
	Friends of the Earth	5	20.0%
	Alaska Wilderness League	4	16.0%

CONCLUSION

Overall, this analysis sheds light on the need to reform judicial review procedures under NEPA. Currently, litigation rarely produces substantial changes to environmental outcomes, instead creating a platform for a narrow set of well-resourced NGOs to further their missions. This status quo not only drains agency resources for challenges that are seldom successful, but pulls resources from services that actually improve environmental outcomes, like forest management. As Congress debates reform, it's essential for policymakers to prioritize pragmatic solutions that streamline the NEPA review process and empower agencies to fulfill their obligations efficiently.

ENDNOTES

1 The research dataset of NEPA judicial decisions was compiled by a team from the law firm of Holland & Knight led by Jennifer Hernandez. Scott Gesundheidt, Elizabeth McCarthy, and clerks Jake Lebovic and Christian Grossenbacher all worked on the compilation of information from this NEPA dataset.

2 David E. Adelman and Robert L. Glicksman, "Presidential and Judicial Politics in Environmental Litigation," *Arizona State Law Journal* 50, no. 1 (2018), https://arizonastatelawjournal.org/wp-content/uploads/2018/05/Adelman_Pub.pdf.

3 Jay E. Austin et al., *Judging NEPA: A "Hard Look" at Judicial Decision Making Under the National Environmental Policy Act, Environmental Law Institute*, 2004, https://www.eli.org/sites/default/files/eli-pubs/d14-12.pdf; and Adelman and Glicksman, "Presidential and Judicial Politics."

4 *2022 Annual NEPA Report*, National Association of Environmental Professionals, July 2022, https://naep.memberclicks.net/assets/annual-report/NEPA_Annual_Report_2022.pdf.

5 John Ruple and Kayla Race, "Measuring the NEPA Litigation Burden: A Review of 1,499 Federal Court Cases," *SSRN Electronic Journal*, 2019, https://doi.org/10.2139/ssrn.3433437.

6 Adelman and Glicksman, "Presidential and Judicial Politics."

7 Council on Environmental Quality, *The National Environmental Policy Act: A Study of Its Effectiveness After Twenty-Five Years*, 1997, https://ceq.doe.gov/docs/ceq-publications/nepa25fn.pdf; Courtney Schultz et al., *Prescribed Fire Policy Barriers and Opportunities, University of Oregon and Colorado State University*, 2018, https://www.nwfirescience.org/sites/default/files/publications/WP_86.pdf; Chad Kooistra et al., *Assessment of Early Implementation of the US Forest Service's Shared Stewardship Strategy*, Colorado State University and University of Oregon, 2021, https://sites.warnercnr.colostate.edu/courtneyschultz/wp-content/uploads/sites/23/2022/10/PLPG-PP-10.pdf; and Rayan Sud, Sanjay Patnaik, and Robert Glicksman, "How to Reform Federal Permitting to Accelerate Clean Energy Infrastructure," Center on Regulation and Markets at Brookings, February 2023, https://www.brookings.edu/wp-content/uploads/2023/02/20230213_CRM_Patnaik_Permitting_FINAL.pdf.

8 USDA Forest Service, *The Process Predicament: How Statutory, Regulatory, and Administrative Factors Affect National Forest Management*, 2002, https://www.fs.usda.gov/projects-policies/documents/Process-Predicament.pdf.

9 Marc J. Stern and Michael J. Mortimer, *Exploring National Environmental Policy Act Processes across Federal Land Management Agencies*, U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, 2009, https://doi.org/10.2737/pnw-gtr-799; and Michael J. Mortimer et al., "Environmental and Social Risks: Defensive National Environmental Policy Act in the US Forest Service," *Journal of Forestry* 109, no. 1 (2011): 27-33, https://www.fs.usda.gov/pnw/pubs/journals/pnw_2011_mortimer001.pdf.

10 Adelman and Glicksman, "Presidential and Judicial Politics."

11 U.S. Environmental Protection Agency, "Environmental Impact Statement (EIS) Database," accessed May 22, 2024, https://cdxapps.epa.gov/cdx-enepa-II/public/action/eis/search?search=&__fsk=841901930#results.

12 Austin et al., *Judging NEPA*; and Adelman and Glicksman, "Presidential and Judicial Politics."

13 Austin et al., *Judging NEPA*; and Adelman and Glicksman, "Presidential and Judicial Politics."

14 Austin et al., *Judging NEPA*; and Adelman and Glicksman, "Presidential and Judicial Politics."

15 Austin et al., *Judging NEPA*; and Adelman and Glicksman, "Presidential and Judicial Politics."

16 Austin et al., *Judging NEPA*.

17 Sierra Club, "About Our Program," accessed June 7, 2024, https://www.sierraclub.org/environmental-law/about-our-program.

18 Center for Biological Diversity, "Climate Law Institute: Saving Life on Earth," accessed June 7, 2024, https://www.biologicaldiversity.org/programs/climate_law_institute/.

19 Natural Resources Defense Council, "Litigation," accessed June 7, 2024, https://www.nrdc.org/about/litigation.

20 Michael Bennon and Devon Wilson, "NEPA Litigation over Large Energy and Transport Infrastructure Projects," *Environmental Law Reporter*, last revised September 28, 2023, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4498938.

21 "Merkley, Colleagues Highlight Environmental Justice Concerns on Permitting Legislation, Need for Standalone Floor Consideration," *Jeff Merkley, Senator for Oregon* (blog), September 22, 2022, https://www.merkley.senate.gov/merkley-colleagues-highlight-environmental-justice-concerns-on-permitting-legislation-need-for-standalone-floor-consideration/.

22 "House Republican Bill Would Upend Bedrock Environmental Review Law," Center for Biological Diversity, February 27, 2023, https://biologicaldiversity.org/w/news/press-releases/house-republican-bill-would-upend-bedrock-environmental-review-law-2023-02-27/.

23 Nina M. Hart and Linda Tsang, "Addressing Environmental Justice through NEPA," Legal Sidebar, Congressional Research Service, updated September 21, 2021, https://crsreports.congress.gov/product/pdf/LSB/LSB10590.

24 Hannah Perls, "President Biden Issues Long-Awaited Update to Clinton-Era Environmental Justice Executive Order," Harvard Law School Environmental & Energy Law Program, August 3, 2023, https://eelp.law.harvard.edu/wp-content/uploads/HPerls_EJ-EO-Analysis_FINAL-8.2.23.pdf.

25 Katie Hoover et al., "The Federal Land Management Agencies," Congressional Research Service, updated February 16, 2021, https://sgp.fas.org/crs/misc/IF10585.pdf.

26 "36 C.F.R. § 219.11: Timber Requirements Based on the NFMA," Cornell Law School, Legal Information Institute, accessed June 7, 2024, https://www.law.cornell.edu/cfr/text/36/219.11.

27 Patrick T. Brown et al., "The Potential for Fuel Reduction to Offset Climate Warming Impacts on Wildfire Intensity in California" (preprint), Earth ArXiv, February 21, 2024, https://doi.org/10.31223/X5BT49.

28 Eric Edwards and Sara Sutherland, "Does Environmental Review Worsen the Wildfire Crisis?," PERC, June 14, 2022, https://perc.org/2022/06/14/does-environmental-review-worsen-the-wildfire-crisis/.

29 Edwards and Sutherland, "Does Environmental Review Worsen the Wildfire Crisis?"

30 Arthur G. Fraas, "Speeding Up Solar Projects: Siting Review under the National Environmental Policy Act," Resources for the Future, March 12, 2024, https://www.resources.org/common-resources/speeding-up-solar-projects-siting-review-under-the-national-environmental-policy-act/.

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