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SABIN CENTER FOR CLIMATE CHANGE LAW

September 21, 2026

Brooke L. Rollins
Secretary of Agriculture
U.S. Department of Agriculture

Attn: Joshua White, Acting Director
Ecosystem Management Coordination
U.S. Forest Service
201 14th Street SW
Washington, DC 20250

Re: Proposed Rescission of the 2001 Roadless Area Conservation Rule (RIN 0596-AD66 / Docket FS-2025-0001)

Dear Secretary Rollins:

The Sabin Center for Climate Change Law (“Sabin Center”) submits these comments in response to the proposed rescission of the 2001 Roadless Area Conservation Rule (“Roadless Rule”).¹ The U.S. Forest Service (“USFS”) claims that rescinding the Roadless Rule is necessary to provide greater flexibility for active forest management to address increasing wildfire risk, insect and disease outbreaks, and other forest health concerns. However, the supporting analysis provides no basis for concluding that rescinding the Roadless Rule will advance these objectives. To the contrary, the Draft Environmental Impact Statement (“DEIS”) shows that this action will increase wildfire risk and ecological harm by opening protected areas to human development and extractive uses.²

The DEIS also contains numerous analytical errors and omissions, including in its treatment of wildfire risk, invasive species and pest outbreaks, watershed protection, biodiversity, and climate change. Essentially all of the claims about environmental benefits are based on unsupported assertions about hypothetical management activities that are not part of the proposed action. At the same time, the DEIS repeatedly minimizes, dismisses, and ignores significant environmental risks without adequate analysis or evidentiary support.

The proposal is fundamentally misguided as a matter of policy, the purported justification is arbitrary and capricious, and the supporting analysis is rife with errors. We urge USFS to withdraw this proposal and maintain the Roadless Rule protections.

¹ Proposed Rule: Special Areas; Roadless Area Conservation, 91 Fed. Reg. 53,827 (Aug. 20, 2026).

² USFS, DRAFT ENVIRONMENTAL IMPACT STATEMENT: 2001 ROADLESS AREA CONSERVATION RULE RESCISSION, Project #68605 (August 2026) (hereinafter “DEIS”).

I. The Proposed Rescission Would Undermine USFS’s Stated Policy Objectives

1. Context and Justification for this Action

The 2001 Roadless Rule prohibits road construction and commercial timber harvest on 58.5 million acres of inventoried roadless areas (IRAs) in the National Forest System (NFS). The rule was enacted to preserve the social and ecological values of undeveloped forest lands – including benefits related to watershed protection, ecosystem health, and habitat conservation – and to protect these areas for the long-term benefit of present and future generations.³ Research suggests that the rule has been highly effective at achieving these goals: IRAs are among the highest integrity forest ecosystems in the United States, and the absence of roads and other human developments significantly reduces environmental risks such as wildfire ignitions and the spread of invasive species.⁴ These conclusions are supported by USFS monitoring data and research.⁵

USFS is now proposing to lift protections on 44.7 million acres of IRAs (encompassing all roadless areas outside of Colorado and Idaho, which regulate the remaining areas under state programs), or in the alternative, 31.7 million acres. Both options would remove protections from 9.3 million acres in the highly sensitive Tongass National Forest in Southeast Alaska. The repeal would open all of these presently protected areas to road construction, commercial timber harvest, and other development activities, including oil and gas extraction.

In the DEIS section on “Purpose and Need”, USFS claims that repeal of the Roadless Rule is warranted because: (i) conditions have changed substantially since 2001, with increasing drought, extreme temperatures, wildfire frequency and severity, and insect and disease outbreaks; (ii) “there is a need to increase local management flexibility and, where necessary, allow for active management to respond to changing and localized conditions, such as increasing wildfire risk, the spread of insect and disease infestations, and the need for community protection in the wildland-urban interface;” and (iii) the rule may limit its ability to conduct vegetation management in roadless areas.⁶

USFS also alludes to extractive uses in the “Purpose and Need” statement, referring to the multiple use mandate for National Forest System (NFS) lands. However, USFS does not specifically cite commercial timber harvests or other extractive uses as justifications for the proposal. Rather, the project rationale is based almost entirely on the need for “local control” and “flexibility” as they relate to “vegetation management” and “active management” to address changing conditions. Increases in timber harvests and extractive uses are treated as outcomes of the action, but not the motivating rationale.

³ See 36 CFR Part 294; 16 U.S.C. §1609.

⁴ David J. Mildrexler et al., *Roadless rule rescission threatens highest integrity forest ecosystems in the United States*, 321 BIOLOGICAL CONSERVATION 111950 (2026).

⁵ See, e.g., Sean P. Healey, *Long-term forest health implications of roadlessness*, 15 ENVIRONMENTAL RESEARCH LETTERS 104023 (2020))

⁶ DEIS at 10.

2. *Misalignment Between Justification and Outcomes*

There is a fundamental mismatch between how USFS has characterized the purpose and need for this project and what is actually being proposed. There is no evidence that opening these lands for road construction, timber harvests, and other extractive uses will assist USFS in responding to the changing conditions outlined in the “Purpose and Need” statement. To the contrary, the DEIS shows that this action will result in more wildfire ignitions, more pest and disease outbreaks, degradation of watersheds, and other harmful impacts – all of which will place additional burdens on forest managers, firefighters, water agencies, affected communities and other stakeholders. In other words, the action will undermine, rather than advance, USFS’s stated objectives by exacerbating the very problems that USFS says it needs to address.⁷

USFS claims that these adverse environmental impacts will be “small” or “insignificant” because road construction will create new opportunities for vegetation management and fuel treatment projects. However, the proposal does not contain any commitment to conduct such projects, and the DEIS does not find that such projects are even likely. Rather, the DEIS treats these projects as a hypothetical possibility (e.g., it does not attempt to quantitatively forecast or otherwise forecast any foreseeable increase in treated acres or corresponding effects on fire and forest health). In contrast, the DEIS suggests that one primary outcome of this action will be to increase national timber harvest by an estimated 5-10%, with nearly 5 million acres that will likely be made available for commercial logging.⁸

Moreover, the DEIS does not demonstrate that the Roadless Rule is actually preventing needed vegetation management projects. The reality is that budget and funding constraints – which have been exacerbated by recent budget cuts and staff layoffs – are the primary barrier to active forest management.⁹ The repeal of the Roadless Rule will not generate funds for vegetation management projects; to the contrary, the DEIS says that any anticipated revenue from timber sales and other resource extraction would be used to *partially* offset road construction and maintenance costs. USFS is already facing a deferred maintenance backlog of \$6.9 billion for roads and bridges,¹⁰ and repealing the Roadless Rule will ultimately exacerbate this problem because the anticipated revenue from extractive activities “would not be sufficient to cover the costs of constructing and maintaining all new roads related to a project.”¹¹ The DEIS ultimately concludes that any increase in “treatment capacity” would be “modest” due to the “high cost of road building and declining budgets for road construction and maintenance.”¹²

Finally, the DEIS does not establish that existing exceptions under the Roadless Rule – which allow tree cutting for forest health projects and wildfire risk reduction, as well as road building to address imminent and catastrophic safety risks – are insufficient to support needed vegetation

⁷ See Part II for an in-depth discussion of these environmental issues.

⁸ DEIS at 220.

⁹ *Id.* at 73, 80, 85.

¹⁰ *Id.* at 43.

¹¹ *Id.* at 45.

¹² *Id.* at 225.

management actions. If these exceptions are too restrictive, this could be addressed through a much narrower rule amendment that does not open these lands to commercial logging and oil and gas extraction. For example, the Idaho Roadless Rule authorizes temporary road construction to reduce hazardous fuel conditions when specific conditions are met.¹³ The Colorado Roadless Rule also authorizes temporary road construction to address wildfire hazards to at-risk communities and municipal water supply systems, and where needed to “maintain or restore ecosystem composition, structure, and processes” within designated Community Protection Zones.¹⁴

In sum: USFS has offered an explanation for this action that runs counter to the evidence before the agency. The proposed action is therefore arbitrary and capricious under the Administrative Procedure Act (APA).¹⁵

II. The DEIS Fails to Adequately Assess the Impacts of Rescinding the Roadless Rule

The DEIS shows that the repeal of the Roadless Rule will result in the degradation of resource values and exacerbation of environmental harms across many different impact areas, but it repeatedly downplays the severity of these impacts, often concluding – without adequate substantiation – that any adverse impacts will be small or insignificant because they will be offset by the benefits of road access. These conclusions are based on assumptions about hypothetical management projects for which there are no firm commitments or funding, and they are directly contradicted by data showing significant differences in environmental indicators between roadless and non-roadless areas.

The DEIS is also deficient due to its cursory analysis of carbon sequestration impacts, its complete failure to discuss how climate change is affecting NFS resources, and its asymmetrical analysis of uncertainty as it relates to beneficial and harmful impacts. The following sections describe these analytical problems as they relate to USFS’s assessment of wildfire risk, invasive species, water quality, biodiversity impacts, scientific uncertainty, and climate change.

1. Wildfire Risk

The DEIS acknowledges that road construction and human development will potentially increase human-caused wildfire ignitions in roadless areas, but it concludes that the net effect on wildfire risk is likely small or insignificant because new roads could provide access for fuel treatments and firefighting. As explained below, this conclusion is impossible to reconcile with the evidentiary record.

¹³ 36 C.F.R. § 294.23(b)(3).

¹⁴ 36 C.F.R. § 294.43(c)(1)(vi)-(vii).

¹⁵ See 5 U.S.C. § 706(2)(A) (agency action may be set aside if it is arbitrary, capricious, an abuse of discretion or otherwise not in accordance with the law); *Motor Vehicle Manufacturers Ass’n v. State Farm*, 463 U.S. 29, 43 (1983).

The data contained within the DEIS shows that there is a strong correlation between roads and wildfire ignitions. As illustrated in Table 18 of the DEIS, ignition density from 2014-2024 was nearly 4x higher on NFS lands that were not subject to Roadless Rule protections, and the area burned (as a percent of total land area) is also substantially higher on unprotected NFS lands. The findings in Table 18 are consistent with other research and datasets, including three decades of data showing increased density in NFS wildfire ignitions near roads.¹⁶

Table 18. Fire occurrence statistics for NFS land categories of other, potentially affected IRAs, and wilderness using fire occurrence records with a point of origin on NFS lands for years 2014-2024 from the Interagency Fire Occurrence Reporting Module (InFORM) Fire Occurrence Data Record (FODR)

Fire Occurrence Metric	Other NFS Lands	Potentially Affected IRAs	Wilderness
Total land area (acres)	88,828,539	40,062,119	29,278,987
Number of fires	40,811	5,305	3,960
Ignition density (fires/million acres/year)	41.8	12.0	12.3
Area burned (acres)	12,230,160	3,480,203	4,223,903
Area burned (percent of land area)	13.8%	8.7%	14.4%
Mean fire size (acres)	302	659	1,071

Despite clear evidence of increased ignitions near roads, the DEIS concludes that “increased human ignitions do not necessarily follow from increased road construction.”¹⁷ The DEIS does not cite any counter-examples to support its decision to treat increased ignitions as a hypothetical possibility rather than a guaranteed outcome of the proposed action. The DEIS also asserts that, even if there is an increase in ignitions, “the net impact of new roads on fire occurrence is likely small or insignificant” because: (i) ignition risk can be “targeted in wildfire prevention programs”, and (ii) the construction of roads will potentially result in improved firefighting response times and “initial attack success” resulting in shorter fire duration.¹⁸

Regarding the first explanation: as discussed above, the DEIS does not contain any commitments or funding for fuel treatment projects, nor does it establish that the Roadless Rule is actually preventing needed fuel treatment projects. So the mitigation potential is purely hypothetical. Moreover, given that more fires ignite and more acres burn in non-roadless areas, it is clear that road access – and any treatment projects enabled by that access – will not offset the additional wildfire risk created by this proposal.

Regarding the second explanation: the DEIS notes that fire containment times are substantially longer in roadless areas, and based on this, it assumes that new road construction will result in more rapid and effective fire suppression in those areas. This assumption is not supported by

¹⁶ Gregory H. Aplet et al., *Three-decade record of contiguous-U.S. national forest wildfires indicates increased density of ignitions near roads*, 22 FIRE ECOLOGY 8 (2026), <https://link.springer.com/article/10.1186/s42408-026-00450-2>. See also Sean P. Haley, *Long-term forest health implications of roadlessness*, 15 ENVIRONMENTAL RESEARCH LETTERS 104023 (2020), <https://iopscience.iop.org/article/10.1088/1748-9326/aba031/pdf>.

¹⁷ DEIS at 101.

¹⁸ DEIS at 105.

evidence, and it ignores the fact that longer containment times in roadless areas could be explained by the fact that USFS allows some naturally ignited fires to burn in natural areas. The DEIS itself recognizes that half of the fuel treatments in IRAs have historically come from wildfires. In other words: the longer containment times in these areas are not necessarily indicative of worse wildfire outcomes, and may be indicative of healthy forest management practices.

There are several additional factors that USFS has overlooked in its analysis of wildfire risk which are directly relevant to the purported rationale for this action:

- **Increased firefighting burden:** The DEIS treats the increase in firefighting activities as though it is a beneficial outcome of the proposed action, while ignoring the potential implications for firefighting resources and response abilities. Even if the DEIS were correct in its assumptions about road access and firefighting responses, the need to respond to additional ignitions – potentially 4x as many ignitions – would impose an enormous burden on firefighting agencies that are already over-encumbered.
- **Interference with natural fire:** Opening up natural lands to human development could interfere with USFS’s use of naturally ignited fires for forest management because USFS may need to increase suppression efforts in order to protect timber resources and built infrastructure. This would put additional strain on firefighting resources and reduce the number of acres that are treated through natural fire. These issues are not considered in the DEIS.
- **Timber harvests:** The DEIS also ignores the potential effect of timber harvests on wildfire risk. Research has shown that commercial logging typically increases wildfire risk and severity, rather than reducing it. The adverse effects of commercial logging can also make forests much more susceptible to wildfires driven by extreme weather.¹⁹ This is an important issue that must be considered in USFS’s NEPA analysis.²⁰
- **Climate change:** The DEIS ignores the fact that climate change can significantly increase wildfire risk and severity, and alter wildfire dynamics in ways that have important implications for this analysis. For example., human ignitions may become a more significant problem and suppression efforts may be less successful due to drier and hotter conditions. We discuss this omission in greater detail below.

In sum: USFS’s analysis of wildfire risk is inadequate, it has omitted key considerations from its assessment, and its conclusion that any increased risk will be “small or insignificant” is directly contradicted by the evidentiary record.

¹⁹ See Jacob I. Levin et al., *Extreme Weather Magnifies the Effects of Forest Structure on Wildfire, Driving Increased Severity in Industrial Forests*, 31 GLOBAL CHANGE BIOLOGY e70400 (2025), <https://onlinelibrary.wiley.com/doi/full/10.1111/gcb.70400>

²⁰ See *Bark v. U.S. Forest Service*, 958 F.3d 865 (9th Cir. 2020) (USFS failed to address the “considerable contrary and scientific expert opinion” regarding the relationship between commercial thinning and wildfire risk).

2. Invasive Species and Pest and Disease Outbreaks

USFS's assessment of invasive species and pest and disease outbreaks suffers from many of the same problems as the wildfire analysis. The DEIS recognizes that Roadless areas are “less likely to experience problems with non-native species” and that roads, logging, and increased development will contribute to the spread of invasive plants, insects, and pathogens.²¹ However, the DEIS concludes that the introduction and spread of invasive species “are not expected to greatly increase” with the opening of these areas, based on three assumptions: (i) the construction of roads will facilitate USFS efforts to detect, treat, and eradicate invasive species; (ii) the construction of roads will also result in fuel treatment projects that will reduce the potential for wildfire that could create large openings for the establishment of invasives; and (iii) future activities will comply with applicable laws and forest plan management standards.²²

Again, the DEIS is minimizing clearly foreseeable and significant adverse effects based on assumptions that lack evidentiary support and are contradicted by other findings. There are several specific problems with the analysis of this topic:

First, the DEIS does not adequately evaluate the risk of invasive species and pest and disease outbreaks. The section on “Non-Native Invasive Plant Species” contains only a short and primarily qualitative discussion of invasive species that does not meaningfully address the *difference* in the prevalence of invasives between roadless areas and non-roadless areas.²³ Oddly, the most relevant findings – i.e., that Roadless areas have fewer problems with non-native species,²⁴ and that non-native plants are twice as common within 500 feet of a road²⁵—appear in the DEIS section on biodiversity and habitat fragmentation, and are not cited anywhere in the section on invasive species. The DEIS also ignores an abundance of additional research showing that road construction and timber projects are significant vectors for the spread of invasive species and a major risk factor for pest and disease outbreaks.²⁶

²¹ DEIS at 136.

²² DEIS at 24, 108.

²³ DEIS at 106-108.

²⁴ DEIS at 136.

²⁵ DEIS at 134 (citing Healey (2020)).

²⁶ See, e.g., Thomas F. Carlin, *Modelling Vehicles as Vectors of Forest Pest and Pathogen Spread*, 36 *Journal of Forestry Research* 134 (2025), <https://doi.org/10.1007/s11676-025-01931-x>; Vanessa L. Jones & Jennifer Grenz, *A review of the impacts and management of invasive plants in forestry*, 18 *CABI REVIEWS* 1 (2023), <https://doi.org/10.1079/cabireviews.2023.0034>; David H. Peter & Timothy B. Harrington, *Effects of Forest Harvesting, Logging Debris, and Herbicides on the Composition, Diversity and Assembly of a Western Washington, USA Plant Community*, 417 *FOREST ECOLOGY & MGMT.* 18, 18–30 (2018), <https://doi.org/10.1016/j.foreco.2018.01.045>; Kellen Calinger et al., *Historic Mining and Agriculture as Indicators of Occurrence and Abundance of Widespread Invasive Plant Species*, 10 *PLOS ONE* e0128161 (2015), <https://doi.org/10.1371/journal.pone.0128161> (logging history Caroline Avon et al., *Management Practices Increase the Impact of Roads on Plant Communities in Forests*, 159 *BIOLOGICAL CONSERVATION* 24 (2013), <https://doi.org/10.1016/j.biocon.2012.10.008>; Jennifer L. Birdsall, Ward McCaughey & Justin B. Runyon, *Roads Impact the Distribution of Noxious Weeds More Than Restoration Treatments in a Lodgepole Pine Forest in Montana, U.S.A.*, 20 *RESTORATION ECOLOGY* 517 (2012), <https://doi.org/10.1111/j.1526-100X.2011.00781.x>; Thomas D. Lee & Jennifer H. Thompson, *Effects of Logging History on Invasion of Eastern White Pine Forests by Exotic Glossy Buckthorn (Frangula alnus P. Mill.)*, 265 *FOREST ECOLOGY & MGMT.* 201, 201–10 (2012),

Second, and relatedly, the DEIS downplays the role of roads and human development in spreading invasive species by treating this as “potential” risk despite strong evidence that roads construction, logging, and other development *will* contribute to the spread of invasive species and pests in national forests.²⁷

Third, regarding the three “mitigating” factors that the DEIS cites to support its conclusion about the magnitude of effect: (i) the action does not actually entail any commitments or funding for invasive species management, and USFS already has a huge backlog of areas that need to be treated for these issues, so that is a purely hypothetical and unlikely scenario; (ii) as discussed above, the action will increase wildfire risk, thereby increasing the opportunities for invasives to spread in the wake of severe wildfires; and (iii) the assumption that existing laws and management practices will prevent the spread of invasives is totally unsupported by the record and completely at odds with the project rationale. If new measures are needed to address the increasing “serious threat” of invasives and pest outbreaks, then existing laws and plan guidelines are clearly insufficient to address that risk. And since invasives are already more prevalent in areas with roads, there is no basis for treating new roads as a mitigating factor in this analysis.

3. Watershed Health and Drinking Water

The DEIS does not take a sufficiently hard look at the effects of this action on watershed health and drinking water systems, and reaches an unsupported conclusion about the “acceptable” nature of water quality impacts.²⁸

The DEIS briefly acknowledges that watersheds in roadless areas generally have good water quality compared to other NFS lands due to limited disturbance.²⁹ It also acknowledges that road construction may cause “runoff” and “reduced water quality.”³⁰ However, the DEIS does not adequately engage with available data and research showing that the construction of roads, logging, and other human activities can cause major degradation of water resources through increased sediment, altered stream temperature, altered runoff timing, altered peak flows, erosion, landslides and debris flows, altered watershed hydrology, and aquatic habitat degradation.³¹

<https://doi.org/10.1016/j.foreco.2011.10.035>; S. Luke Flory & Keith Clay, *Effects of Roads and Forest Successional Age on Experimental Plant Invasions*, 142 BIOLOGICAL CONSERVATION 2531 (2009), <https://doi.org/10.1016/j.biocon.2009.05.024>; Andrew N. Gray, *Eight Nonnative Plants in Western Oregon Forests: Associations with Environment and Management*, 100 ENV'T MONITORING & ASSESSMENT 109, 109 (2005), <https://doi.org/10.1007/s10661-005-7060-9>; Jonathan L. Gelbard & Jayne Belnap, *Roads as Conduits for Exotic Plant Invasions in a Semiarid Landscape*, 17 CONSERVATION BIOLOGY 420 (2003), <https://conbio.onlinelibrary.wiley.com/doi/abs/10.1046/j.1523-1739.2003.01408.x>.

²⁷ See DEIS at 107.

²⁸ DEIS at 111, 122, 124.

²⁹ DEIS at 122.

³⁰ DEIS at 122-130.

³¹ See, e.g., EPA, Nonpoint Source: Forestry, <https://www.epa.gov/nps/nonpoint-source-forestry> (finding that commercial logging and associated road building are the primary sources of nonpoint source water pollution on forested lands); Mildrexler et al. (2026), *supra* note 4; C. Deval et al., *Long-Term Response in Nutrient Load from Commercial Forest Management Operations in a Mountainous Watershed*, 494 FOREST ECOLOGY AND

The DEIS also identifies substantial vulnerabilities related to water quality impacts – most notably, many of the potentially affected watersheds have “poor” slope stability and are therefore more prone to severe soil erosion, landslides, and water quality degradation.³² However, the DEIS does not adequately engage with this data or acknowledge the implications for watershed health and water quality.³³ It merely concludes that additional road construction and timber harvest “has the potential to impact water quality through increased sediment delivery.”³⁴ The analysis is disproportionately focused on road construction; it only briefly considers the effects of logging. There is no discussion of other water quality impacts, including pollution from roads, chemical and organic waste from logging, and watershed degradation from the increase in wildfire activity.

The watershed impacts have enormous implications for both forest health and human use of water. The DEIS shows that there are more than 7,000 municipal water intakes in the potentially affected watersheds which provide water to approximately 24 million people. These numbers do not include Alaska due to limited data, but there are at least nine municipalities that would also be affected in the Tongass region. The DEIS acknowledges that some regions are particularly vulnerable to water quality impacts because millions of people receive water directly from watersheds in roadless areas; however, it does not actually evaluate the effect of the action on drinking water supplies.³⁵

The DEIS also reaches an erroneous conclusion about the magnitude and significance of these effects. The DEIS assumes that water quality impacts are a non-issue because the use of “Best Management Practices during road construction and maintenance will reduce these impacts to levels congruent with the Clean Water Act.”³⁶ The assumption that existing management practices will reduce impacts to a non-significant level is directly contradicted by the data showing that roadless areas have significantly better water quality than other NFS lands. This conclusion also ignores the potentially significant effects of logging on water quality.

4. Biodiversity Impacts

The DEIS does not meaningfully address potential impacts on biodiversity, which are clearly significant. The DEIS recognizes that the proposed action will affect plant and animal communities through habitat destruction, disturbance, fragmentation, and loss of connectivity, as well as other pathways including direct mortality and the introduction of invasive species. However, the analysis of these impacts is relatively superficial, as the DEIS asserts that more in-depth analyses must be

MANAGEMENT 119312 (2021), <https://doi.org/10.1016/j.foreco.2021.119312>; Rodolfo Picchio et al., *Effects of Forest Harvesting on Water and Sediment Yields: A Review Toward Better Mitigation and Rehabilitation Strategies*, 7 CURRENT FORESTRY REPORTS 214 (2021), <https://doi.org/10.1007/s40725-021-00146-7>; Nadeem W. Shah et al., *The effects of forest management on water quality*, 522 FOREST ECOLOGY AND MANAGEMENT 120397 (2022), <https://www.sciencedirect.com/science/article/pii/S0378112722003917>.

³² DEIS at 114.

³³ For example, the DEIS only discusses the slope stability issue in the “soils” section and does not consider the implications for watershed impacts.

³⁴ DEIS at 122.

³⁵ DEIS at 123-124.

³⁶ DEIS at 122, 124.

deferred to later stages when specific project decisions are being made. It also downplays the effects of commercial logging, stating that future projects “would be designed to avoid or minimize adverse impacts from timber harvests to biodiversity and in some cases could incorporate design features beneficial to terrestrial animal species and habitats.”³⁷ Moreover, the DEIS does not adequately connect its assessment of biodiversity and ecological impacts to forest health and related management objectives, as well as more specific considerations related to wildfire risk and invasive species.

Similar problems arise in the draft biological assessments (BAs) prepared as part of the Endangered Species Act (ESA) consultation with the U.S. Fish and Wildlife Service (FWS) and National Marine Fisheries Service (NMFS). In the draft BAs, USFS finds that the action is “likely to adversely affect” 327 ESA-listed species and 71 critical habitats. The magnitude of these effects cannot be understated. This appears to be one of the largest – if not the largest – ESA adverse effect determination in the history of NFS management. But USFS sidesteps this issue, concluding that the action “will have no *direct* effect on ESA-listed resources because it does not authorize, fund, or carry out future forest management activities” (emphasis added).³⁸ USFS also asserts that in-depth analysis of species impacts is not possible because it “does not have a reliable method to identify, describe, or analyze the likelihood and location of any future projects that may be proposed for currently inventoried roadless areas.”³⁹

This action will clearly have significant impacts on biodiversity and ESA-listed species. The DEIS sidesteps this issue in the same fashion that it sidesteps other significant impacts – it concludes that future activities would be subject to existing laws and management standards, which would mitigate harm to plant and animal communities.⁴⁰ What is more: the DEIS erroneously finds that road construction and timber harvest may have “potential beneficial effects” on biodiversity – in doing so, it cherry picks data, distorts scientific findings, and relies on unsubstantiated assumptions about future forest health projects that it is not committing to undertake as part of this action.⁴¹ The DEIS ultimately concludes that “complete avoidance of adverse effects *may* not be possible” – thus failing to acknowledge that the adverse effects on biodiversity are both *certain* and *significant*.⁴²

³⁷ DEIS at 146. The DEIS also treats increased timber harvest as a hypothetical outcome of the action when discussing biodiversity impacts; whereas timber harvest is treated as “reasonably foreseeable” in the section on “potential timber harvest opportunities.” Compare DEIS at 146 (“if there is an increase in timber harvest in the affected environment”) with *id.* at 76-77 (characterizing an increase in timber harvest as “reasonably foreseeable” and quantifying the expected increase).

³⁸ USFS, U.S. Fish and Wildlife Service Species’ Draft Biological Assessment for the 2001 Roadless Area Conservation Rule Rescission (Aug. 14, 2026) at 369; USFS, National Marine Fisheries Service Species’ Draft Biological Assessment for the 2001 Roadless Area Conservation Rule Rescission (Aug. 14, 2026) at 103.

³⁹ Draft BA for NMFS Species at 201; Draft BA for FWS Species at 368.

⁴⁰ See, e.g., DEIS at 146.

⁴¹ E.g., the DEIS focuses on the fact that some bat species use roads for corridors, and makes erroneous claims about the benefits of *commercial logging* by citing studies about the benefits of carefully planned *fuel treatment* projects for spotted owl species. See DEIS at 148-150.

⁴² DEIS at 146.

5. Asymmetries in the Assessment of Adverse and Beneficial Impacts

There is a striking asymmetry in how the DEIS approaches uncertainty in its discussion of adverse environmental impacts and economic benefits from timber harvest. As discussed above, the DEIS does not adequately analyze the potential for environmental harm – generally speaking, there is very little quantitative analysis of harmful impacts, there are very few citations to scientific literature, the data presented in the DEIS is often overlooked, and USFS reaches erroneous conclusions about the significance and magnitude of harmful impacts. The DEIS often cites uncertainty about future projects and site-specific impacts as a reason for not conducting a more in-depth assessment of potential environmental harm.

In comparison, the DEIS does quantify the potential economic benefits of repeal (e.g., 4.8 million potentially operable acres and 253,000–557,000 ccf/year of additional potential harvest). USFS’s claim that it cannot identify the likelihood and location of future projects is contradicted by the fact that the DEIS used detailed geographic data to identify potential logging areas and yields. The agency mapped where commercial valuable timber is located and considered factors such as slope topography, distance from roads, site productivity, statutory restrictions, and the feasibility of different logging systems to develop an overall estimate of the potential increase in timber harvests. USFS did use some geographic data in its assessment of adverse effects – but it more often deferred meaningful analysis to subsequent stages, and avoided reaching meaningful conclusions about the magnitude or significance of adverse impacts.

This asymmetry in the impact assessment is arbitrary and capricious. The result is an analysis that is heavily skewed towards economic benefits and which largely overlooks or minimizes the adverse environmental consequences. USFS cannot “tip the scales” in favor of the project by emphasizing economic benefits and minimizing or ignoring environmental harms.⁴³

6. Climate Change

The DEIS cites changed conditions including increases in extreme temperature, wildfire risk, drought, and insect and disease outbreaks as a key rationale for the proposed repeal. However, the DEIS completely ignores the fact that these trends are attributable to anthropogenic climate change, and it does not account for future change in its effects analysis. Instead, it relies on historical data to establish the environmental baseline for its assessment. Although agencies have discretion regarding *how* to analyze relevant climate impacts in environmental reviews and regulatory actions, the complete failure to discuss climate change is precisely the sort of omission that violates NEPA as well as APA rulemaking requirements.⁴⁴

⁴³ See *Center for Biological Diversity v. National Highway Traffic Safety Administration*, 538 F.3d 1172, 1198 (9th Cir. 2008); *Sierra Club v. Sigler*, 695 F.2d 957, 979 (5th Cir. 1983).

⁴⁴ See *Defenders of Wildlife v. U.S. Forest Service*, 94 F.4th 1210 (10th Cir. 2024) (upholding land management plan and accompanying biological opinion because USFS incorporated climate change projections); *Maine Lobstermen's Ass'n v. National Marine Fisheries Service*, 70 F.4th 582 (D.C. Cir. 2023) (vacating a “no jeopardy” determination for lobster fisheries that was predicated, in part, on assumptions about climate change and holding

The DEIS also glosses over the effect of the proposed repeal on carbon sequestration and greenhouse gases (GHGs). Despite identifying approximately 0.9 billion metric tons of carbon in affected roadless areas, the DEIS does not quantify or assess the significance of potential effects on forest, soil, dead-wood, or product carbon or future sequestration. It simply concludes that "some areas would lose capacity for carbon sequestration" but this would be partially offset by the storage of carbon in harvested timber products.⁴⁵ This qualitative assessment is grossly insufficient given the potential magnitude of the carbon storage impacts. USFS should use available data and tools to quantitatively forecast the effects of logging on forest carbon sequestration.⁴⁶

What is more: the DEIS fails to acknowledge that the total amount of carbon stored in the affected roadless areas is substantially higher than its 0.9 billion ton estimate.⁴⁷ This figure only includes IRAs in the contiguous United States, and does not include carbon stored in the Tongass and Chugach National Forests in Alaska. The total amount of carbon storage across all IRAs affected by the repeal is *at least* 2.3 billion tons – more than 2x that reported in the DEIS.⁴⁸ This should be disclosed and accounted for in the carbon storage assessment.

that NMFS must "strive to resolve or characterize uncertainty through accepted scientific techniques"); *Turtle Island Restoration Network v. U.S. Department of Commerce*, 878 F.3d 725 (9th Cir. 2017) (overturning biological opinion for fishery plan because NMFS "improperly minimized" climate-related risk); *AquAlliance v. U.S. Bureau of Reclamation*, 287 F. Supp. 3d 969 (E.D. Cal. 2018) (remanding EIS for failure to consider climate change impacts on hydrology).

⁴⁵ DEIS at 79.

⁴⁶ There are many decision-support tools and datasets available to help with this assessment. See, e.g., John D. Shaw et al., *A National-Scale Tree Volume, Biomass, and Carbon Modeling System for the United States* (U.S. Dep't Agric., Forest Serv. 2024), <https://research.fs.usda.gov/programs/fia/nsvb>; John D. Shaw, *Accessing and Using Forest Inventory and Analysis (FIA) Data in FVS*, in *Sixth Forest Vegetation Simulator Conference*, Proc. RMRS-P-81, at 19–22 (U.S. Dep't Agric., Forest Serv. 2024), <https://research.fs.usda.gov/treesearch/69774>; John D. Shaw, Eric Henderson, Gunnar Carnwath & Sheryl Gunn, *Using FIA Data and FVS to Develop Yield Streams and State-and-Transition Models for National Forest Planning*, in *Sixth Forest Vegetation Simulator Conference*, Proc. RMRS-P-81, at 38–40 (U.S. Dep't Agric., Forest Serv. 2024), <https://research.fs.usda.gov/treesearch/69780>; Taylor K. Lucey et al., *A Synthesis of Harvested Wood Product Carbon Models*, Gen. Tech. Rep. PNW-GTR-1020 (U.S. Dep't Agric., Forest Serv. 2024), <https://research.fs.usda.gov/treesearch/67619>; U.S. Dep't Agric., Forest Serv., *Carbon Science Delivery Platform* (2024), <https://research.fs.usda.gov/projects/carbonsdp>; U.S. Dep't Agric., Forest Serv., *PNW-FIADB (Forest Inventory and Analysis Databases)* (2025), <https://research.fs.usda.gov/pnw/products/dataandtools/pnw-fiadb-forest-inventory-and-analysis-databases>; Grant M. Domke et al., *The New Forest Carbon Accounting Framework for the United States* (USDA Forest Serv. 2015), <https://research.fs.usda.gov/treesearch/50243>; Coeli M. Hoover & Stephanie A. Rebain, *Forest Carbon Estimation Using the Forest Vegetation Simulator: Seven Things You Need to Know*, Gen. Tech. Rep. NRS-77 (USDA Forest Serv. 2011), <https://research.fs.usda.gov/treesearch/37449>; James E. Smith, Linda S. Heath & Michael C. Nichols, *U.S. Forest Carbon Calculation Tool: Forest-Land Carbon Stocks and Net Annual Stock Change*, Gen. Tech. Rep. NRS-13 (USDA Forest Serv. 2007), <https://research.fs.usda.gov/treesearch/12394>.

⁴⁷ See DEIS at 66.

⁴⁸ This figure does not include estimated emissions from the Chugach National Forest. A recent study found that the Chugach National Forest stored approximately 0.9% of the total NFS tree biomass carbon stock, which would be approximately 38.75 million metric tons of carbon. This figure does not include carbon stored in soils and other biomass. See B.E. Law et al., *Southern Alaska's Forest Landscape Integrity, Habitat, and Carbon are Critical for Meeting Climate and Conservation Goals*, 4(6) AGU ADVANCES e2023AV00965 (2023).

7. *Climate Change and Carbon Storage in the Tongass National Forest*

The DEIS's failure to analyze climate change and carbon storage impacts in the Tongass National Forest is particularly egregious. The Tongass is one of the highest integrity forest ecosystems in the United States.⁴⁹ It “supports a world-class salmon fishery, is one of the world’s most intact temperate rainforests, and is recognized for exceptional levels of carbon stored in woody biomass.”⁵⁰ The Tongass is disproportionately affected by climate change due to its high-latitude coastal location, but also uniquely resilient to climate impacts in large part due to its exceptional ecological integrity. In particular, because most of its old-growth habitat remains unfragmented, it provides a buffer against climate change impacts and can absorb localized climate shocks.⁵¹ It also has a relatively low occurrence of wildfire due to wetter and cooler conditions, which means that it provides more stable carbon storage than drier, hotter forests.⁵² Its sequestration capacity is projected to increase in the future *if* forests are allowed to grow without harvest.⁵³

Researchers estimate that the Tongass currently stores a massive amount of carbon – approximately 2.7 billion tons, which is roughly 20% of the total forest carbon stock in the entire NFS.⁵⁴ IRAs account for just over half of the total carbon storage in the Tongass (~ 1.374 billion tons), with 48% stored in old-growth forests. Opening the IRAs to commercial logging could result in enormous amounts of carbon being released into the atmosphere. Researchers estimate that historical logging in the Tongass generated emissions in excess of 900,000 tons of CO₂ per year on average from 1952-2000; average emissions dropped 90% after commercial logging was restricted.⁵⁵ Research has also shown that logging in the coastal temperate rainforests of southeast Alaska is correlated with significantly lower aboveground tree biomass carbon, e.g., 461 Mg carbon/hectare in unlogged plots, as compared with 189 Mg carbon/hectare in logged plots.⁵⁶ Unlogged old-growth stands store significantly more carbon per acre than previously logged forests, and it can take hundreds of years for these forests to fully recover their original carbon storage capacity.

⁴⁹ B.E. Law et al., *Southern Alaska’s Forest Landscape Integrity, Habitat, and Carbon are Critical for Meeting Climate and Conservation Goals*, 4(6) AGU ADVANCES e2023AV00965 (2023).

⁵⁰ Dominick DellaSala et al., *The Tongass National Forest, Southeast Alaska, USA: A Natural Climate Solution of Global Significance*, 11(5) LAND 717 (2022), <https://www.mdpi.com/2073-445X/11/5/717>.

⁵¹ Dominick DellaSala, *The Tongass Rainforest as Alaska’s First Line of Climate Change Defense and Importance to the Paris Climate Change Agreements*, <https://geosinstitute.org/wp-content/uploads/2016/01/tongass-report-emissions-2016-01.pdf> (Geos Institute 2016).

⁵² *Id.*

⁵³ *Id.*

⁵⁴ DellaSala et al. (2022), *supra* note 50. This is consistent with prior USFS assessments of Tongass carbon storage. See, e.g., Tara M. Barrett (2014), *Storage and flux of carbon in live trees, snags, and logs in the Chugach and Tongass National Forests*, Rep. PNW-GTR-889 (USFS 2014), <https://research.fs.usda.gov/treesearch/45431> (estimating that the Tongass stored 2.8 ± 0.5 Pg C).

⁵⁵ DellaSala et al. (2022), *supra* note 50.

⁵⁶ Trevor A. Carter et al., *The distribution of tree biomass carbon within the Pacific Coastal Temperate Rainforest, a disproportionally carbon dense forest*, 54(9) CANADIAN JOURNAL OF FOREST RESEARCH 956 (2024), <https://www.sciencedirect.com/org/science/article/pii/S0045506724000191>.

The DEIS does not discuss carbon storage impacts in the Tongass National Forest because it assumes that the proposed action will not have *any* effect on logging in the Tongass.⁵⁷ The DEIS offers no empirical support for this assumption. The underpinning analysis points towards the opposite conclusion – most notably, the DEIS says that repealing the Roadless Rule will result in an “estimated net gain of about 168,000 acres of suitable old growth, including 59,000 acres of high-volume suitable old-growth” in the Tongass, as well as an estimated net gain of 20,000 acres of suitable young growth.⁵⁸ The DEIS also finds that, due to the repeal, “roads and timber harvest are likely to penetrate much farther into roadless areas, resulting in a greater degree of [habitat] fragmentation.”⁵⁹

Moreover, the assumption that there will be “no change” in timber harvest is clearly erroneous in light of other actions that USFS is currently undertaking in the Tongass. Most notably, USFS has initiated a Tongass Forest Plan Revision – in conjunction with the Roadless Rule repeal – one goal of which will be to expand timber production. In the “Preliminary Draft Plan Content”, USFS has projected that: (i) potentially suitable lands for timber production will increase from 827,000 acres to 2,651,000 acres due to repeal of the Roadless Rule, and (ii) annual timber harvests in the Tongass will more than double in the next decade.⁶⁰ Notably, this estimate of “suitable” lands is dramatically different than that provided in the Roadless Rule DEIS. USFS is also taking immediate actions to open the Tongass to additional logging – for example, when USFS revised the South Revilla Integrated Research Management Plan earlier this year, it explicitly selected the management alternative would maximize old-growth logging in the Tongass, opening 4,343 acres of old growth forest to logging.⁶¹

Due to this erroneous assumption of “no impact”, the DEIS fails to take a hard look at the effects of logging in the Tongass, including effects related to habitat fragmentation, ecological health, and biodiversity. The DEIS completely ignores how increased logging and fragmentation could impair the Tongass’s capacity to provide a climate refuge and buffer against future climate impacts, as well as its capacity for long-term carbon storage. These omissions are particularly egregious given the Tongass’s unique importance as a high-integrity and climate-resilient forest ecosystem that stores a huge amount of carbon.

⁵⁷ DEIS at 233.

⁵⁸ DEIS at 232.

⁵⁹ DEIS at 233.

⁶⁰ USFS, Land Management Plan: Preliminary Draft Plan Content, Southeast Alaska (March 23, 2026), https://www.fs.usda.gov/sites/nfs/files/r10/tongass/publication/TongassPlanRevision_Preliminary%20Draft%20Plan%20Content_20260323.pdf.

⁶¹ USFS, South Revillagigedo Integrated Resource Project: Final Environmental Impact Statement, R10-MB-834c (January 2026), <https://usfs-public.app.box.com/v/PinyonPublic/file/2110760157479>.

III. Conclusion

USFS claims that this action is necessary to improve vegetation management, forest health, and wildfire resilience, but the record does not establish that the repeal will actually produce those benefits. To the contrary, the weight of the evidence suggests that this action will have significant adverse effects on wildfire risk, forest health, biodiversity, and water resources. In other words: USFS has offered an explanation that “runs counter to the evidence before the agency” and is therefore arbitrary and capricious.⁶² The analytical problems in the DEIS also run afoul of NEPA requirements as well as APA rulemaking standards.

We urge USFS to withdraw this irrational and poorly conceived proposal. The DEIS shows that maintaining the Roadless Rule protections is the best way to achieve USFS’s stated objectives related to wildfire risk, invasive species, and other aspects of forest health.

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⁶² See *Motor Vehicle Manufacturers Ass’n v. State Farm*, 463 U.S. 29 (1983).