



BETTER PATH COALITION



January 2, 2024

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Re: Comment on the U.S. Forest Service’s Proposed Rule, “Land Uses; Special Uses; Carbon Capture and Storage Exemption,” 88 Federal Register 75530 (Nov. 3, 2023), RIN 0596–AD55; FS-2023-0014-0001

Submitted via regulations.gov and email to Mark Chandler; mark.chandler@usda.gov

The Center for Biological Diversity, CURE, Partnership for Policy Integrity, Better Path Coalition, Food and Water Watch, and the additional undersigned 185 organizations submit the following comment on the U.S. Forest Service’s (“the Forest Service,” or “the agency”) proposal to “amend its special use regulations, which prohibit authorizing exclusive and perpetual use and occupancy of National Forest System lands, to provide an exemption for carbon capture and storage.” 88 Fed. Reg. 75530 (Nov. 3, 2023) (“Proposed Rule”).

The Forest Service’s Proposed Rule is a fundamental alteration of how our national forests and grasslands can be used, and this alteration is for the worse. The Forest Service must not allow private industries to permanently convert these lands for industrial uses. As noted by Representative Huffman, the change amounts to a “sacrifice of public lands as a life support for fossil fuels” and other dirty industries.¹

Our comment letter outlines concerns—policy, scientific, and legal—with the Proposed Rule. It is also noteworthy that the Proposed Rule represents an unexplained change in position for the agency. The Forest Service previously determined in a separate rulemaking that granting perpetual and exclusive use via special use permits, as is proposed here, would run counter to congressional and executive intent. Ultimately we urge the Forest Service to decline to finalize the Proposed Rule.

Commenters are submitting the references cited herein for the administrative record and for the convenience of the agency. The references can be accessed via this link (<https://diversity.box.com/s/shuxvo0dlcp5fje2lm19nl41pckfpk1e>) and will be uploaded into regulations.gov.

¹ Pam Radtke, *Alarm at Plan to Stash Planet-Heating CO2 Beneath US National Forests*, THE GUARDIAN (Dec. 7, 2023), <https://www.theguardian.com/environment/2023/dec/07/co2-us-forest-service>.

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I. The Forest Service Can, and Must, Withdraw Its Proposed Rule.

An agency is not obligated to finalize a discretionary rule change such as here. There is no law requiring the Forest Service to promulgate a regulation enabling carbon capture and storage (“CCS”) on Forest System lands, meaning that the agency does not need to change its special use permit criteria to allow this use.

There is precedent for agencies withdrawing proposed rules. In June 2023, the U.S. Environmental Protection Agency (“EPA”), elected to withdraw a proposed provision “[b]ased on discussions with stakeholders and [its] review of the comments . . . as well as current scientific literature on the topic.”² Because of the vast opposition to the Forest Service’s Proposed Rule—including over 20,200 pre-rule signatures, the opposition demonstrated by signees to this letter, comments already in the docket opposing the rule, lawmaker opposition, environmental justice concerns about CCS, and more—plus the scientific literature showing the harms of carbon capture and its ineffectiveness as a climate solution, the Forest Service must ultimately decline to finalize this regulatory change. We elaborate in greater detail on all of these factors in the enclosed comment.

It is also noteworthy that the Proposed Rule represents an unexplained change in position for the agency. The Forest Service previously determined in a separate rulemaking that granting perpetual and exclusive use via special use permits, as is proposed here, would run counter to congressional and executive intent. The Proposed Rule fails to explain why, and how, reversing that position is permissible now.

II. There Is Significant Public Opposition to the Forest Service’s Proposed Rule.

There is significant public interest in CCS as well as concerns about—and opposition to—the Forest Service’s Proposed Rule to enable CCS activities on its lands. Upon release of the Proposed Rule, 140 organizations—spanning a broad geographic range and covering a wide variety of interest areas—signed a request to the Forest Service asking it to extend the Proposed Rule’s comment period due, in part, to many of the concerns raised in this comment.³ Prior to the Proposed Rule, over 20,200 people signed a petition urging the Forest Service to halt its proposed regulatory change.⁴ A retired, 34-year veteran of the Forest Service, who served as Deputy Chief for national forests from 1999 – 2002, authored an op-ed entitled, “Don’t Offer Up Our National Forests for Industrial Carbon Waste Dumping.”⁵ And nationally recognized climate

² U.S. EPA, Withdrawal of Proposed Provision Removing Pyrolysis/Combustion Units, 88 Fed. Reg. 36524 (June 5, 2023).

³ Ctr. for Biological Diversity et al., Request for Extension of Comment Period on the U.S. Forest Service’s Proposed Rule (Nov. 10, 2023), https://www.biologicaldiversity.org/programs/public_lands/forests/pdfs/23-11-10-Request-for-Extension--USFS-RIN-0596-AD55-140-groups.pdf.

⁴ See *Over 20,200 Urge Forest Service to Reject Industrial Carbon Waste Dumping in National Forests*, CARBON CAPTURE FACTS (Oct. 3, 2023), <https://www.carboncapturefacts.org/blog/over-20200-urge-forest-service-to-reject-industrial-carbon-waste-dumping-in-national-forests> (“Using public lands as storage for industrial carbon waste is alarming and wrong.”). Groups on this letter submitted those petition signatures to the Forest Service, attention: Mark Chandler.

⁵ Jim Furnish, *Don’t Offer Up Our National Forests for Industrial Carbon Waste Dumping*, COMMON DREAMS (Oct. 23, 2023), <https://www.commondreams.org/opinion/carbon-dumping-national-forests>.

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expert Bill McKibben alerted his newsletter audience about the Proposed Rule.⁶ More generally, there are widespread concerns about CCS and CO₂ pipelines and injection. For example, in January 2021, the 1,500 member-organizations of Climate Action Network (“CAN”) International warned that CCS “risks distracting from the need to take concerted action across multiple sectors in the near-term to dramatically reduce emissions.”⁷

These are but a few examples of the groundswell of public interest in CCS and CO₂ injection in National Forests. In addition, as evidenced this summer when more than 528,000 people submitted comments urging the Forest Service to protect mature and old-growth forests, there is overwhelming public support for protecting national forests as a natural climate solution.

III. The Forest Service Previously Concluded That It Could Not Issue Perpetual Rights of Occupancy in Special Use Permits.

Commitments that Congress, the Executive Branch broadly, and the Forest Service specifically have made consistently rebut the idea that any heavy industry can obtain perpetual and exclusive use of Forest Service lands. The Forest Service has not justified or provided authority for this proposed change in its longstanding position regarding special use permits being impermanent and nonexclusive.

In a 1998 rulemaking, the Forest Service clearly stated its policy against issuing perpetual special use permits. In that rulemaking, commenters requested that “utility companies seeking rights-of-way across NFS lands” should receive a *special exemption from the prohibition on permanent and exclusive uses*.⁸ The Forest Service did not mince words in dismissing the request for such uses:

The Department recognizes the concerns of these respondents but rejects the suggestions that utility companies should be exempted from this criterion because they must have an exclusive and perpetual use of Federal land. *To grant such use would, in effect, grant fee title to Federal land to an authorization holder.* Longstanding Congressional and Executive Branch policy dictates that authorizations to use NFS lands *cannot grant a permit holder an exclusive or perpetual right of occupancy in lands owned by the public.* The direction contained in this requirement is no different from that contained in the current regulations at § 251.55(b). . . . Accordingly, the recommendation that the criterion allow automatic acceptance of an application for a permanent road easement is not adopted. Such applications should be subjected to the same screening as all other applications.⁹

⁶ Bill McKibben, *The Rays of the Sun*, THE CRUCIAL YEARS (Oct. 7, 2023), https://billmckibben.substack.com/p/the-rays-of-the-sun?utm_source=substack&publication_id=438146&post_id=137747946&utm_medium=email&utm_content=share&utm_campaign=email-share&triggerShare=true&isFreemail=true&r=233o7i.

⁷ *Position: Carbon Capture, Storage, and Utilization*, CLIMATE ACTION NETWORK INT’L at 6 (2021), <https://climatenetwork.org/resource/can-position-carbon-capture-storage-and-utilisation/>.

⁸ Special Uses, 63 Fed. Reg. 65,950, 65,954 (Nov. 30, 1998) (to be codified at 36 C.F.R. pt. 251) (emphasis added).

⁹ *Id.* at 65,955 (emphasis added).

The agency’s reasoning in the previous rulemaking is consistent with its statutory duties, and all industries are held to the same screening criteria consistent with this longstanding policy and law. At this point the agency arbitrarily appears to be reversing this longstanding position without explanation and without any legal authority for such a change.

IV. CO₂ Injection Infrastructure Will Cause Long-Term Damage to National Forests and Grasslands, When Instead These Landscapes Must Be Protected.

The Forest Service has an existing responsibility to manage national forests and national grasslands to protect renewable resources, maintain existing sustainable uses, and safeguard the environment, especially water resources. By hastily changing the standards to allow permanent uses of these lands for industrial purposes, the agency is illegally abdicating its role and existing duties, and undercutting the habitat, water resources management, and climate-stabilizing purposes for which these lands must be maintained.

As the Forest Service recently acknowledged, “all the Nation’s forests, [including] old-growth and mature forests, are threatened by climate change and associated stressors,” such as wildfire, insects, disease, drought, and logging.¹⁰ Against this shifting backdrop, the agency is currently evaluating the various threats and considering how to strengthen the resilience of national forests.¹¹ Meeting this moment will require a multifaceted response comprising strategies that work together in complementary ways. Some circumstances may call for an active management strategy, while others will call for allowing natural systems to recover, strengthen, and adapt on their own.

What will not aid in meeting this critical moment for national forests and grasslands, however, is carving out an entirely new—and permanently harmful—industrial use of these landscapes. CO₂ pollution injection will require building massive amounts of infrastructure, including pipelines and pumping stations, injection wells, access roads, electric transmission lines to facilities with large energy needs, and well pads. Road building, construction and logging would cause additional harm to forest ecosystems and recreation. Deforestation for pipelines, compressor stations, access roads, and wells, along with the potential for additional tree cutting in pipeline setback zone, will cause soil compaction and erosion, removal of topsoil, changes in habitat and biodiversity from forest fragmentation, creation of corridors, and potential acceleration of exotic species invasions.

The Forest Service must recognize that the damage done to forests and grasslands as natural carbon sinks far outpaces whatever polluting industries claim are the climate benefits from capturing some of their pollution and then compressing, transporting, and injecting that

¹⁰ U.S. FOREST SERV., MATURE AND OLD-GROWTH FORESTS: DEFINITION, IDENTIFICATION, AND INITIAL INVENTORY ON LANDS MANAGED BY THE FOREST SERVICE AND BUREAU OF LAND MANAGEMENT 1 (Apr., 2023), <https://www.fs.usda.gov/sites/default/files/mature-and-old-growth-forests-tech.pdf> [hereinafter *2023 USFS MOG Forest Report*].

¹¹ See, e.g., Organization, Functions, and Procedures; Functions and Procedures; Forest Service Functions, 88 Fed. Reg. 24497 (Apr. 21, 2023) (to be codified at 36 C.F.R. pt. 200).

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pollution under natural landscapes. As one advocate said, “Our national forests are already home to the most viable carbon capture and storage technology on Earth — they’re called trees.”¹²

There is also no guarantee that the specific projects enabled by the Proposed Rule will not harm or destroy mature and old growth (“MOG”) forests, which must be protected as natural carbon stores and because of their other ecosystem contributions. MOG forests enhance climate resilience by sequestering and storing carbon, providing stable ecosystems and habitats, safeguarding hydrological cycles and drinking water supplies, and increasing resistance to wildfire. Executive Order 14072 (also known as “Strengthening the Nation’s Forests, Communities, and Local Economies”)¹³ directs the agency to foster resilience in forests in an era of rapidly changing climate, address the critical role forests play in slowing the pace of climate change and conserving biodiversity, and consider how forests help local communities thrive through recreation and forest management activities, including in enabling subsistence and cultural uses.¹⁴ The Executive Order calls particular attention to the importance of MOG forests on Federal lands for the many benefits they provide, as well as their role in contributing to nature-based climate solutions by storing large amounts of carbon.¹⁵

Not only do MOG forests draw greenhouse gases out of the atmosphere and store carbon long-term, but they also support conditions that will help humans and other species adapt to the climate crisis.¹⁶ Across forest types, the proportion of carbon stored in MOG far exceeds the proportion of acres that they occupy. Not only do older trees hold more carbon than younger trees, but their annual rate of carbon sequestration increases as they age.¹⁷ After a forest stand enters maturity, it continues to accumulate carbon at a high rate, and dead big trees can continue

¹² *Thousands Oppose Industrial Carbon Waste Dumping in National Forests*, CTR. FOR BIOLOGICAL DIVERSITY (Aug. 4, 2023), <https://www.biologicaldiversity.org/w/news/press-releases/thousands-oppose-industrial-carbon-waste-dumping-in-national-forests-2023-08-04/>.

¹³ See Exec. Order No. 14,072, 87 Fed. Reg. 24851 (Apr. 22, 2022)

<https://www.federalregister.gov/documents/2022/04/27/2022-09138/strengthening-the-nations-forests-communities-and-local-economies>.

¹⁴ *2023 USFS MOG Forest Report*, *supra* note 10, at 3.

¹⁵ *Id.*

¹⁶ See Dominick A. DellaSala et al., *Mature and old-growth forests contribute to large-scale conservation targets in the conterminous USA*, FRONTIERS FOREST & GLOB. CHANGE, Sept. 2022, <https://doi.org/10.3389/ffgc.2022.979528>; Beverly E. Law et al., *Creating Strategic Reserves to Protect Forest Carbon and Reduce Biodiversity Losses in the United States*, LAND, 2022, <https://doi.org/10.3390/land11050721>; William R. Moomaw et al., *Focus on the Role of Forests and Soils in Meeting Climate Change Mitigation Goals*, ENVIRON. RES. LETTERS, 2020, <https://doi.org/10.1088/1748-9326/ab6b38>.

¹⁷ David J. Mildrexler et al., *Large Trees Dominate Carbon Storage in Forests East of the Cascade Crest in the United States Pacific Northwest*, FRONTIERS FOREST & GLOB. CHANGE, Nov. 2020, <https://doi.org/10.3389/ffgc.2020.594274>; James A. Lutz et al., *Global Importance of Large-Diameter Trees*, 27 GLOB. ECOLOGY & BIOGEOGRAPHY 849 (2018), <https://doi.org/10.1111/geb.12747>; Sandra L. Brown et al., *Spatial Distribution of Biomass in Forests of the Eastern USA*, 123 FOREST ECOLOGY & MGMT. 81 (1999), [https://doi.org/10.1016/S0378-1127\(99\)00017-1](https://doi.org/10.1016/S0378-1127(99)00017-1); N.L. Stephenson et al., *Rate of Tree Carbon Accumulation Increases Continuously with Tree Size*, 507 NATURE 90 (2014), <https://doi.org/10.1038/nature12914>.

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to store carbon for centuries as they slowly decompose when left as snags or coarse woody debris.¹⁸

While MOG would be worth protecting for its carbon storage value alone, MOG forests and trees provide many other irreplaceable benefits. Over extremely long timespans, they develop complex habitats that support significant—and often imperiled—biodiversity. Depending on the forest type, important habitat features might include shady canopies that provide cooler conditions and snags in which many species take up residence. They also regulate hydrological cycles, often preventing water from quickly evaporating or running off the landscape.¹⁹ Many of these habitats are becoming even more important under changing climatic conditions. Relatively cool, moist areas can serve as climate refugia for species that are sensitive to temperature increases in a warming world.

Protecting our national forests and allowing them to grow is one of the most effective, immediately available natural climate solutions, and MOG is the carbon storage stronghold within the system. MOG forests everywhere should be protected from logging; the Forest Service must not undermine this goal by enacting a rule that would allow industries to store their manufactured carbon dioxide pollution at the expense of natural carbon stores.

V. Carbon Capture and Storage, and by Extension, CO₂ Injection, Is Antithetical to Real and Necessary Climate Action.

The Proposed Rule would open the door for injection of CO₂ pollution from CCS operations. Opening this door only enables a false climate solution that prevents, and takes significant funding away from, true climate action. As a threshold matter, therefore, we urge the Forest Service to abandon the Proposed Rule and reject the premise that CCS is a necessary—or even appropriate—approach to addressing the climate crisis and pollution burdens borne by frontline and fenceline communities.

After billions of dollars of investment and decades of development, deployment of CCS has consistently proven to be ineffective, uneconomic, and unnecessary. CCS projects around the world have failed to meet their greenhouse gas (“GHG”) emission reduction promises and have harmed people and the environment.²⁰ The types of dirty energy CCS will enable and prolong,

¹⁸ Liming He et al., *Relationships Between Net Primary Productivity and Forest Stand Age in U.S. Forests*, GLOB. BIOGEOCHEMICAL CYCLES, Sept. 2012, <https://doi.org/10.1029/2010GB003942>; Beverly E. Law et al., *Changes in Carbon Storage and Fluxes in a Chrono-sequence of Ponderosa Pine*, 9 GLOB. CHANGE BIOLOGY 510 (2003), <https://doi.org/10.1046/j.1365-2486.2003.00624.x>; William S. Keeton et al., *Late Successional Biomass Development in Northern Hardwood-Conifer Forests of the Northeastern United States*, 57 FOREST SCI. 489 (2011), <https://academic.oup.com/forestscience/article/57/6/489/4604514>; Richard Birdsey et al., *Middle-aged Forests in the Eastern U.S. Have Significant Climate Mitigation Potential*, 548 FOREST ECOLOGY & MGMT. 121373 (2023), <https://doi.org/10.1016/j.foreco.2023.121373>.

¹⁹ See Phoebe G. Aron et al., *Stable Water Isotopes Reveal Effects of Intermediate Disturbance and Canopy Structure on Forest Water Cycling*, 124 J. GEOPHYSICAL RSCH. 2958 (2019), <https://doi.org/10.1029/2019JG005118>.

²⁰ Michael Buchsbaum & Edward Donnely, *Fossil Fuel Companies Made Bold Promises to Capture Carbon. Here's What Actually Happened*, DESMOG, (Sept. 25, 2023, 10:00 PM), <https://www.desmog.com/2023/09/25/fossil-fuel-companies-made-bold-promises-to-capture-carbon-heres-what-actually-happened/>.

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and the infrastructure and energy required for CCS, will cause additional pollution in communities already suffering from unhealthy air and water quality.

CCS is a dangerous delay tactic championed by polluting industries—primarily fossil fuels and biomass—to enable business-as-usual, all while diverting resources from the needed transition to clean, true renewable energy. While an oft-repeated talking point, it is untrue that CCS is required under Intergovernmental Panel on Climate Change (“IPCC”) pathways to avert climate catastrophe. The IPCC-modeled pathway with the best chance of keeping warming at or below 1.5°C makes no use of fossil fuels with carbon capture or bioenergy with carbon capture and storage, and limited to no use of engineered carbon removal technologies.²¹ Instead, this pathway requires a rapid reduction in carbon emissions along with increased carbon dioxide removal by *natural sources*, particularly through restoring and expanding forests.²² A November 2023 report by the International Energy Association confirmed that to align with a 1.5 °C scenario, the oil and gas industry’s emissions need to decline by 60% by 2030; the report then goes on to urge the fossil fuel industry to let go of the “illusion” that carbon capture and storage is the solution.²³

The false promise of CCS is also evident in its real-world deployment. Experience has shown that power plants with carbon capture have drastically—and repeatedly— failed to meet their CO₂ capture targets.²⁴ The Petra Nova coal-fired power plant in Texas achieved only a 50% CO₂ capture rate when the fossil fuels needed to capture and store the carbon were taken into account.²⁵ Ultimately, thus far every CCS project the United States has subsidized at an existing power plant has failed.²⁶ Internationally, Chevron, operator of Australia’s only commercial-scale CCS project, admitted that its self-described “world’s biggest CCS project” failed to meet its

²¹ IPCC, *Summary for Policymakers*, in SPECIAL REPORT: GLOBAL WARMING OF 1.5°C (Masson-Delmotte et al. eds., 2018) at 14, Section C.1.1., Figure SPM 3b (Pathway 1); *see also* IPCC, *Mitigation Pathways Compatible with 1.5°C in the Context of Sustainable Development*, in SPECIAL REPORT: GLOBAL WARMING OF 1.5°C (Masson-Delmotte et al. eds., 2018) at 115 Ch. 2.3.3 and Table 2.SM.12. *See also* CENTER FOR INTERNATIONAL ENVIRONMENTAL LAW, *CONFRONTING THE MYTH OF CARBON FREE FOSSIL FUELS: WHY CARBON CAPTURE IS NOT A CLIMATE SOLUTION 2* (2021), <https://www.ciel.org/wp-content/uploads/2021/07/Confronting-the-Myth-of-Carbon-Free-Fossil-Fuels.pdf> [hereinafter *CIEL CCS Report*].

²² *The IPCC’s Recipe for a Livable Planet: Grow Trees, Don’t Burn Them*, PARTNERSHIP FOR POLICY INTEGRITY (Oct. 7, 2018), <https://www.pfpi.net/the-ipccs-recipe-for-a-livable-planet-grow-trees-dont-burn-them/>.

²³ *Oil and gas industry faces moment of truth – and opportunity to adapt – as clean energy transitions advance*, INT’L ENERGY ASS’N (Nov. 23, 2023), <https://www.iea.org/news/oil-and-gas-industry-faces-moment-of-truth-and-opportunity-to-adapt-as-clean-energy-transitions-advance>.

²⁴ Bruce Robertson, *Carbon capture has a long history. Of failure.*, IEEFA (Sept. 2, 2022), <https://ieefa.org/resources/carbon-capture-has-long-history-failure>.

²⁵ David Schlissel, *Reality of carbon capture not even close to proponents’ wishful thinking*, IEEFA (Aug. 8, 2019), <https://ieefa.org/reality-of-carbon-capture-not-even-close-to-proponents-wishful-thinking/>.

²⁶ June Sekera & Neva Goodwin, *Why the oil industry’s pivot to carbon capture and storage – while it keeps on drilling – isn’t a climate change solution*, THE CONVERSATION (Nov. 23, 2021), <https://theconversation.com/why-the-oil-industrys-pivot-to-carbon-capture-and-storage-while-it-keeps-on-drilling-isnt-a-climate-change-solution-171791>.

five-year capture target of 80% CO₂, and is now seeking a deal with regulators on how to make up for millions of tons of CO₂ emitted.²⁷

These real-world failures of CCS projects do not even account for the *lifecycle* emissions of CCS projects. A Stanford study calculated the lifecycle emissions associated with CCS projects used with energy production from fossil fuels and found that “the equipment captured the equivalent of only 10-11 percent of the emissions they produced, averaged over 20 years.”²⁸ This research also considered the social cost of carbon capture—in other words, the resulting air pollution, potential health problems, economic costs and overall contributions to climate change—and concluded that these costs are similar to or higher than a fossil fuel plant *without* carbon capture.²⁹ And as the Institute for Energy Economics and Financial Analysis (“IEEFA”) notes, the energy required to capture, transport, and inject carbon underground “materially reduces its net benefit.”³⁰ Power plants with carbon capture typically have an energy penalty of 25% or more.³¹ These “penalties” mean more fuel has to be burned to produce the same amount of power, which means higher energy costs, greater emissions of non-CO₂ air pollutants, and increased energy demand.³² And any CO₂ that is stored underground risks leakage back to the atmosphere, based on the long track record of fossil fuel industry leaks and spills.³³

Because CCS fundamentally enables the underlying emissions-generating activity (such as fossil fuel power generation) to continue, upstream and downstream impacts from activities such as fossil fuel extraction, refining, transport, use, and disposal continue to harm people’s health, particularly in overburdened communities.³⁴ A recent study confirmed that the lifecycle pollution and social harms from CCS fossil fuel-fired powerplants can result in more harm than good. The researchers examined the net CO₂ reduction and total lifecycle cost of carbon capture

²⁷ Michael Mazengarb, *Chevron admits failure of \$3 billion CCS facility in Western Australia*, IEEFA (July 19, 2021), <https://ieefa.org/chevron-admits-failure-of-3-billion-ccs-facility-in-western-australia/>.

²⁸ Taylor Kubota, *Stanford Study casts Doubt on Carbon Capture*, STANFORD NEWS (Oct. 25, 2019), <https://news.stanford.edu/2019/10/25/study-casts-doubt-carbon-capture/> (citing Mark Z. Jacobson, *The health and climate impacts of carbon capture and direct air capture*, 12 ENERGY ENV'T. SCI. 3567 (2019), <https://pubs.rsc.org/en/content/articlelanding/2019/ee/c9ee02709b/unauth#!divAbstract>) [hereinafter *Stanford Study*].

²⁹ *Id.* (noting that the social cost of coal with carbon capture powered by natural gas was about 24 percent higher, over 20 years, than the coal without carbon capture, and only when wind replaced the fossil fuel did the social cost decrease).

³⁰ CLARK BUTLER, CARBON CAPTURE AND STORAGE IS ABOUT REPUTATION, NOT ECONOMICS 4 (IEEFA, 2020), https://ieefa.org/wp-content/uploads/2020/07/CCS-Is-About-Reputation-Not-Economics_July-2020.pdf.

³¹ *Stanford Study*, *supra* note 28.

³² *Id.*

³³ The myth of permanent carbon sequestration is echoed in regulations that merely kick the climate problem down the road and onto future generations. Under EPA’s regulations for Class VI injection wells for CO₂, for example, a permit applicant need only show that they can store CO₂ for 50 years in order to qualify for subsidies. 40 C.F.R. § 146.93. California’s Low Carbon Fuel Standards doesn’t fare much better, requiring only 100 years of storage. CAL. AIR RES. BD., ACCOUNTING AND PERMANENCE PROTOCOL FOR CARBON CAPTURE AND GEOLOGIC SEQUESTRATION UNDER LOW CARBON FUEL STANDARD (2018), https://ww2.arb.ca.gov/sites/default/files/2020-03/CCS_Protocol_Under_LCFS_8-13-18_ada.pdf (“‘Permanent sequestration’ or ‘permanence’ means the state where sequestered CO₂ will remain within the sequestration zone for at least 100 years.”).

³⁴ *CIEL CCS Report*, *supra* note 21, at 7 (citing, for example, a Harvard study finding that fine particulate matter emitted with fossil fuel burning is responsible for millions of deaths worldwide).

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from a coal plus CCS power plant, and a plant that removes carbon directly from the air.³⁵ They found that CCS “reduces only a small fraction of carbon emissions, *and it usually increases air pollution.*”³⁶

The proposed rulemaking states: “Authorizing carbon capture and storage on National Forest lands would support the Administration’s goal to reduce greenhouse gas emissions by 50 percent below the 2005 levels by 2030.”³⁷ This is false. Storing carbon does nothing to reduce carbon emissions; in fact, the Proposed Rule (and CCS generally) will be used to justify continued carbon pollution. It is arbitrary and capricious for the Forest Service to allege that carbon storage will reduce carbon emissions, and to justify its rulemaking on that erroneous assumption.

The climate crisis is an existential threat to public lands, public health, and human civilization. The Forest Service can and must take all effective measures to address climate pollution. The Proposed Rule enables a false climate solution and must therefore be withdrawn.

VI. CO₂ Pipelines and Injection Pose Grave Threats to People, Wildlife, and Plants.

CCS projects threaten the local environment and public health of communities in areas where CCS is deployed and where CO₂ pipelines and injection wells are located. The capture, compression, transportation, injection, and storage of carbon dioxide pose significant environmental, health, and safety risks that are not adequately assessed or addressed under existing regulations.³⁸

CO₂ pipelines, which would presumably be used to transport and inject CO₂ under, national forests and grasslands, present significant public safety concerns. Due to its volatile nature (particularly in the presence of water, which mixes with CO₂ to form carbonic acid, which corrodes pipelines, potentially leading to failure/rupture), CO₂ can lead to violent pipeline ruptures known as “zip fractures” of pipelines over long distances.³⁹ The Pipeline Safety Trust issued a report concluding that “existing federal regulations do not allow for the safe transportation of CO₂ via pipelines” because “[t]he way regulations currently consider and mitigate for the risks posed by hydrocarbon pipelines in communities are neither appropriate nor sufficient for CO₂ pipelines.”⁴⁰

Anyone working in or visiting a national forest or grassland has a legitimate reason to be concerned about the impacts a leak could have on their health and safety. CO₂ gas is “odorless, colorless, doesn’t burn, is heavier than air, and is an asphyxiant and intoxicant,” which makes releases potentially deadly—as well as difficult to observe and avoid.⁴¹ Once compressed CO₂

³⁵ *Stanford Study, supra.*

³⁶ *Id.* (emphasis added).

³⁷ 88 Fed. Reg. 75531.

³⁸ See, e.g., *CO₂ Pipelines – Dangerous and Under-Regulated*, PIPELINE SAFETY TRUST (Mar. 30, 2022), <https://pstrust.org/wp-content/uploads/2022/03/CO2-Pipeline-Backgrounder-Final.pdf> (citing *Accufacts’ Perspectives on the State of Federal Carbon Dioxide Transmission Pipeline Safety Regulations as it Relates to Carbon Capture, Utilization, and Sequestration within the U.S.*, ACCUFACTS INC. (Mar. 23, 2022) <https://pstrust.org/wp-content/uploads/2022/03/3-23-22-Final-Accufacts-CO2-Pipeline-Report2.pdf>) [hereinafter *PST Report*].

³⁹ *Id.* at 6.

⁴⁰ *Id.*

⁴¹ *Id.* at 8.

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leaks, its physical properties allow it to travel *miles* at lethal concentrations displacing oxygen and settling in low-laying areas.⁴² Oxygen displacement can starve gasoline- or diesel-powered vehicles utilized by first responders, rendering them useless. The dense CO₂ plume then can cause disorientation, confusion, unconsciousness and death for humans and animals.⁴³

Because CO₂ is an asphyxiant, any leak can severely harm people, as well as wildlife, insects, and plants. Examples of this occurring, and research on impacts, include:

- In 2020, residents of rural Satartia, Mississippi experienced a CO₂ pipeline rupture that sickened dozens of people. The rupture resulted in more than 300 residents being evacuated and 46 hospitalized, with victims found gasping for breath, nauseated, foaming at the mouth, and rendered unconscious. Months later, residents continued to suffer from mental fogging, lung dysfunction, chronic fatigue, and stomach disorders.⁴⁴ The incident also presented immense challenges for emergency response personnel since vehicles could not reach victims, 911 lines were flooded, and responders had a difficult time identifying the cause of the crisis.⁴⁵
- In 1986, a sudden, catastrophic release of CO₂ from Lake Nyos in Cameroon killed 1,700 people and 3,000 cattle. The CO₂ spread 10 km from the lake. Bird, insect, and small mammal populations in the area were not seen for at least 48 hours after the event.⁴⁶
- Experiments with controlled injections of CO₂ into soil showed adverse effects on plants in response to CO₂ exposure. Biomass changes were seen in all plants studied; for example, clover plants decreased by 79% while grass decreased by 42%. The researchers' overarching conclusion was that elevated concentrations of soil CO₂ damages both soil microbiology and growing vegetation.⁴⁷
- Other research on CO₂ and plants showed reduced plant growth and extensive mortality where CO₂ concentrations were greatest in the soil. For the plants that survived, root and shoot growth was significantly lower than in controls. Reproductive variables such as number of seeds per plant and seed dry weight per plant were also reduced compared to controls.⁴⁸
- A well blowout of injected CO₂ "released so much carbon dioxide that the gas settled into hollows and suffocated deer and other animals."⁴⁹

⁴² *Id.* at 9.

⁴³ *Id.*

⁴⁴ See Dan Zegart, *Gassing Satartia: Carbon Dioxide Pipeline Linked to Mass Poisoning*, HUFFINGTON POST, (Aug. 26, 2021) https://www.huffpost.com/entry/gassing-satartia-mississippi-co2-pipeline_n_60ddea9fe4b0ddef8b0ddc8f.

⁴⁵ Julia Simon, *The U.S. is Expanding CO₂ Pipelines. One Poisoned Town Wants You to Know Its Story*, NPR (Sept. 25, 2023), <https://www.npr.org/2023/05/21/1172679786/carbon-capture-carbon-dioxide-pipeline>.

⁴⁶ Kling, G.W. et al., *The 1986 Lake Nyos Gas Disaster in Cameroon, West Africa*, 236 SCIENCE 169 (1987).

⁴⁷ Smith, K.L. et al., *Environmental impacts of CO₂ leakage: recent results from the ASGAR facility, UK*, 37 ENERGY PROCEDIA 791 (2013).

⁴⁸ Al-Traboulsi et al., *Potential impact of CO₂ leakage from carbon capture and storage (CCS) systems on growth and yield in spring field bean*, 80 ENVIRON. EXPER. BOTANY 43 (2012).

⁴⁹ Nicholas Kusnetz, *Exxon Touts Carbon Capture as a Climate Fix, but Uses It to Maximize Profit and Keep Oil Flowing*, INSIDE CLIMATE NEWS (Sept. 27, 2020), <https://insideclimatenews.org/news/27092020/exxon-carbon-capture/>.

VII. The Proposed Rule Will Perpetuate Environmental Injustice.

Despite all evidence to the contrary, the Proposed Rule notice states: “The Forest Service has determined that the proposed rule is not expected to result in disproportionately high and adverse impacts on minority or low-income populations or the exclusion of minority and low-income populations from meaningful involvement in decision making.”⁵⁰ In fact, the opposite is likely. All information available to the agency, including materials produced by environmental justice experts working with the White House and the Council on Environmental Quality, contradicts the notice’s conclusion.

The Proposed Rule, while not approving specific project proposals, will nonetheless open the door for CCS projects to inject their CO₂ under Forest Service lands, and perhaps catalyze projects that otherwise would not occur. The Proposed Rule therefore will perpetuate environmental injustice in that CCS projects existing and planned will disproportionately harm Black, Brown, Indigenous, and other historically overburdened communities. One study showed that of the 35 planned CCS projects in the US power generation sector, 33 of these (94.3%) are located within three miles of an [environmental justice] community.⁵¹ In addition, many Tribal Nations live near, and/or manage, national forest lands, where the proposed rule would allow for CO₂ injection wells and associated infrastructure. Placing dangerous CCS infrastructure in rural areas puts those frontline communities—which are often far from medical care and hospitals—at risk.

On November 17, 2023, the White House Environmental Justice Advisory Council (“WHEJAC”) issued recommendations to a variety of federal agencies (including the U.S. Department of Agriculture, “USDA”) related to carbon management, with a particular focus on CCS.⁵² After a thorough analysis of federal agency actions, research, and CCS proposals, the WHEJAC expressed “surprise[] at how environmental justice concerns related to safety, public health, environmental risks, cumulative impacts, and efficiency are unaddressed, addressed inefficiently, or addressed haphazardly by the federal government and other proponents of carbon management.”⁵³ The WHEJAC listed the “critical environmental justice concerns that have been expressed by communities across multiple carbon management strategies related to environmental, health, safety, and regulatory risks.”⁵⁴ These risks, listed below, are all implicated by the Proposed Rule, which opens the door for CCS projects and could enable CCS projects that otherwise may not be viable without access to national forest lands as CO₂ pollution dumping grounds:

⁵⁰ 88 Fed. Reg. 75531.

⁵¹ WHITE HOUSE ENV’T. JUST. ADVISORY COUNCIL, RECOMMENDATIONS: CARBON MANAGEMENT WORKGROUP at 10 (2023), https://www.epa.gov/system/files/documents/2023-11/final-carbon-management-recommendations-report_11.17.2023_508.pdf [hereinafter *WHEJAC 2023 CCS Report*].

⁵² *Id.* at 1-2.

⁵³ *Id.* at 3-4.

⁵⁴ *Id.* at 8.

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1. Increases in co-pollutant emissions (i.e., particulate matter, NO_x, SO_x, hazardous air pollutants, etc.) in air and water that contributes to cumulative burdens and places risks on already overburdened and/or vulnerable communities;
2. Threats from harmful chemical spills or leaks in soil, water, air, aquifers;
3. Pipeline explosions;
4. CO₂ storage leaks;
5. Exacerbating water scarcity;
6. Hazardous waste storage and disposal;
7. Seismic activity;
8. Insufficient regulatory oversight at local, state and federal levels to protect EJ communities and significant uncertainty in state compliance;
9. Fossil fuel infrastructure lock-in that extends the life of polluting fossil fuel use;
10. Diversion of public funds and economic opportunity loss with resources diverted to risky experimental technologies; and
11. Misdirection of climate funds that would be more impactfully invested in renewable energy.

The Forest Service should heed the WHEJAC’s priority recommendation to “[h]alt the implementation of . . . Carbon Capture and Sequestration (CCS); Carbon Capture, Utilization and Storage (CCUS); Direct Air Capture; Bioenergy with Carbon Capture and Storage (BECCS); and Hydrogen co-firing.”⁵⁵ In an earlier report, the WHEJAC called CCS projects a “type[] of project that will not benefit a community,” noting that “it would be unreasonable to have any climate investment working against historically harmed communities.”⁵⁶

The WHEJAC also issued a recommendation to the federal lands management agencies, the Department of the Interior and USDA. They asked these agencies to “prepare an [environmental justice] analysis, public health risk assessment and cumulative impacts analysis for any proposed projects on federal lands.”⁵⁷ The Forest Service (situated within USDA) should prepare these analyses for any specific project applying under the Proposed Rule, but the Forest Service should go father and prepare these analyses for the Proposed Rule itself. As discussed further below, such analysis is required under the National Environmental Policy Act due to the extraordinary circumstances of the Proposed Rule.

VIII. The Proposed Rule Is Incompatible with the Multiple-Use Sustained Yield Act.

The Organic Administration Act (“Organic Act”) created the first forest reserves (which became national forests) with narrow purposes. The Multiple-Use Sustained Yield Act

⁵⁵ *Id.* at 2.

⁵⁶ WHITE HOUSE ENV’T. JUST. ADVISORY COUNCIL, JUSTICE40 CLIMATE AND ECONOMIC JUSTICE SCREENING TOOL & EXECUTIVE ORDER 12898 REVISIONS: INTERIM FINAL RECOMMENDATIONS at 55, 58 (2021), https://www.epa.gov/sites/default/files/2021-05/documents/whejac_interim_final_recommendations_0.pdf (emphasis original).

⁵⁷ WHEJAC 2023 CCS Report, *supra* note 51, at 21.

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(“MUSYA”) widened those purposes. These authorities, together with the National Forest Management Act (“NFMA”) work in tandem to guide the management of the National Forest System. The Proposed Rule must not move forward because its change to allow perpetual and exclusive use of national forests and grasslands via special use permits exceeds the Forest Service’s statutory authority under the MUSYA.

The Organic Act (1897) (codified as amended at 16 U.S.C. §§ 471-481) announced the purposes for which the national forests were established: “to improve and protect the forest” or secure “favorable conditions of water flows, and to furnish a continuous supply of timber.” 16 U.S.C. § 475; *see also United States v. New Mexico*, 438 U.S. 696, 708 (1978). Just over 60 years after passage of the Organic Act, the MUSYA (16 U.S.C. §§ 528-531) widened the purposes for which national forests could be established and is “supplemental to, but not in derogation of, the purposes for which the national forests were established as set forth in the Organic Act.” 16 U.S.C. § 528. What constitutes “multiple use” is broadly defined by Congress:

The management of all the *various renewable surface resources of the national forests* so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output. 16 U.S.C. § 531 (emphasis added).

While the statutory definition is broad, it is not unbounded. In the MUSYA, Congress directed the USFS to administer national forest lands “for outdoor recreation, range, timber, watershed, and wildlife and fish purposes.” 16 U.S.C. § 528. That list is exhaustive—not illustrative—and does not mention pore space, CO₂ storage, or anything contemplated in the Proposed Rule. Similarly, as emphasized above, the MUSYA directs the USFS to manage the *surface resources* of national forests. 16 U.S.C. § 529; *id.* § 531. The Proposed Rule, by contrast, seeks to open the door to significant use of the *subsurface* of national forests and grasslands, running the risk of exceeding the agency’s directive. And Congress’s instruction that the Forest Service manage “resources *of the national forests*” (16 U.S.C. §531, emphasis added) further focuses the agency’s management on what is already *contained within* national forests (such as trees and wildlife), not pollution or waste brought in from the outside that would be injected under national forest lands. Nothing in this language allows permanent permits that withdraw public lands from the National Forest System and end all sustainable uses Congress intended for these lands. The MUSYA also prohibits agency action that would “impair[] the productivity of the land.” Perpetual and exclusive occupancy of Forest System lands for industry pollution dumping, and the associated infrastructure required for those operations, impairs the lands’ productivity and represents a land use conversion, from forest to industrial.

IX. The Proposed Rule Violates Indigenous Rights and Cultural Practices.

The Proposed Rule notice states that “The Forest Service has determined that this proposed rule could have substantial direct effects on one or more Tribes and is subject to Tribal

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consultation per E.O. 13175 and Forest Service Handbook 1509.13.”⁵⁸ Because of the nationwide scope of this rule, many Tribal Nations are potentially impacted, and so the Forest Service should abandon this rulemaking until it has fully consulted with all recognized Tribes and incorporated their input and perspectives into the draft rule language. Moreover, the Proposed Rule would violate Indigenous rights and cultural practices, meaning the rule must ultimately be shelved.

Tribal Nation members, Alaskan Natives, and Indigenous communities frequently use and rely upon resources located in national forests and grasslands. Articulated and implied usufructuary rights are an important part of these communities’ continued use of public lands, and they are enshrined in treaties and laws that bind the agency’s actions.⁵⁹ However, the Proposed Rule would change the agency’s relationship with these communities and their lands by allowing private companies to apply to permanently sever Indigenous peoples’ relationship to their land.

Starting in the past few years, Forest Service has started building out and promoting its increased co-management of public lands with Tribal Nations.⁶⁰ This appears to be a substantial expansion of past efforts to respect treaty rights and assure that tribal expertise is respected in managing public lands where tribes have retained rights.⁶¹ In northern Minnesota the Forest Service recently entered into a Memorandum of Understanding with numerous tribes and tribal organizations whose treaty rights overlap with the Superior National Forest.⁶² This agreement explicitly states:

It is critical to the Forest Service and to the Tribes that Superior National Forest-wide issues regarding forest management, development of Standards and Guidelines, potential changes to the Forest Plans, and major Forest Service actions,

⁵⁸ 88 Fed. Reg. 75530.

⁵⁹ Most such rights have been either explicitly or implicitly found in treaties executed with Tribal Nations and then affirmed and interpreted by the U.S. Supreme Court, *see, e.g.*, Michael R. Newhouse, *Recognizing and Preserving Native American Treaty Usufructs in the Supreme Court: the Mille Lacs Case*, 21 Pub. Land & Res. L. Rev. 169 (2002), <https://scholarworks.umt.edu/cgi/viewcontent.cgi?article=1149&context=plrllr>; A. Dan Tarlock, *Tribal Justice and Property Rights: The Evolution of Winters v. United States*, 50 NAT. RES. J. 471 (2010) <https://digitalrepository.unm.edu/cgi/viewcontent.cgi?article=1135&context=nrj>; Emily Droll, *The Akaka Bill and Native Hawaiian Usufructuary Rights*, 3 Geo. J. L. & Mod. Critical Race Persp. 39 (2011), <https://heinonline.org/HOL/LandingPage?handle=hein.journals/gjmodco3&div=6&id=&page=>. While not limited to hunting and gathering, there are independent sources of federal law supporting Tribal rights over related issues such as historic sites covered by the National Historic Preservation Act.

⁶⁰ *See, e.g.*, USDA Forest Service Signs 11 New Agreements to Advance Tribal Co-Stewardship of National Forests, USDA (Nov. 30, 2022), <https://www.fs.usda.gov/news/releases/new-agreements-advance-tribal-co-stewardship>.

⁶¹ For an earlier example of such efforts, *see* Memorandum of Understanding Regarding Tribal – USDA-Forest Service Relations On National Forest Lands Within The Territories Ceded In Treaties Of 1836, 1837, and 1842, Jun. 1999, https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5309366.pdf.

⁶² *Tribal Relations*, USDA – FOREST SERVICE, <https://www.fs.usda.gov/main/superior/workingtogether/tribalrelations> (last visited Dec. 1, 2023).

including special use permits and land exchanges, shall be addressed between the Tribes and the Forest Supervisor at the earliest stage in their development.”⁶³

The agreement goes on to identify “Tribal Access Priorities” that include: “Ensuring that any special use or other permits granted by the Forest Service do not detract from Tribal members’ ability to exercise Treaty-Reserved Rights by impeding access[.]”⁶⁴ It is clear from this agreement that tribes are concerned with the agency’s issuance of special use permits, and specifically any such permits that would impede their treaty-protected rights and access to resources within the national forest. However, this agreement was implicitly premised on the agency’s prior commitment to never issuing permanent and exclusive permits. If the Forest Service finalized the Proposed Rule it would entirely move the goalposts on what had been a clear agreement regarding co-management. The importance of special use permits not impacting or eliminating access is an identified major concern, and likely is important to all tribes and Native peoples throughout the country who regularly use national forests and grasslands. Co-management by equal partners is not possible if the Forest Service changes the underlying rules without obtaining the consent of its purported tribal government partners. Because the agency has been creating new co-management agreements with dozens of Tribal Nations, the Proposed Rule’s undercutting of all those agreements is a significant harm to many governments and peoples.

These concerns are not just a matter of Tribal Nations’ and Native people’s preferences; they infringe on legal commitments made by the United States. The hundreds of federally-recognized Tribal Nations have reserved numerous significant rights under the many treaties they have entered with the United States over the past three centuries.⁶⁵ Tribal Nations have unique government-to-government status under numerous federal laws and executive actions.⁶⁶ Treaties are the Supreme Law of the Land under the United States Constitution, and no agency has authority to unilaterally abrogate or change a treaty without clear direction from Congress.

The Forest Service has no authority from any source to abrogate treaties, statutes, or executive orders, nor does it have the ability to reverse decades and centuries of policy around Tribal Nations without so much as a justification in the Proposed Rule for how or why the agency believes it can modify and invalidate all of these legal rights and policies. The Forest Service’s Proposed Rule therefore risks violating the Constitution and every treaty regarding reserved rights of tribes to use, occupy, manage, and benefit from lands or resources held in trust by the federal government.

⁶³ Memorandum of Understanding Regarding Tribal-USDA-Forest Service Relations, Co-Stewardship, and Protection of Treaty-Reserved Rights Within Superior National Forest, May 2023, at 8, <https://usfs-public.box.com/s/kfun5ts17nefn58mwuppvr4gnzc0tu6s> [hereinafter *MOU*] (emphasis added).

⁶⁴ *Id.* at 19.

⁶⁵ See *Native American Heritage, American Indian Treaties: Catalog Links*, NATIONAL ARCHIVES, <https://www.archives.gov/research/native-americans/treaties/catalog-links> (last visited Dec. 1, 2023).

⁶⁶ See Consultation and Coordination With Indian Tribal Governments, E.O. 13175, 65 Fed. Reg. 67249 (Nov. 6, 2000); Tribal Consultation and Strengthening Nation-to-Nation Relationships, 86 Fed. Reg. 7591 (Jan. 29, 2021); Uniform Standards for Tribal Consultation, 87 Fed. Reg. 74479 (Nov. 30, 2022) <https://www.federalregister.gov/documents/2022/12/05/2022-26555/uniform-standards-for-tribal-consultation>.

X. The Proposed Rule Must Be Evaluated Under the National Environmental Policy Act.

The National Environmental Policy Act (“NEPA”) requires that agencies “carefully consider” the environment impacts of their actions and make the relevant information available to the public.⁶⁷ The Forest Service’s regulation at 36 C.F.R. 220.6(d)(2) excludes “rules, regulations, or policies to establish service-wide administrative procedures, program processes, or instructions” from NEPA review. According to the Forest Service, its “preliminary assessment is that this proposed rule falls within this category of actions and that *no extraordinary circumstances exist* which would require preparation of an environmental assessment or environmental impact statement.”⁶⁸ Here, there are ample extraordinary circumstances that cannot be ignored and trigger full NEPA review. Moreover, it is questionable whether the categorical exclusion cited by the Forest Service is applicable to the Proposed Rule at all.

The Forest Service lists resource conditions “that should be considered in determining whether extraordinary circumstances related to a proposed action warrant further analysis and documentation”:⁶⁹

- i. Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species;
- ii. Flood plains, wetlands, or municipal watersheds;
- iii. Congressionally designated areas, such as wilderness, wilderness study areas, or national recreation areas;
- iv. Inventoried roadless area or potential wilderness area;
- v. Research natural areas;
- vi. American Indians and Alaska Native religious or cultural sites; and
- vii. Archaeological sites, or historic properties or areas.

The Proposed Rule opens up a new, industrial use applicable to national forests and grasslands nationwide, implicating all of these resource conditions listed above. As discussed in this comment’s prior sections above, there are many environmental, cultural, legal, and societal impacts that would flow from the Proposed Rule’s language. In light of the agency’s own listed triggers, many of the above-described impacts and legal issues are also “extraordinary circumstances” that must be fully reviewed under NEPA. And while the regulation states that the “presence of one or more of these resource conditions does not preclude use of a categorical exclusion,” the regulation further explains that it is “the degree of the potential effect of a proposed action on these resource conditions that determines whether” the exclusion may be used.⁷⁰ Here, the Proposed Rule’s potential effects on national forest and grassland resources are potentially catastrophic and are intended to be “perpetual.” As such, the “degree of the potential effect” could not be higher, and the Forest Service cannot rely on a categorical exclusion to evade NEPA review on the Proposed Rule.

⁶⁷ *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989).

⁶⁸ 88 Fed. Reg. 75531 (emphasis added); *see also* 36 C.F.R. § 220.6(a) (excluding certain actions from NEPA review “only if there are no extraordinary circumstances related to the proposed action”); 40 C.F.R. § 1501.4(b).

⁶⁹ 36 C.F.R. § 220.6(b)(1).

⁷⁰ *Id.* § 220.6(b)(2).

The broader NEPA regulations define extraordinary circumstances as instances where “a normally excluded action *may have* a significant environmental effect.”⁷¹ As noted above and throughout this comment, the Proposed Rule may (and foreseeably will) have cause environmental damage by opening up an entirely new, industrial, surface- and sub-surface-disturbing, environmental injustice-causing, and perpetual use of national forests and grasslands nationwide. Brushing the Proposed Rule away from public scrutiny with a categorical exclusion is therefore irrational and improper.

Further, as noted above, the Forest Service justifies this rulemaking on the grounds that “[a]uthorizing carbon capture and storage on National Forest lands would support the Administration’s goal to reduce greenhouse gas emissions by 50 percent below the 2005 levels by 2030.”⁷² The Forest Service thus asserts (without evidence) that this proposal will have beneficial environmental impacts by reducing carbon pollution. Whether the agency’s assertion is true or not, the Forest Service cannot have it both ways: it cannot allege that the rule will have no environmental effect (and thus require no NEPA analysis) while justifying the proposal on the grounds that the rule will buttress a pillar of the administration’s climate policy, and thus have critical environmental benefits. If the agency intends to justify the rule on its environmental benefits resulting from carbon pollution reduction, it must estimate, quantify, disclose the social cost of greenhouse gas emissions, and otherwise comply with CEQ’s recommended guidance on disclosing the climate damage (or benefit) of agency proposals in NEPA analysis.⁷³

Finally, it is questionable whether the exclusion in 36 C.F.R. 220.6(d)(2), which refers to “procedures, processes, or instructions,” applies at all. The agency’s own Federal Register notice describes the Proposed Rule not simply as a procedure, process or instruction change, but as a regulatory amendment that would carve out a wholesale, nationwide “exemption for the exclusive and perpetual use and occupancy for carbon capture and storage on [National Forest System] lands.”⁷⁴ In other words, the Forest Service is carving out an entirely new and major industrial use of lands under its jurisdiction that could have profound environmental and public safety implications. This change may be embedded in the agency’s special use permit screening criteria but the permanent and exclusive use enabled by the Proposed Rule is less like a process change envisioned under 36 C.F.R. 220.6(d)(2) (examples include adjusting fees, proposing a change to permit payments, and establishing a method to screen for air quality impacts) and more like other agency actions subject to NEPA review as described in the agency’s regulation at 36 C.F.R. § 220.4 (stating that NEPA is required where the agency has a goal and can evaluate alternatives, the proposed action is within Forest Service control and responsibility, and the proposed action would impact the natural and physical environment and the relationship of people with that environment.) The Forest Service should therefore initiate review of the Proposed Rule under NEPA by preparing an environmental impact statement or environmental assessment.

⁷¹ 40 C.F.R. § 1507.3(e)(2)(ii) (emphasis added).

⁷² 88 Fed. Reg. 75531.

⁷³ See National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change, 88 Fed. Reg. 1196 (Jan. 9, 2023).

⁷⁴ 88 Fed. Reg. 75531.

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XI. The Forest Service Must Conduct a Programmatic Endangered Species Act Consultation for the Proposed Rule.

Because the Proposed Rule is a discretionary action that may affect listed species, the Forest Service must formally consult under the Endangered Species Act (“ESA”) with the U.S. Fish and Wildlife Service on this regulatory change, as well as on specific project applications.

Section 7 of the ESA requires that “[e]ach Federal agency shall, in consultation with and with the assistance of [the Services], insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification” of designated critical habitat. 16 U.S.C. § 1536(a)(2). This “mandate applies to every discretionary agency action—regardless of the expense or burden its application might impose.” *Nat’l Ass’n of Home Builders v. Defs. of Wildlife*, 551 U.S. 644, 671 (2007). As the Supreme Court explained, “[o]ne would be hard pressed to find a statutory provision whose terms were any plainer than those in § 7” of the ESA. *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 173 (1978).

The definition of agency “action” is broad and includes the issuance of permits as well as “programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies.” 50 C.F.R. § 402.02 (emphasis added). Each federal agency must review its actions “at the earliest possible time” to determine whether it “may affect” listed species or critical habitat. *Id.* at § 402.14. If an agency action “may affect” and is “likely to adversely affect” listed species or critical habitat, then “formal consultation” is required. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(a). For broad federal programs that may affect listed species, action agencies and the Services must engage in “programmatic consultation” to consider the aggregate impacts of the whole program and to guide implementation by establishing criteria to avoid, minimize, or offset adverse effects on listed species and critical habitat. *See* 50 C.F.R. §§ 402.02, 402.14(i)(6).

Here, the Proposed Rule is an “agency action” under the ESA in that it is a program establishing a new use for national forests and grasslands. *See* 50 C.F.R. § 402.02 (agency actions include “permits” and “programs of any kind”). Consultation prior to finalizing this rule would be the “earliest possible time,” while waiting upon future permit applications would clearly fail to meet the agency’s obligation to address potential impacts programmatically. Furthermore, as established earlier in this comment letter, there can be no dispute that the Proposed Rule “may affect” listed species and their habitats, a trigger that is widely accepted as a low threshold for consultation. *See Kraayenbrink*, 632 F.3d at 496 (formal consultation is triggered by “[a]ny possible effect, whether beneficial, benign, adverse, or of an undetermined character” (quoting 51 Fed. Reg. 19,926, 19,949 (June 3, 1986))). Consultation on the Proposed Rule as a whole is therefore warranted. That consultation may occur with individual projects does “not relieve the Federal agency of the requirements for considering the effects of the action as a whole.” 50 C.F.R. § 402.14(c).⁷⁵

⁷⁵ Accordingly, the regulations set forth procedures for consultation on programmatic actions where consultation on “future action(s)” is still required because incidental take statements are not provided at the programmatic level, but rather are “addressed in subsequent section 7 consultation, as appropriate.” 50 C.F.R. § 402.14(i)(6).

XII. The Proposed Rule Concerningly Opens the Door to Lifecycle Harms from Carbon Capture and Storage Infrastructure.

The Forest Service is proposing to amend 36 C.F.R. 251.54(e)(1)(iv) “to provide an exemption for carbon *capture* and storage.”⁷⁶ This broad language implies that different stages of the CCS lifecycle could be permitted on Forest System lands. Each of these lifecycle stages is concerning in its own right, as elaborated on below. The Forest Service must clarify whether these different stages could be permitted now, and/or via the Proposed Rule, or if the Forest Service would prohibit any of these dangerous activities altogether.

a. Carbon capture facilities

The Proposed Rule’s broad language would authorize the exclusive and perpetual use of Forest Service lands for the “capture” of CO₂. This is concerning and should be clarified (or prohibited) in a final rule. Currently-proposed carbon capture facilities include ethanol plants, coal-fired power plants, and biomass power plants.⁷⁷ Direct Air Capture (“DAC”) facilities are similarly large and heavily industrialized uses that require large energy inputs and significant disruptive infrastructure to facilitate the capture and storage of carbon on-site.⁷⁸

This Proposed Rule’s inclusion of “capture” means industrial buildings and facilities can—for the first time ever—be permanently sited on Forest Service land for the profit and benefit of private industry. No other industry benefits from this permanent right to occupy and use public lands, not even housing built to benefit community members and Forest Service staff.⁷⁹ The fact that these facilities would require additional permits (for example new transmission lines or natural gas pipelines across national forests to serve the needs of DAC or CCS facilities) also suggests that this new precedent of permanent permits will lead to more associated permits that are, in effect, permanent because they are linked to carbon capture. These heavy industries, be it CCS or DAC, would convert national forests and grasslands into brownfield industrial development, forever ending the sustainable uses and living ecosystems that are currently part of the agency’s core mission and work.

As an example of the impacts a capture facility can have, the agency can look at the proposal to add capture to a coal-fired power plant in North Dakota. In its Environmental Assessment (“EA”) for the facility, the Department of Energy notes: “A new water appropriation of 15,000 acre-feet from the Missouri River has been approved by the North Dakota State Water Commission to supply the water needs.”⁸⁰ This new water appropriation is for *nearly five billion*

⁷⁶ Land Uses; Special Uses; Carbon Capture and Storage Exemption, 88 Fed. Reg. 75530 (emphasis added).

⁷⁷ See, e.g., Table of EPA’s Draft and Final Class VI Well Permits, EPA <https://www.epa.gov/uic/class-vi-wells-permitted-epa> (last visited Dec. 28, 2023).

⁷⁸ BARNABY PACE ET. AL., DIRECT AIR CAPTURE, BIG OIL’S LATEST SMOKESCREEN (Lindsey J. Durland & Lani Furbank eds., Ctr. Int’l Env’t Law 2023), <https://www.ciel.org/wp-content/uploads/2023/11/Direct-Air-Capture-Big-Oils-Latest-Smokescreen-November-2023.pdf>.

⁷⁹ Andrew Kenney, *Mountain Towns Need Housing. The U.S. Forest Service Has Land. Guess What Happens Next*, CPR NEWS (Sep. 27, 2023, 4:00 AM), <https://www.cpr.org/2023/09/27/dillon-affordable-housing-development-us-forest-service/>.

⁸⁰ U.S. DEP’T OF ENERGY, DOE/EA-2197D, DRAFT ENVIRONMENTAL ASSESSMENT FOR NORTH DAKOTA CARBONSAFE: PROJECT TUNDRA, at 2-8 (2023), <https://www.energy.gov/sites/default/files/2023-08/draft-ea-2197-nd-carbonsafe-chapters-2023-08.pdf>.

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gallons per year, and is indicative of the huge water quantity and quality impacts that can be expected from carbon capture facilities enabled and possibly authorized by the Proposed Rule.

Additionally, adding carbon capture to the North Dakota project would increase its power demand by 1.9 million megawatt hours per year. This suggests that capture projects on Forest Service lands will require additional transmission lines, and potentially natural gas pipelines for DAC, leading to more impacts to national forests and grasslands due to associated infrastructure that is necessary for these heavily industrialized facilities.

Capture facilities also generate significant quantities of wastewater. For example, the North Dakota coal plant's EA indicates that the project's polluted water will be injected near the project in two Class 1 injection wells.⁸¹ While other kinds of carbon capture facilities may generate different kinds of pollutants, they all will require large amounts of water⁸² that will end up degraded and will need to be disposed of in some way. Allowing polluted water to flow into national forests and grasslands, or to be injected into the ground water below, because carbon capture facilities have been permitted there, would be a misuse of public lands and waters.

b. Carbon transportation

Captured carbon dioxide must be compressed and transported in some manner. While the oil and gas industry has some experience with carbon pipelines used in EOR in some parts of the country, the new rush to profit from CCS/DAC subsidies has motivated a new generation of pipeline proposals cutting across states and ecosystems that have never before been impacted by CO₂ pipelines. The risks CO₂ pipelines pose to people, wildlife, and ecosystems is detailed in this letter. The Forest Service should further consider recent examples of pushes to build new CO₂ pipelines because these examples illustrate why the Forest Service should not even entertain the idea of permanently permitting carbon dioxide transport through national forests and grasslands.

One company proposing a carbon pipeline in parts of Minnesota has requested a 500-foot construction right-of-way, with a 25- to 50-foot perpetual right of way after construction.⁸³ These hundreds of miles of linear infrastructure lead to cuts through forests and waterways that can be seen from space, and pipeline corridors are maintained with herbicides and other destructive management techniques to prevent regrowth of trees that could interfere with pipeline maintenance.⁸⁴ This necessity to keep the ground relatively bare, and use dangerous chemicals for maintenance, fragments habitat⁸⁵ and introduces pesticides in areas that were relatively untouched prior to development. Habitat degradation and the increase of chemical use across all

⁸¹ *Id.* at 3-41.

⁸² Lorenzo Rosa et al., *The Water Footprint of Carbon Capture and Storage Technologies*, 140 RENEWABLE & SUSTAINABLE ENERGY REVS. 110773 (2021), <https://www.sciencedirect.com/science/article/abs/pii/S1364032120307978>.

⁸³ Fritz Busch, *Landowners to Host CO₂ Pipeline Information Meeting*, THE JOURNAL (Jan. 21, 2023), <https://www.nujournal.com/news/local-news/2023/01/21/landowners-to-host-co2-pipeline-information-meeting/>.

⁸⁴ *See, e.g.*, TRANSMOUNTAIN, INTEGRATED VEGETATION MANAGEMENT PLAN FOR BRITISH COLUMBIA RIGHTS-OF-WAY (2021), https://docs.transmountain.com/IVMP_BC_-ROW-Final.pdf.

⁸⁵ Lillie Langlois et al., *Linear Infrastructure Drives Habitat Conversion and Forest Fragmentation Associated with Marcellus Shale Gas Development in a Forested Landscape*, 197 J. ENV'T MGMT. 167 (2017), <https://www.sciencedirect.com/science/article/abs/pii/S0301479717302608> (Pipelines were by far the largest contributor to the fragmentation of core forest due to shale gas development.).

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national forests and grasslands under the Proposed Rule would be a significant harm to listed species and the many other plants and animals that rely on public lands for their continued survival.

Below the surface, the carbon pipeline proposed in Minnesota would be sited four feet below ground.⁸⁶ Underground pipelines not only block normal flow of groundwater and therefore serve as dams that disrupt natural water flow,⁸⁷ they’ve also been linked to highly damaging aquifer breaches⁸⁸ that endanger drinking water reserves as well as unique, irreplaceable, and fragile natural features that depend on upwelling groundwater, such as calcareous fens.⁸⁹ By blocking groundwater flow in saturated soils such as peatlands, pipelines can effectively drain these wetlands and cause large amounts of carbon emissions from dried and degraded peat.⁹⁰ Destruction of peatland is a significant driving force of GHG emissions from natural landscapes.⁹¹ Aquifer breaches can also deplete and alter natural wetland development that creates necessary habitat for waterfowl and other animals and plants.⁹² The damage to biodiversity is also potentially significant when considering the many linear miles of disruption caused by any single pipeline project.

Another new CO₂ pipeline company, in filings to a state regulator in South Dakota, demonstrated that the dangerous plume expected from a pipeline rupture is broad enough to impact wildlife and people over a large area along either side of the proposed route. The maps of plume impacts that could incapacitate people or vehicles anticipated from a breach reached 1,855 feet in both directions, with a full diameter of 3,710 feet, or 0.7 miles.⁹³

⁸⁶ Busch, *supra*.

⁸⁷ Xiaofei Yu et al., *Effects of Pipeline Construction on Wetland Ecosystems: Russia–China Oil Pipeline Project (Mohe-Daqing Section)*, 39 *AMBIO* 448, 448 (2010), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3357716/> (“The construction will alter the existing hydrologic regime of these wetland areas in two ways. It will block the surface water flows or change the flow directions because of the soil or spoil deposition, and block the shallow groundwater flows directly.”).

⁸⁸ Kirsti Marohn, *DNR Confirms New Line 3 Aquifer Breach in Northern Minnesota*, *MPR NEWS* (Jul. 28, 2023), <https://www.mprnews.org/story/2023/07/28/new-line-3-aquifer-breach-minnesota-oil-pipeline>.

⁸⁹ MINNESOTA DEP’T OF NAT. RES., *CALCAREOUS FENS FACT SHEET* (2018), https://files.dnr.state.mn.us/natural_resources/water/wetlands/calcareous_fen_fact_sheet.pdf.

⁹⁰ The IPCC recognized that conserving and maintaining peat lands is necessary to prevent further anthropogenic climate change. See IPCC, *Summary for Policymakers*, in *SPECIAL REPORT ON CLIMATE CHANGE AND LAND* (Shukla et al. eds., 2019), <https://www.ipcc.ch/srccl/chapter/summary-for-policymakers/>. (“While some response options have immediate impacts, others take decades to deliver measurable results. Examples of response options with immediate impacts include the conservation of high-carbon ecosystems such as peatlands, wetlands, rangelands, mangroves and forests.”).

⁹¹ See Joannie Beaulne et al., *Peat Deposits Store More Carbon Than Trees in Forested Peatlands of the Boreal Biome*, *SCI. REPS.* 2021. <https://www.nature.com/articles/s41598-021-82004-x>.

⁹² See *Understanding the Line 3 Aquifer Breach and Spills*, *MINN. ENV’T P’SHIP.* (last visited Dec. 29, 2023), <https://www.mepartnership.org/line3/aquifer-breach/> (discussing the scope of harm caused by aquifer breaches associated with pipeline construction in Minnesota); U.S. DEP’T AGRIC., *EFFECTS OF WETLAND HABITAT QUALITY AND DROUGHT ON BREEDING WATERFOWL* (2022) <https://www.nrcs.usda.gov/publications/ceap-wetland-2022-WetlandHabitatQualityDroughtBreedingWaterfowl.pdf> (discussing how water availability and variability due to drought is a contributing factor harming water fowl and their habitat).

⁹³ Cory Allen, *Navigator Releases Not-So-Complicated Carbon Dioxide Plume Maps*, *DAKOTA FREE PRESS*, (Aug. 8, 2023), <https://dakotafreepress.com/2023/08/28/navigator-releases-not-so-complicated-carbon-dioxide->

Additionally, beyond the more recent one-off applications for new pipelines discussed above, it is also clear that this new industry will lead to heavier and heavier impacts as it matures. Because pipelines are so harmful to the habitat they fragment, they are often grouped together to create pipeline corridors.⁹⁴ This does not decrease harms so much as concentrate them in specific communities and habitats. Researchers also note that wider rights-of-way and the roads built to access and accompany this infrastructure have their own harmful impacts.⁹⁵

c. Carbon dioxide injection

The Proposed Rule states that, “Storing carbon dioxide in pore spaces is intended to mitigate greenhouse gas emissions and is performed via Class VI underground injection control wells.”⁹⁶ But it is simply untrue that Class VI wells are the only type of well used for storing carbon dioxide underground, and the Proposed Rule does not explicitly say special use permits may be issued *only for* Class VI wells. Accordingly, the Forest Service must clarify whether it would only authorize Class VI wells in a final rule.

While Class VI wells have their problems (and the regulations do not require 1,000-year permanency, see elsewhere in this comment letter), they are preferable to Class II wells or other types of injection wells or mineralization only because the regulations are slightly more robust. There is a high likelihood that the oil industry will seek to expand the instant rulemaking to include its favored type of “storage,” i.e., injection to exploit depleted oil fields using Class II permits. The Forest Service must not allow Class II wells or mineralization on its lands, as this would enable extraction of more fossil fuels and therefore it would greatly add to the climate crisis.

Finally, and well classes aside, the Forest Service should closely investigate the failure rate of well caps in national forests and grasslands to better understand how many leaking wells already exist and the likelihood that new CO₂ injection wells would fail and leak if installed and managed by the same industry that built the existing faulty wells on public lands. This is not just a job for EPA. Without a full understanding of the legacy and orphan well problem it is not appropriate for the agency to make the problem worse by encouraging high-pressure injection into adjacent geologies.

[plume-maps/](#). While illustrative of the immediate harm conceded by the industry, these numbers may not even show the full extent of the dangers of the plume following a pipeline rupture. This proposed project was never fully permitted in South Dakota, and this plume modeling has not been verified by independent experts or regulators, so these estimates—while concerning on their face—should also be viewed as a minimum anticipated zone of danger.

⁹⁴ See Lillie A. Langlois et al., *Collocating Pipelines to Minimize Fragmentation: Evaluating Ecological Costs of a Shale Gas Mitigation Practice*, J. WILDLIFE MGMT., Sept. 2023

<https://wildlife.onlinelibrary.wiley.com/doi/pdfdirect/10.1002/jwmg.22468> (“Collocation is a mitigation practice that sites new pipelines adjacent to existing surface disturbance such as forest roads; it reduces core forest loss but may have associated ecological costs, defined as negative effects on native species and ecosystems.”).

⁹⁵ *Id.* (“Our study indicates the expansion of forest roads to collocated pipelines exacerbates the negative ecological effects already present with the existing road including increased edge avoidance by a forest interior species, greater barrier effects for all 3 territorial forest songbirds, and increased access for brown-headed cowbirds into core forest. We support collocation as a mitigation strategy but emphasize restricting overall corridor width to reduce the additional ecological costs associated with this practice.”).

⁹⁶ 88 Fed. Reg. 75530.

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XIII. The Forest Service Must Address the Gaps Between the Proposed Rule And EPA’s Class VI Injection Well Regulations.

There are numerous instances of dissonance, lack of synchronicity, and unexplained questions with regards to how the Forest Service and its Proposed Rule will interact with EPA’s issuance of CO₂ injection permits. The Forest Service must address each of these before issuing a final rule.

First, as explained in the Proposed Rule announcement, “[s]toring carbon dioxide . . . is performed via Class VI underground injection control wells.”⁹⁷ Established under the Safe Drinking Water Act (“SDWA”) (42 U.S.C. § 300f *et seq.*), Class VI wells are administered by the U.S. Environmental Protection Agency (“EPA”) (40 C.F.R. parts 144, 146). Yet while EPA regulates many aspects of Class VI wells,⁹⁸ EPA’s sole, statutory focus when reviewing and issuing Class VI permits is whether the proposed injection well could endanger *underground* sources of drinking water (“USDWs”).⁹⁹ The protection of USDWs is an important, but narrow, consideration. In contrast, Forest Service is directed to consider and manage much more (water, trees, wildlife, recreation, etc.) on the *surface* of national forest lands.¹⁰⁰ While the Proposed Rule text acknowledges that project-specific reviews “would have to meet all other screening criteria, including but not limited to consistency with the applicable land management plan, potential risks to public health or safety, conflicts or interference with authorized uses of NFS lands or use of adjacent non-NFS lands,” there is no indication that the Forest Service would evaluate the actual *injection* components and long-term monitoring and maintenance of wells beyond what EPA is providing for protection of USDWs. This is a problem, and this gap must be addressed before a final rule goes into effect.

Second, the Forest Service must address that, on one hand, supposedly the injected CO₂ may remain for “over 1,000 years after injection,”¹⁰¹ while on the other hand, EPA’s regulations require only that Class VI permit holders monitor the injection site for 50 years (or less) following the end of injection to ensure that the project does not endanger USDWs.¹⁰² The gap between 50 and 1000 years is quite large, and the Forest Service cannot allow the CO₂ injected to remain unmonitored or remediated during that time. The Proposed Rule must therefore explain both how monitoring will occur, and what entity will be financially responsible for remediation, emergency response, and other issues after the 50 years. Similarly, the Forest Service must explain how—during the 50 years in which the Class VI operator is monitoring for harms to USDWs—the Forest Service will monitor for harms *beyond* those posed to USDWs. Further, the rule should explain how the Forest Service will oversee and revoke *permanent* permits when the

⁹⁷ *Id.*

⁹⁸ *Id.* (“To protect public health and underground sources of drinking water for these wells, including for those that may be sited on NFS lands, the EPA regulates all aspects of the wells, including siting, construction, injection operations, testing and monitoring, emergency response, financial responsibility, and plugging and closure of the wells and injection sites through permitting, site inspections, required reporting, and compliance reviews.”).

⁹⁹ 40 C.F.R. § 144.12(a) (“No owner or operator shall construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water”).

¹⁰⁰ 16 U.S.C. §§ 528-531.

¹⁰¹ 88 Fed. Reg. 75530.

¹⁰² 40 C.F.R. § 146.93.

permittee does not meet the standards that the agency imposes in order to assure 1000-year storage.

Third, EPA told Congress that its typical processing time for Class VI permits is approximately 24 months.¹⁰³ The Forest Service must explain in the Proposed Rule how its review of project-specific proposals for CO₂ injection will fit with EPA’s review of Class VI permit applications. The Forest Service has not addressed whether it could approve a specific project proposal before a Class VI well is approved, or if a Class VI permit must issue before the Forest Service will consider a project proposal, and then how each agency’s review will be informed by considerations and information gathered by the other agency. Not clarifying (and ensuring) a stepwise process will put the public in a disadvantageous position for commenting on both project proposals and draft permits, and result in de facto piecemealing of CO₂ injection review.

XIV. The Proposed Rule Is Not Harmonizing the Forest Service’s Regulations With Other Federal Agencies Because There Has Been No Other Regulatory Change to Allow CO₂ Injection on Federal Lands.

The Forest Service claims the Proposed Rule “would harmonize the framework between the federal government’s two largest land managers by aligning with *regulatory structures* already established for the U.S. Department of Interior’s Bureau of Land Management.”¹⁰⁴ This statement is inaccurate and misleading. In 2022, the Bureau of Land Management (“BLM”) issued an Instructional Memorandum (“IM”) addressing CCS rights-of-way on federal lands.¹⁰⁵ An IM is *not* a regulatory change, meaning it does not have the force of law and the public did not have a chance to comment. An IM can be changed at the discretion of BLM’s Director. On the other hand, a regulatory change—such as what the Forest Service is proposing here—has the force of law, requires public comment, and can only be changed through a rulemaking process guided by the Administrative Procedure Act. In other words, the Forest Service’s Proposed Rule is the *first ever* regulation-level change to explicitly contemplate CO₂ injection on federal lands. Instead of harmonizing with BLM, the Forest Service is moving into uncharted territory without understanding or assessing the implications of this major change—and simply should not do so, for the reasons discussed herein.

As noted by Representatives Huffman and Grijalva in their letter to the Forest Service requesting a comment extension, “Opening our national forests and grasslands to the potential for permanent and exclusive permits for carbon dioxide waste injection and storage sets a dangerous precedent.”¹⁰⁶

¹⁰³ EPA, REPORT TO CONGRESS: CLASS VI PERMITTING at 15 (2022), <https://www.epa.gov/system/files/documents/2022-11/EPA%20Class%20VI%20Permitting%20Report%20to%20Congress.pdf>.

¹⁰⁴ USDA Forest Service proposes rule to facilitate carbon capture and sequestration permitting on national forest lands, USDA (Nov. 3, 2023), <https://www.fs.usda.gov/news/releases/usda-forest-service-proposes-rule-facilitate-carbon-capture-and-sequestration> (emphasis added).

¹⁰⁵ BLM INSTRUCTIONAL MEMORANDUM 2022-041 (June 8, 2022), <https://www.blm.gov/policy/im-2022-041>.

¹⁰⁶ Letter from Reps. Huffman and Grijalva to Thomas J. Vilsack and Randy Moore, U.S.D.A. and U.S.F.S. (Dec. 6, 2023).

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CONCLUSION

Thank you for considering our comment. That said, we are disappointed that the Forest Service ignored and did not grant a comment extension,¹⁰⁷ and failed to respond to a December 7, 2023 letter and email raising the issue of incorrect comment instructions in the agency’s Federal Register notice.¹⁰⁸ The public deserves better engagement from the agency and ample time for commenting and consultation should this proposal move forward.

Because of the concerns raised herein, we ultimately urge the Forest Service to withdraw this Proposed Rule in its entirety and to not open the door for perpetual and exclusive rights to change our national forests and grasslands forever through dangerous, destructive, and unnecessary pollution dumping.

Please contact Victoria Bogdan Tejada (vbogdantejada@biologicaldiversity.org) and Hudson Kingston (HUDSON@curemn.org) should you have any questions.

Thank you,

350 Bay Area Action

350 Eugene

350 Massachusetts

350 Rutland County

350.org

350 Hawaii

7 Directions of Service

Alliance for the Wild Rockies

Alliance of Nurses for Healthy
Environments

Animals Are Sentient Beings, Inc

Ashby Conservation Commission

Athens County's Future Action Network

Battle Creek Alliance/Defiance Canyon

Raptor Rescue

Beaver County Marcellus Awareness

Community

Bee Friendly Williamstown

Berks Gas Truth

Better Path Coalition

Between the Waters

Biofuelwatch

Black Hills Group of the Sierra Club

Bold Alliance

Breathe Easy Berkshires

Breathe Easy Susquehanna County

Breathe Project

Buckeye Environmental Network

Cascadia Wildlands

Center for Biological Diversity

Center for International Environmental Law

Center on Race, Poverty & the Environment

Chattooga Conservancy

Citizens for Clean Water

CleanEarth4Kids.org

Clean Up the River Environment (CURE)

Climate Action California

Climate Communications Coalition

Climate Hawks Vote

Climate Reality Pittsburgh & SWPA Chapter

Climate Reality, Western New York Chapter

Climate Writers

Compressor Free Franklin

Concerned Citizens of Franklin County

Concerned Health Professionals of

New York

Earth Action, inc.

Eastern Oregon Legacy Lands

¹⁰⁷ See, e.g., Ctr. for Biological Diversity et al., Request for Extension of Comment Period on the U.S. Forest Service’s Proposed Rule (Nov. 10, 2023),

https://www.biologicaldiversity.org/programs/public_lands/forests/pdfs/23-11-10-Request-for-Extension--USFS-RIN-0596-AD55-140-groups.pdf.

¹⁰⁸ Ctr. for Biological Diversity et al., Extension Request Addendum (Dec. 7, 2023).

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Eco-Justice Collaborative
Endangered Species Coalition
Environmental Health Project
Environmental Integrity Project
Environmental Protection Information
Center- EPIC
Extinction Rebellion San Francisco
Bay Area
Extinction Rebellion Vermont
Franklin County Climate Crisis Task Force
Food and Water Watch
Forces for Nature, LLC
Forest Keeper
Forest Web
Forests Forever
Fossil Free California
Fossil Free Tompkins
FracTracker Alliance
Friends of the Clearwater
Friends of the Kalmiopsis
Gallatin Wildlife Association
Georgia ForestWatch
Global Justice Ecology Project
Great Old Broads for Wilderness, Zootown
Greater Hells Canyon Council
Green Cove Defense Committee
Greenbrier River Watershed Association
Greenfire Coalition Writers' Forum
GreenLatinos
Healthy Gulf
Highland Park Ecology and Environmental
Group
Hilltown Vision
Indigenous Environmental Network
Inland Empire Task Force
Institute for Agriculture and Trade Policy
Institute for Policy Studies Climate
Policy Program
Interfaith EarthKeepers
John Muir Project
Kentucky Heartwood
Kentucky Resources Council, Inc.
Kettle Range Conservation Group
KY Student Environmental Coalition
Labor Rise Climate Jobs Action Group
Lake Maurepas Preservation Society
LaPlaca and Associates LLC
Lexington Climate Action Network
Long Beach Alliance for Clean Energy
Long Island Progressive Coalition
Los Padres ForestWatch
Massachusetts Forest Watch
Mass.Interfaith Power & Light, Inc.
Mid-Ohio Valley Climate Action
Milwaukee Riverkeeper
Minnesota Center for Environmental
Advocacy
MW & Associates
Native Village of Dot Lake
Natural Resources Law
Natural Solutions Team of Elders Climate
Action MA
NC Climate Justice Collective
NEPA Green Coalition
Network for a Sustainable Tomorrow
New Jersey Forest Watch
New Jersey Highlands Coalition
New Mexico Wild
No False Solutions PA
No Fracked Gas in Mass
North American Climate, Conservation
and Environment
North Braddock Residents For Our Future
North Parish of North Andover Climate
Justice
Northeast Ohio Climate Reality Project
Northeastern Minnesotans for Wilderness
North Jersey Pipeline Walkers
Nuclear Energy Information Service (NEIS)
NYPAN of the Southern Finger Lakes
Ohio Valley Allies
Oil and Gas Action Network
Okanogan Highlands Alliance
Old-Growth Forest Network
Partnership for Policy Integrity
Penn. Alliance for Clean Water and Air
Penn. Intergenerational Climate Action
People for a Healthy Environment
People Over Petro Coalition
Physicians for Social Responsibility (PSR)
PSR- Greater Boston
PSR- Iowa

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PSR- Pennsylvania	at UIUC
Pipe Line Awareness Network for the Northeast, Inc.	Sunflower Alliance
Planning and Conservation League	Swan View Coalition
Prairie Protection Colorado	Taproot Earth
Preserve Montgomery County VA	Terra Advocati
Property Rights and Pipeline Center	The Enviro Show
Protect Our Water, Heritage, Rights	The Forest Advocate
Protect Our Woods	The People’s Justice Council
Protect Wild Petaluma	The Quantum Institute
Public Employees for Environmental Responsibility	The Vessel Project of Louisiana
Public Goods Institute	Third Act Pennsylvania
Putnam Progressives	Thurston Climate Action Team, Tree Action Group
Quittapahilla Watershed Association	Tikkun Olam Productions
Rail Pollution Protection Pittsburgh	Turtle Island Restoration Network
Resist the Pipeline	Upper Valley Affinity Group (Vermont)
Resource Renewal Institute	Umpqua Natural Leadership Science Hub
RESTORE: The North Woods	Unite North Metro Denver
Santa Cruz Climate Action Network	United Plant Savers
Santa Fe Forest Coalition	Upper Peninsula Environmental Coalition
Save Massachusetts Forests	Wall of Women
Science and Environmental Health Network	WaterLegacy
Seneca Lake Guardian	Waterspirit
Sequoia ForestKeeper	We Advocate Thorough Environmental Review
Sierra Club Delta Chapter	Wendell State Forest Alliance
Solidarity INFOService	Western Environmental Law Center
Sonoma County Climate Activist Network	Wild Heritage
South Coast Neighbors United	WildEarth Guardians
Southern Oregon Climate Action Now	Williams Community Forest Project
Standing Trees	Winter Wildlands Alliance
Stop the Pipeline	Women's Earth and Climate Action Network (WECAN) International
Stop VT Biomass	Yaak Valley Forest Council
Students for Environmental Concerns	

Cc:

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