



Environmental  
Advocacy Clinic  
VERMONT LAW & GRADUATE SCHOOL

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626 East Wisconsin Avenue  
Milwaukee, WI 53202

April 1, 2024

*Submitted via:* <https://cara.fs2c.usda.gov/Public//CommentInput?Project=57392>

**Re: Objection under 36 C.F.R. § 218.8 to Sandwich Vegetation Management Project,  
Saco Ranger District, White Mountain National Forest**

Dear Reviewing Officer Ibarguen:

This is an objection by Standing Trees, New Hampshire Sierra Club, and the Wonalancet Preservation Association (the “Objectors”) to the Sandwich Vegetation Management Project (“Sandwich VMP,” the “Project”).<sup>1</sup> The responsible official is District Ranger Jim Innes, and the ranger district on which the Project is proposed to be implemented is Saco Ranger District, White Mountain National Forest, New Hampshire.<sup>2</sup> As detailed below, this objection meets applicable requirements for filing an objection in 36 C.F.R. § 218.8, and it ultimately seeks to compel the Forest Service (the “Service”) to rescind the project or, at a minimum, withdraw its legally deficient Environmental Assessment (“EA”) and perform an Environmental Impact Statement (“EIS”) that more thoroughly considers the Service’s myriad legal obligations.

**I. By Declining to Consider Reasonable Alternatives to the Project in Making its Finding of No Significance and Inadequately Assessing Project-Related Environmental Impacts, the Service Failed to Satisfy its Legal Obligations Under NEPA, the ESA, and the 2005 Forest Plan.**

The Objectors summarize the legal grounds for this objection as follows. First and foremost, the Forest Service’s Final EA violates the National Environmental Policy Act (“NEPA”) because the agency fails to adequately consider either a genuine “no action” alternative or other reasonable

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<sup>1</sup> All exhibits are listed at the end of this objection, and the exhibits themselves are enclosed in our electronic filing.

<sup>2</sup> Notice of availability of the Draft Decision Notice, Final Environmental Assessment, and Finding of No Significant Impact was published in the newspaper of record, New Hampshire Union Leader, on February 15, 2024 (Exhibit 1).

alternatives to the Project that might just as effectively achieve its stated management objectives. From the Forest Service's perspective, that is, the only way to achieve the agency's goal of bringing the management unit in line with Forest-wide management targets is to perform the actions exactly as proposed; this simply cannot be the case.

Second, the Final EA violates NEPA's requirement that federal agencies take a "hard look" at the environmental consequences of their actions in a number of respects. This refusal to thoroughly consider such impacts contributed directly to the agency's third legal error: producing an EA and Finding of No Significance ("FONSI") instead of—as NEPA requires with respect to all "significant" federal agency actions—producing an EIS.

Fourth, and separately, the agency failed to meet its burden under NEPA to make the information upon which it bases its decision publicly and promptly available. In some instances, the Service has purported to rely on science that is either outdated or inherently flawed; in other instances, it has neglected to make such information available until the opportunity for comment has elapsed; and in other respects, the agency purports to reserve the right to make substantive future decisions without providing any opportunity for public comment. In any case, the public has not been provided with the opportunity to evaluate much of the rationale supposedly supporting the agency's proposed decision. For the above reasons, the Service's Final EA runs afoul of the Administrative Procedure Act ("APA"), which contains the prevailing standard for assessing discretionary agency action.

Finally, the Final EA fails to meet the Service's obligations under the Endangered Species Act ("ESA") and National Forest Management Act ("NFMA") to protect sensitive and listed species, particularly the Northern Long-Eared Bat ("NLEB"). Specifically, the agency's reliance on the United States Fish and Wildlife Service's ("Fish and Wildlife") Programmatic Biological Opinion, which lacks any site-specific analysis of Project-area conditions—as well as the agency's failure to conduct its own site-specific analysis—are insufficient to justify the agency's assurances that individual NLEBs will not be harmed.

## **II. The Forest Service's Final EA Asserts, Without Basis in the Record, that Logging and Prescribed Burning Across 1,600 Acres of the Sandwich Habitat Management Unit Are "Necessary" to Help Achieve the 2005 Forest Plan's Vegetation-Management Targets.**

As relevant to these objections, the Forest Service proposes timber harvest and prescribed burning across approximately 1,600 acres of the southern White Mountain National Forest (the "National Forest"). In sum, the Service has proposed to conduct timber harvest on about 1,325 acres of the National Forest, ultimately treating 638 acres; conduct prescribed fire treatment on 306 acres; reconstruct about 4.5 miles of existing road; and convert 12 miles of existing

unauthorized roads to maintenance level 1 system roads.<sup>3</sup> These actions are “necessary,” according to the Service, “to advance forest plan goals, objectives, and desired conditions for vegetation, wildlife, and other resources” on lands allocated to the National Forest’s Management Area 2.1 (General Forest Management).<sup>4</sup> Lands so designated are intended to, *inter alia*, “provide a sustained yield of high-quality timber products . . . [and] a balanced mix of habitats for wildlife. . . .”<sup>5</sup> And in the Service’s view, the Sandwich Habitat Management Unit currently does not meet the habitat-composition and age-class objectives for such areas in the 2005 White Mountain National Forest Land and Resource Management Plan (“2005 Plan”).<sup>6</sup> Specifically, the Service cites the lack of age-class diversity within the Unit and the need to increase the forest’s ability to adapt to climate change-related stressors as rationales for the proposed management actions.<sup>7</sup> However, the Forest Service has not provided relevant documentation—such as quantifiable data on stand ages, habitat types, and species composition—that would allow for a rational review of the agency’s rationale or conclusions.

**III. This Objection Meets the Threshold Requirements Under 36 C.F.R. § 218.8(c) to Raise Issues Based Either on Previously Submitted Specific Written Comments or New Information that Arose After the Opportunity for Comment.**

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New Hampshire Sierra Club, which joins in these comments, has the following contact information:

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<sup>3</sup> U.S. Forest Serv., White Mountain National Forest, Saco Ranger District, Sandwich Vegetation Management Project Environmental Assessment and Finding of No Significant Impact 18 (Feb. 2024) [hereinafter “Final EA”].

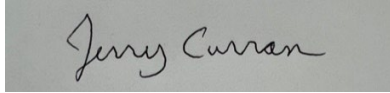
<sup>4</sup> *Id.* at 5.

<sup>5</sup> U.S. FOREST SERV., WHITE MOUNTAIN NATIONAL FOREST LAND AND RESOURCE MANAGEMENT PLAN 3-3 (2005) [hereinafter “2005 PLAN”].

<sup>6</sup> *See id.* at 1-20 to 1-21.

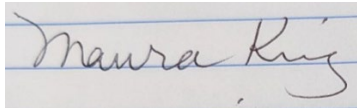
<sup>7</sup> Final EA at 5–6.

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The Wonalancet Preservation Association, which joins in these comments, has the following contact information:

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Standing Trees filed specific written comments regarding the Project’s Draft EA on August 30, 2023.<sup>8</sup> All issues raised in this objection are either based on those comments or are related to new information, pursuant to 36 C.F.R. § 218.8(c).<sup>9</sup>

New Hampshire Sierra Club joins in this objection. Founded in 1990, the New Hampshire Chapter is a state chapter of the Sierra Club—the nation’s oldest grassroots environmental organization. The Chapter is a non-profit, volunteer-run, member-supported public-interest organization that promotes environmental protection in the Granite State. Its members frequently recreate in the National Forest, including in and near the Project area. The Chapter filed comments of its own on the Draft EA in which it joined other Objectors’ comments.<sup>10</sup>

The Wonalancet Preservation Association also joins in this objection. The Association is a non-profit association of local residents and landowners with a mission to prevent pollution and

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<sup>8</sup> See Comments of Standing Trees and the Wonalancet Preservation Association Regarding Draft Environmental Assessment and Preliminary Finding of No Significant Impact for Sandwich Vegetation Management Project #57392, Saco Ranger District, White Mountain National Forest (Aug. 30, 2023) [hereinafter “Draft EA Comments”] (Exhibit 2); see also Standing Trees Scoping Comments for Sandwich Vegetation Management Project (July 1, 2022) [hereinafter “Scoping Comments”] (Exhibit 3).

<sup>9</sup> 36 C.F.R. § 218.8(c) (“Issues raised in objections must be based on previously submitted specific written comments regarding the proposed project or activity and attributed to the objector, unless the issue is based on new information that arose after the opportunities for comment. The burden is on the objector to demonstrate compliance with this requirement. . . .”); see also *id.* § 218.8(d)(6) (requiring objections to Forest Service predecisional documents to include a “statement that demonstrates the connection between prior specific written comments on the particular proposed project or activity and the content of the objection, unless the objection concerns an issue that arose after the designated opportunity(ies) for comment”).

<sup>10</sup> See New Hampshire Sierra Club Draft EA Comments (Exhibit 29).

commercial and other activities detrimental to the natural beauty of the Wonalancet Basin, situated in the towns of Tamworth, Sandwich, Waterville, and Albany, New Hampshire; to promote the common good and general welfare of the Wonalancet Basin; and to provide facilities and services within the Wonalancet Basin that, due to its remote location, are not provided by the towns, including civic betterments, recreational facilities for the accommodation of persons within the area and the general public, policing the area and the properties within it, disposing of waste materials, and holding land and interests in land within the Basin so as to preserve its natural beauty. Its members also frequently recreate in the National Forest, including in and near the Project area. The Association joined Standing Trees' comments on the Draft EA directly.<sup>11</sup>

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<sup>11</sup> See Draft EA Comments at 2.

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## DETAILED OBJECTIONS

### IV. The Final EA Violates NEPA by Failing to Include Reasonable Alternatives that Meet the Need for Action.

In issuing this Final EA, the Forest Service remains unwilling to consider a genuine “no action” scenario or any reasonable alternatives to the Project. By failing to heed Objectors’ prior warnings about the strict requirements governing alternatives analysis, the Forest Service thereby violates NEPA. Indeed, such analysis is widely recognized as the “heart” of environmental reviews.<sup>12</sup> The omission of any meaningful alternatives analysis here is a fatal flaw in the Service’s decision-making that distorts the remainder of its analysis for the worse.

#### A. The Final EA fails to analyze reasonable alternatives.

In violation of NEPA’s insistence that agencies consider reasonable alternatives, the Forest Service failed to analyze any such alternatives to the Project. In their comments on the Draft EA, Objectors presented several reasonable alternatives, or potential components of alternatives, that the Forest Service should have analyzed.<sup>13</sup> Some of these include:

- Avoidance of Roadless Area Impacts: This alternative involves directing logging activities away from Forest Plan Inventoried Roadless Areas located within Management Area 2.1 in the 2005 Forest Plan. The analysis would consider how—as described in peer-reviewed research and acknowledged by the 2001 Roadless Area Conservation Rule—logging and its associated road construction impact roadless-area values irrespective of an area’s future wilderness designation. It would also much more thoroughly explore how proposed actions could influence future wilderness inventories and evaluations under Chapter 70, particularly given that the current Forest Plan has outlasted the 15-year lifespan that NFMA provides.
- Increased Buffer from Watercourses and Wetlands: This alternative entails enlarging the buffer zone around watercourses and wetlands. The analysis would evaluate the potential benefits in protecting water quality, maintaining appropriate flows through flood and drought periods, and retaining and restoring ecosystem integrity.
- Expanded Buffer from Wilderness and Scenic Areas: This alternative involves extending the buffer zone from the boundaries of the Sandwich Range Wilderness and Mount Chocorua Scenic Area. The analysis would assess how logging activities may affect

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<sup>12</sup> See 40 C.F.R. § 1502.14 (1978) (“This section is the heart of the environmental impact statement.”); *see also* National Environmental Policy Act Implementing Regulations Revisions Phase 2, 88 Fed. Reg. 49924, 49977 (July 31, 2023) (proposing to reintroduce the same language to CEQ regulations).

<sup>13</sup> See Draft EA Comments at 45–48.

scenery management objectives, desired future conditions for National Forest Scenic Areas, and the wilderness character of designated wilderness areas.

- Protection of Mature and Old Forests: This alternative aims to avoid logging in mature and old forest areas as defined in 2005 Forest Plan Appendix D, Age Class Definitions by Habitat Type, as well as in old growth as defined by Region 9.<sup>14</sup> This approach is intended to align with Executive Order 14072’s emphasis on climate, water quality, and flood risk reduction. Additionally, it would minimize the risk of adverse impacts on imperiled species that benefit from or rely on mature, old, and interior forests, such as the federally endangered Northern Long-Eared Bat. Finally, this alternative would align itself with Forest Service Deputy Chief Christopher French’s letter directing elevated review of any timber harvest that proposes to log where old-growth conditions are determined to exist.<sup>15</sup>

Alternatives analysis is “the heart” of environmental reviews precisely because the agency must define key issues that are ripe for decision-making.<sup>16</sup> Agencies are prohibited from committing resources that could prejudice the selection of alternatives before reaching a final decision,<sup>17</sup> and they must not restrict the choice of reasonable alternatives.<sup>18</sup> Unresolved conflicts arise when there is a lack of consensus about the proposed action based on input from concerned parties.<sup>19</sup>

The Council on Environmental Quality (“CEQ”) regulations guiding the implementation of NEPA underscore the imperative for federal agencies to thoroughly “inform decision-makers and the public of reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment.”<sup>20</sup> They also emphasize the obligation to explore and delineate appropriate alternatives for proposals entailing unresolved conflict concerning resource utilization. Additionally, it is the responsibility of federal agencies to “[s]tudy, develop, and

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<sup>14</sup> Region 9’s stand-age criteria for considering forests “old growth” vary, from 101 years for dry-oak and northern-pine communities to 161 years for mesic northern-oak communities. See 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*, at 45–46 (Apr. 2023) (Exhibit 4).

<sup>15</sup> See Chris French, Deputy Chief, U.S. Forest Serv., Letter to Regional Foresters re: Review of Proposed Projects with Management of Old Growth Conditions (Dec. 18, 2023) [hereinafter “Elevated Review Letter”] (Exhibit 5). Subsequently, the Forest Service issued a Notice of Intent to prepare an EIS for a nationwide forest-plan amendment that would conserve old-growth on all National Forest System lands. See Land Management Plan Direction for Old-Growth Conditions Across the National Forest System, 88 Fed. Reg. 88042 (Dec. 20, 2023).

<sup>16</sup> See 40 C.F.R. § 1502.20 (“Agencies are encouraged to tier their [EISs] to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review.”).

<sup>17</sup> *Id.* § 1502.2(f).

<sup>18</sup> *Id.* § 1506.1(a)(2).

<sup>19</sup> See National Environmental Policy Act Procedures, 73 Fed. Reg. 43084, 43092 (July 24, 2008) (codified at 36 C.F.R. § 220).

<sup>20</sup> 40 C.F.R. § 1502.1.

describe appropriate alternatives to recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources.”<sup>21</sup>

Considering the diverse aspects of the proposed action and the primary purpose outlined in the EA—to “advance Forest Plan goals, objectives, and desired conditions for vegetation, wildlife, and other resources in the Sandwich HMU”—it is implausible that there exists only one method to achieve that purpose.<sup>22</sup> This is particularly evident concerning the logging aspects of the proposed action. The multitude of silviculture prescriptions proposed demonstrates that even if logging is deemed necessary—which Objectors dispute—there exist a broad spectrum of approaches by which logging might accomplish the desired conditions. This variability inherently suggests the existence of several reasonable alternatives that the Forest Service failed to consider before preparing the EA.

A recent federal district-court case in New Hampshire offers valuable insight into the importance of considering a range of alternatives in an EA. In considering a challenge to an agency EA, the court highlighted 40 C.F.R. § 1502.14, emphasizing that agencies must: “[r]igorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated”; and “[d]evote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.”<sup>23</sup> The court concluded that the agency in question was likely to succeed on the merits because, unlike in the present case, “the EA provided reasonable, common-sense explanations for rejecting alternatives.”<sup>24</sup> In that case, the agency considered five alternatives, including a true “no action” alternative.<sup>25</sup> That EA assessed these alternatives quantitatively and provided a rationale for why each was rejected in favor of the proposed action.<sup>26</sup>

In contrast, the Forest Service has not analyzed any reasonable alternatives to the Project, nor has it provided any rationale, quantitative or otherwise, for dismissing those put forward by Objectors. For example, Objectors, both in response to the Notice of Proposed Action (“NOPA”) for the Project and in comments on the Draft EA, urged the Forest Service to analyze, mitigate, or avoid impacts to roadless areas.<sup>27</sup> As Objectors explained, the Forest Service could likely achieve the same management objectives without conducting timber harvest in inventoried roadless areas; once proffered by Objectors, it was incumbent on the agency to explain why that

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<sup>21</sup> *Id.* § 1501.2(c); *see also* 42 U.S.C. § 4332(2)(E) (requiring federal agencies to “make use of reliable data and resources” when undertaking NEPA procedures).

<sup>22</sup> Final EA at 5.

<sup>23</sup> *Conservation L. Found. v. U.S. Army Corps of Eng’rs*, 457 F.Supp.3d 33, 56 (D.N.H. 2019); *see also* 40 C.F.R. § 1502.14.

<sup>24</sup> *Conservation L. Found.*, 457 F.Supp.3d at 56.

<sup>25</sup> *Id.* at 57.

<sup>26</sup> *Id.* at 57–58.

<sup>27</sup> Scoping Comments at 16; Draft EA Comments at 33.

alternative was not feasible. Thus, as Objectors have demonstrated,<sup>28</sup> there are indeed numerous reasonable alternatives readily apparent to both the agency and the public alike, and the Forest Service’s failure to seriously assess any of them violates NEPA.

Furthermore, in another recent and illuminating case, the Ninth Circuit Court of Appeals found that the Bureau of Ocean Energy Management (“BOEM”) insufficiently considered alternatives in its EA, thus violating NEPA.<sup>29</sup> In *Environment Defense Center v. Bureau of Ocean Energy Management*, the court determined that although the Bureau examined three alternatives, they were not distinct enough.<sup>30</sup> Additionally, the court ruled that BOEM’s Final EA must encompass “full and meaningful consideration [of] all viable alternatives ‘in [the] environmental assessment,’” including those suggested by commenters.<sup>31</sup> In this case, the Forest Service failed to contemplate any alternatives beyond its cursory assessment of the consequences of inaction, and it disregarded the viable alternatives proposed by commenters throughout the NEPA process. Specifically, commenters urged that the “White Mountain National Forest should prepare additional alternatives that explore a reasonable range of options to meet the purpose and need while avoiding or minimizing harmful impacts; a more accurate purpose and need statement that would also promote detailed evaluations of current natural and cultural resources, which are lacking, which would in turn, illuminate further reasonable alternatives for the Forest Service.”<sup>32</sup> Unlike the agency in *Environment Defense Center*, the Forest Service also failed to consider any reasonable alternatives to its proposed silviculture treatment plans, in violation of NEPA.<sup>33</sup>

As stated elsewhere in this objection, to the extent the Forest Service intends to move forward with the Project, it must complete an EIS. As part of that EIS, it must consider all reasonable alternatives, including a true no-action alternative.

***Requested Remedy: The Forest Service should prepare an EIS with a full analysis of reasonable alternatives to the Project.***

B. The Final Environmental Assessment’s no-action alternative falls short.

A robust evaluation of a “no action” alternative is an essential requirement of any NEPA analysis, yet the EA’s no-action discussion fails to satisfy this requirement. Establishing a baseline against which proposed actions can be measured is a critical function of the no-action

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<sup>28</sup> See Scoping Comments at 6-7; Draft EA Comments at 45–48.

<sup>29</sup> *Env’t Def. Ctr. v. Bureau of Ocean Energy Mgmt.*, 36 F.4th 850, 877 (9th Cir. 2022).

<sup>30</sup> *Id.* at 878.

<sup>31</sup> *Id.*

<sup>32</sup> U.S. Forest Serv., Sandwich Vegetation Management Project Comment Period Consideration Summary for the Draft Environmental Assessment, at 3 (Feb. 2024) [hereinafter “Response to Comments”] (Exhibit 32).

<sup>33</sup> 42 U.S.C. § 4332(C)(iii).

alternative.<sup>34</sup> The Service did not consider such an alternative to provide a comprehensive evaluation of the proposed action.

NEPA mandates that agencies assess both the advantages and disadvantages of proposed projects and their reasonable alternatives.<sup>35</sup> The Forest Service's EA did nothing to evaluate the numerous benefits to opting not to proceed with the proposed action, including but not limited to: preserving the climate benefits derived from retaining older, mature trees; safeguarding habitats crucial for species reliant on mature or old forests, such as the NLEB; preventing potential adverse effects on water quality stemming from runoff, sedimentation, and possible herbicide contamination; averting the loss or harm to historical and cultural resources within the project area; and preventing the introduction of invasive species (which were observed to be virtually absent during the June 2022 public meeting for this Project). Additionally, refraining from taking action would mitigate visual and noise disturbances, among other advantages.

The Final EA's analysis falls short with respect to the no-action alternative. Instead of addressing the issues outlined above and with no scientific rationale, the Service asserts that without the Project, "wildlife habitat diversity would continue to decline."<sup>36</sup> Additionally, the Service argues that "the stand vigor in the planned treatment units may decline over time due to the increasing competition for sunlight, moisture, and nutrients among the trees."<sup>37</sup> It contends that without the Project, there would be a reduced "diversity of tree species, ages, and structures in the project area."<sup>38</sup> Moreover, the Service emphasizes the opportunity for potential revenue from timber sales in the Project area that would be lost under such a scenario.<sup>39</sup> This constitutes a significant flaw in the analysis, as the Service focuses solely on how the no-action alternative would *undermine* agency goals without considering the numerous *benefits* it would provide.

***Requested Remedy:*** The Forest Service should prepare an EIS with a full analysis of a no-action alternative to the Project.

**V. The Final EA Violates NEPA and the APA by Failing to Take a "Hard Look" at Many of the Project's Potentially Significant Impacts to the Environment and Insufficiently Justifying Many Aspects of the Final EA.**

By issuing a Final EA that contains superficial analysis of most of the Project's environmental impacts and disregards others altogether, the Forest Service has failed to take the "hard look" at such actions required under NEPA and the APA. NEPA imposes procedural requirements

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<sup>34</sup> 40 C.F.R. § 1502.12(c).

<sup>35</sup> *See id.* § 1502.14

<sup>36</sup> Final EA at 19.

<sup>37</sup> *Id.*

<sup>38</sup> *Id.*

<sup>39</sup> *Id.*

designed to force federal agencies to “take a ‘hard look’ at the environmental consequences of a project before taking a major action.”<sup>40</sup> In other words, the Forest Service must “undertake a thorough environmental analysis before concluding that no significant environmental impact exists.”<sup>41</sup> Furthermore, when necessary information is inconvenient or difficult to obtain, the Service is not permitted to simply proceed as though such information is dispensable.<sup>42</sup> Determining whether the Service has taken this “hard look” is to be judged against the APA’s arbitrary-and-capricious standard for agency decision-making.<sup>43</sup> By that standard, when an agency fails to consider all relevant factors<sup>44</sup> or offers a rationale for its decision that runs counter to the evidence before it,<sup>45</sup> its decision is arbitrary and capricious.

Here, the Forest Service has failed to take the requisite hard look at numerous factors relevant to the Project planning process; consequently, the current EA and FONSI are legally deficient. The Forest Service must rectify these shortcomings by providing further justification for the proposed action and developing an EIS.

A. The Final EA violates NEPA’s requirement for agencies to consider the cumulative effects of a potentially significant action by disregarding the effects of “similar actions” on the National Forest.

The Final EA fails to satisfy NEPA’s requirement that the Forest Service consider the cumulative impacts

of major actions it undertakes for at least two reasons: first, because the Service has failed to identify the geographic scope of its cumulative-effects analysis; and second, because, partly for that reason, the Service’s consideration of such effects falls short of the quantified, reasoned analysis that NEPA requires of federal agencies.

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<sup>40</sup> *Dubois v. U.S. Dep’t of Agric.*, 102 F.3d 1273, 1284 (1st Cir. 1996) (quoting *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n. 21 (1976)).

<sup>41</sup> *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1216 (9th Cir. 1998).

<sup>42</sup> See *WildEarth Guardians v. Jeffries*, 370 F.Supp.3d 1208, 1235 (D. Or. 2019) (“The problem is that, without data identifying the location of calving sites and wallows, the Forest Service cannot meet its obligation to protect those sites or minimize disturbance to [elk].”); *Sierra Club v. Martin*, 71 F.Supp.2d 1268, 1319 (N.D. Ga. 1996) (finding that, because there was no population data, quantitative data, or other adequate information, the Forest Service did not have sufficient facts or evidence regarding sensitive and endangered species to support its finding of no significant impact).

<sup>43</sup> See *Dubois*, 102 F.3d at 1284 (“[T]he appropriate scope of review for . . . NEPA claims . . . is the standard set forth in the APA.”).

<sup>44</sup> See *Citizens to Preserve Overton Park v. Volpe*, 401 U.S. 402, 416 (1971) (“[T]he court must consider whether the decision was based on a consideration of the relevant factors. . . .”).

<sup>45</sup> See, e.g., *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (“[A]n agency rule would be arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.”).

Under the pertinent CEQ regulations for implementing NEPA,<sup>46</sup> the Forest Service must assess the cumulative impacts to which the Project will contribute.<sup>47</sup> A cumulative impact is defined as the environmental impact caused by “the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such actions.”<sup>48</sup> Such actions may result from “individually minor but collectively significant actions taking place over a period of time.”<sup>49</sup> Before analyzing such impacts, the agency must choose an analysis area within which to assess them and “must provide support for this choice of analysis area.”<sup>50</sup> Critically, too, the agency may not simply make “general statements about possible effects”;<sup>51</sup> rather, it must provide some quantified, meaningful analysis of collectively significant actions.<sup>52</sup> Conclusory statements based on “vague and uncertain analysis” are unlikely to meet NEPA’s requirements for assessing cumulative effects.<sup>53</sup>

The paltry analysis of potential cumulative impacts included in the Final EA for the Project falls far short of satisfying this standard, both because it fails to identify the geographic scope of most of its analysis and because what little analysis the Service provides is general and unquantified. First, the Forest Service claims that the Project is “not expected to contribute cumulatively to resource impacts within the analysis area,” but does not specify what it means by the “analysis area.”<sup>54</sup> Though NEPA and CEQ’s regulations do not precisely dictate *how* an agency must determine the geographic scope of its cumulative effects analysis, the Forest Service must make that determination on some reasoned basis. The Service has not even attempted to explain itself on this issue. Second, whether the Forest Service has considered the collective effects of other proposed management actions on the National Forest—including the Wanosha Integrated Resource Project, Peabody West Integrated Resource Project, Lake Tarleton Integrated Resource Project, Lost River Integrated Resource Project, and Hales Location Wildfire Resiliency Project—is unclear because, as Objectors raised in their comments on the Draft EA,<sup>55</sup> these projects are not mentioned anywhere in the Final EA or its supporting documents.

For most resources, the Final EA either does not discuss the potential cumulative impacts at all or attempts to dispel them in a conclusory way. Cumulative effects were apparently not even considered with respect to fire, fuels, and air quality; soil quality; recreation; transportation;

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<sup>46</sup> 40 C.F.R. §§ 1500–1508.

<sup>47</sup> *Id.* § 1508.27(b)(7) (providing that, when evaluating the intensity and significance of a proposed action, agencies should assess “whether the action is related to other actions with individually insignificant but cumulatively significant impacts”).

<sup>48</sup> *Id.* § 1508.7.

<sup>49</sup> *Id.*

<sup>50</sup> *Native Ecosystems Council v. Dombeck*, 304 F.3d 886, 902 (9th Cir. 2002).

<sup>51</sup> *Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1379–80 (9th Cir. 1998).

<sup>52</sup> *See Bark v. U.S. Forest Serv.*, 958 F.3d 865, 872 (9th Cir. 2020).

<sup>53</sup> *See, e.g., Ocean Advocs. v. U.S. Army Corps of Eng’rs*, 402 F.3d 846, 869 (9th Cir. 2004).

<sup>54</sup> Final EA at 31.

<sup>55</sup> Draft EA Comments at 42.

threatened and endangered vegetation; or threatened or endangered wildlife.<sup>56</sup> The Final EA also makes short work of the potential cumulative effects to other resources in the analysis area.<sup>57</sup> These vague and unquantified conclusory assertions fail to satisfy NEPA’s requirement that federal agencies provide meaningful data to support their analyses of cumulative impacts.

***Requested Remedy:*** To satisfy its burden under NEPA, the Forest Service must withdraw its legally deficient EA and prepare an EIS. That EIS must identify a precise geographic scope for its analysis of the cumulative effects to which the Project contributes. Once the Service has done so, it must analyze the cumulative effects within that geographic range using quantified, meaningful data.

B. The Agency’s cursory assessment of the Project’s impacts on climate-change mitigation and adaptation efforts violates current CEQ guidance on carbon-emissions analysis and disregards vitally important executive orders.

The National Forest contains some of New England’s oldest and most carbon-dense ecosystems, and NEPA requires the Forest Service to consider the Project’s climate-related impacts, including the greenhouse gas (“GHG”) emissions likely to result from the Project. The Service failed to do so. The insignificant climate analysis in the Final EA, including the recently published Forest-wide carbon assessment, fails to justify its failure to consider and clear departure from recent guidance from CEQ on climate change, to address adequately recent executive orders related to climate mitigation, or to explain how the decision would conform with the Forest Service’s own Climate Adaptation Plan. In asserting that the climate impacts of its proposed action are “negligible” without sufficient analysis to support that conclusion, the Service ultimately fails to meet its obligations under NEPA.

1. The Forest Service’s climate analysis is legally flawed, both procedurally—because the Service has not provided the public with the opportunity to comment on the 2024 carbon white paper supporting its proposed decision—and substantively, because its analyses use flawed methodology and faulty logic.

As one of the only discrete changes between the Draft EA and Final EA, the Forest Service included the *Forest Carbon Assessment for the White Mountain National Forest in the Forest Service’s Eastern Region* (“Carbon White Paper”) as an additional supporting document. According to the Service, the new white paper has been “updated to reflect current information and calculations in accordance with agency guidance,” and the Project-level carbon assessment

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<sup>56</sup> Final EA at 32–35.

<sup>57</sup> See, e.g., *id.* at 22 (“The project will not contribute cumulatively to impacts to [non-native invasive species] in the analysis area. . . . Due to limited nature and duration of the project, the project will not contribute cumulatively to impacts to quality of life in the analysis area.”).



has been “updated to reference the updated . . . Carbon White Paper.”<sup>58</sup> In relying on this Carbon White Paper and Sandwich VMP Carbon and Greenhouse Gas Emissions Assessment as its logical foundation, the Forest Service’s analysis of climate-related impacts suffers from three distinct legal deficiencies. The Service’s failure up to this point to reveal part of the analysis supporting its conclusion that the Project’s climate impacts are negligible violates NEPA’s core requirement that the agency provide the public with the reasoning for its decision-making. Additionally, the science upon which the agency relies suffers from methodological and logical flaws that undermine the validity of its analysis.

First, the fact that the Service has provided such analysis as justification only at this stage—after the general public’s opportunity to comment has passed—violates NEPA’s requirements to provide the public with adequate opportunity for participation. The Forest Service’s last-minute incorporation of the Carbon White Paper to justify the Project’s activities violates NEPA’s requirement that the public receive “public notice of . . . the availability of environmental documents so as to inform those persons . . . who may be interested or affected.”<sup>59</sup> Despite the fact that the Forest Service cites the Carbon White Paper twice<sup>60</sup>—and thus appears at least partly to rely on it as justification for the proposed Project actions—the public has not had access to such a document until the final stage of public participation. For that reason, the public had zero opportunity to evaluate or provide input on the document before the Forest Service used it to come to its decision. Consequently, the public has not had the opportunity to steer the planning process to the extent that it would have if such information were provided earlier in the process. NEPA prohibits federal agencies from keeping their environmental analyses from the public for exactly this reason: without knowing the rationale behind a given agency decision, the public cannot possibly point out the potential logical or legal deficiencies from which such reasoning suffers.

Second, both the Carbon White Paper and Project-level carbon assessment engage in “before-and-after” carbon accounting, which is highly misleading, paints an inaccurate picture of the difference between various alternatives, and fails to satisfy NEPA’s hard-look standard. The Final EA, as part of its brief discussion of the Project’s climate and carbon impacts, asserts that, because “carbon will be removed from the atmosphere over time as the forest regrows[,] . . . effects of the project activities on carbon, [GHGs], and climate overall will be negligible.”<sup>61</sup> Similarly, the Sandwich VMP carbon assessment asserts that “any initial carbon emissions from this proposed action will be balanced and possibly eliminated as the stand recovers and regenerates. . . .”<sup>62</sup> To put it plainly, these conclusions misstate the agency’s obligation to compare alternatives by choosing instead to compare the forest now with the forest after it has

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<sup>58</sup> Final EA at 8.

<sup>59</sup> 40 C.F.R. § 1506.6(b).

<sup>60</sup> Final EA at 6, 26.

<sup>61</sup> *Id.*

<sup>62</sup> Sandwich VMP Carbon Assessment at 3.

had time to regenerate completely. This approach is entirely unscientific because it purports to use *future* forest conditions as a control for determining the impacts of Project activities on *current* forest conditions. That is, the Forest Service has not demonstrated the difference between the carbon impacts of its proposed actions and, for example, a no-action alternative. These conclusions—which essentially posit that the Forest Service is free to ignore the impacts from emissions if there is a *chance* that such emissions will be offset by forest regeneration at *any point* in the future—miss the mark entirely.

Third and finally, the Project-level carbon assessment suffers from numerous erroneous interpretations of the Service’s obligations under NEPA, the most notable being the agency’s conclusory assertion that any Project-related GHG emissions are certain to be negligible and therefore need not be considered as part of the Forest Service’s environmental analysis. As federal courts have held, however, this sort of *de minimis* argument is impermissible under NEPA.<sup>63</sup> The analysis summarily concludes that the “proposed activities . . . are not considered a major source of [GHG] emissions,” a conclusion apparently based on the Service’s assertion that “[f]orested land will not be converted into a developed or agricultural condition or otherwise result in the loss of forested area.”<sup>64</sup> In other words, the Forest Service has determined that, because the proposed action will not *permanently* alter Forest conditions because the Project area may eventually recover its forest cover, any resulting GHG emissions need not be accounted for. This summary disposal of such a critical environmental consideration defies NEPA’s requirement that the agency take a hard look at the environmental consequences of its actions.

In sum, the analysis provided in the Forest Service’s Carbon White Paper and Sandwich VMP Carbon Assessment is insufficient to satisfy NEPA’s requirement that the agency takes a hard look at the climate-related impacts of the Project, including any resulting GHG emissions.

2. The Final EA fails to address relevant CEQ guidance for addressing and disclosing the climate impacts of a proposed action.

With respect to its climate-impact analysis, the Final EA fails even to mention salient guidance from CEQ: the nation’s highest authority on NEPA. In January 2023, CEQ released interim guidance for agencies to “make use of . . . immediately” when considering greenhouse gas (GHG) emissions and climate change under NEPA.<sup>65</sup> This guidance directs agencies analyzing a

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<sup>63</sup> See, e.g., *Ctr. for Biological Diversity v. U.S. Forest Serv.*, No. CV 22-114-M-DWM, 2023 WL 5310633, at \*10-11 (D. Mont. Aug. 17, 2023) (cleaned up) (“While the USFS did not address climate change in the EA through the Forest and Project Carbon Plans, merely discussing carbon impacts and concluding that they will be minor does not equate to a ‘hard look. . . .’ [The Forest Service] has the responsibility to give the public an accurate picture of what impacts a project may have, no matter how ‘infinitesimal’ they may be.”).

<sup>64</sup> Sandwich VMP Carbon Assessment at 2.

<sup>65</sup> National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change, 88 Fed. Reg. 1196, 1196 (Jan. 9, 2023) (Exhibit 6).

proposed action’s climate impacts under NEPA to: (1) quantify the reasonably foreseeable GHG emissions (both direct and indirect) of a proposed action, the no-action alternative, and any reasonable alternatives; (2) disclose and provide context for the GHG emissions and climate impacts associated with a proposed action and its alternatives; and (3) analyze reasonable alternatives and identify available strategies for mitigating the action’s climate effects.<sup>66</sup> As the guidance explains, analyzing reasonably foreseeable climate effects in NEPA reviews “helps ensure that decisions are based on the best available science and account for the urgency of the climate crisis.”<sup>67</sup>

Nowhere in the Final EA, however, does the Forest Service mention CEQ’s guidance as a factor in its analysis—despite Objectors having alerted the agency to this issue in prior comments.<sup>68</sup> Nor, for that matter, does the Service claim any alternative methodology by which it has gauged the climate impact of its actions. In fact, the only concrete reference to the climate impacts of this particular Project in the Final EA commits a cardinal NEPA sin, asserting that the Project will “affect a relatively small amount of forest land” and that “[i]n the short-term, activities are likely to contribute an extremely small quantity of [GHG] emissions relative to national and global emissions.”<sup>69</sup> Thus, while the Forest Service need not exhaustively analyze the climate effects of the Project, it may not dismiss them solely because they are considered too small to count; here, the Service must at least provide a reasonable estimate of the carbon emissions likely to result from the Project and its associated actions.

In order to remedy this deficiency in its climate-impacts analysis, the Forest Service must quantify the reasonably foreseeable GHG emissions resulting from not only the proposed action, but also any reasonable alternatives, and must then use such data to make a reasoned decision between those alternatives.

3. The Final EA fails to adequately account for relevant executive orders and Service directives intended to foster climate-smart forestry practices.

The Forest Service’s decisions to disregard Executive Order 14008 and summarily conclude that the agency has satisfied Executive Order 14072 are contrary to NEPA. Prior to the Draft and Final EAs, President Biden issued Executive Orders 14072 and 14008, which directly relate to the Service’s proposed action here. Notwithstanding the Final EA’s acknowledgment of the Service’s obligations to protect old-growth forest under Executive Order 14072, it disregards Executive Order 14072’s mandate to conserve and restore *mature* forests—the most prevalent

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<sup>66</sup> *Id.* at 1200–1201.

<sup>67</sup> *Id.* at 1197.

<sup>68</sup> See Draft EA Comments at 26.

<sup>69</sup> Final EA at 26; see also *Ctr. for Biological Diversity v. U.S. Forest Serv.*, No. CV 22-114-M-DWM, 2023 WL 5310633, at \*10-11 (D. Mont. Aug. 17, 2023) (cleaned up) (holding that federal agencies must at least account for climate impacts, no matter how small, in order to fairly apprise the public of a decision’s impacts).

forest type in the Project area. Similarly, the Final EA disregards Executive Order 14008's call to conserve at least 30% of the nation's land and waters by 2030. By either disregarding these pronouncements or concluding that they have been satisfied without explanation, the Agency runs afoul of NEPA's hard-look requirement.

Executive Order 14072, issued in April 2022, aims to “retain and enhance carbon storage” and the “climate resilience” of our mature and old-growth forests.<sup>70</sup> The order makes clear that it is the policy of the Biden Administration to, *inter alia*, pursue science-based, sustainable forest management; conserve America's mature and old-growth forests; retain and enhance carbon storage; conserve biodiversity; and deploy climate-smart forestry practices.<sup>71</sup> Like other components of an agency's environmental analysis under NEPA, the Forest Service's treatment of Executive Order 14072 is to be judged against the arbitrary-and-capricious standard.<sup>72</sup> In other words, if the Service purports to wrestle with the implications of this standard in a discretionary way, it must ensure that its reasoning is transparent and demonstrates a rational connection between the facts and the choice that the agency ultimately makes.

In a December 18, 2023 letter to Regional Foresters, Forest Service Deputy Chief Chris French addressed the old-growth portion of that mandate by directing agency staff “to reserve to the National Forest System Deputy Chief the decision-making authority over management of old growth forest conditions on National Forest System lands during the amendment process.”<sup>73</sup> Under this directive, “any projects proposing vegetation management activities that will occur where old growth forest conditions (based on regional old-growth definitions) exist on National Forest System lands shall be submitted to the National Forest System Deputy Chief for review and approval.”<sup>74</sup> Shortly thereafter, the Forest Service published a Notice of Intent in the Federal Register to prepare an EIS for a nationwide forest-plan amendment process that will update management of all mature and old-growth forests under the Service's stewardship.<sup>75</sup>

Despite the Forest Service's acknowledgment that the “Forest Plan already prohibits management” in old-growth and similar forests, the Final EA states that the Service “identified, removed, and protected fifty acres of habitat meeting [the] descriptions” of “old growth and forests with old growth characteristics” as defined by the 2005 Forest Plan.<sup>76</sup> Additionally, the Final EA declares that the agency “identified, inventoried, and mapped a stand in the project area

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<sup>70</sup> Exec. Order No. 14072, 87 Fed. Reg. 24851, 24852 (Apr. 27, 2022).

<sup>71</sup> *Id.* at 24851.

<sup>72</sup> *See, e.g., Comm 'ys Against Runway Expansion v. FAA*, 355 F.3d 678, 688–89 (D.C. Cir. 2004) (holding that any analysis an agency discretionarily includes in its NEPA evaluation is subject to arbitrary-and-capricious review).

<sup>73</sup> *See* Elevated Review Letter.

<sup>74</sup> *Id.*

<sup>75</sup> *See* Land Management Plan Direction for Old-Growth Conditions Across the National Forest System, 88 Fed. Reg. 88042 (Dec. 20, 2023) (Exhibit 7).

<sup>76</sup> Final EA at 30.

outside the proposed units for future protection.”<sup>77</sup> While we are grateful for these decisions by the Forest Service to modify the Proposed Action, the modification belies a recognition that the Service failed to assess Project-area stand ages and conditions during the development of the Draft EA. If the Service had taken a hard look at such characteristics—using the same standards that have applied for the past two decades—then it would surely have identified such old-growth stands earlier in the Project’s development, thereby informing the drafting of alternatives and providing the public with ample opportunity to comment.

Instead of learning from this mistake, however, the Final EA does not apply a screen based on the relevant “regional old-growth definitions,” which the Deputy Chief has directed each unit of the National Forest System to use to “ensure the careful evaluation of proposed vegetation management activities occurring in areas where old growth forest conditions exist while the national old growth amendment is developed.”<sup>78</sup> In a March 27, 2024 email to Standing Trees Executive Director Zack Porter, White Mountain National Forest Environmental Coordinator Theresa Corless denied that the Service had any obligation to respond affirmatively to the Deputy Chief’s letter.<sup>79</sup> This refusal not only constitutes a failure to comply with the Deputy Chief’s direction, but a failure to meet the “hard look” standard of NEPA as well.

And as Objectors have identified since scoping began,<sup>80</sup> this failure is merely the latest example of the Forest Service’s continued refusal to assess the ages or ecological conditions of the stands it has proposed for management. Furthermore, the Final EA does not even attempt to grapple with the Forest Service’s obligation to conserve mature forests under Executive Order 14072. Not only, then, is the agency’s complacent approach to conserving old growth impermissible, but so, too, is its complete disregard for mature stands on the Unit.

Executive Order 14072’s climate-conscious vision for federal forest management is buttressed by the overarching climate-related mandates inherent in Executive Order 14008—issued just after the President’s inauguration in January 2021—which made it the policy of the federal government to “protect America’s natural treasures, increase reforestation, improve access to recreation, and increase resilience to wildfires and storms” and acknowledged the pivotal role that forest landowners play in “combating the climate crisis and reducing [GHG] emissions by sequestering carbon. . . .”<sup>81</sup> Additionally, the Order required the Forest Service and other relevant agencies to contribute to recommend steps for “achiev[ing] the goal of conserving at least 30 percent of our lands and waters by 2030.”<sup>82</sup> Executive Order 14008 also required the

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<sup>77</sup> *Id.*

<sup>78</sup> *See* Elevated Review Letter.

<sup>79</sup> *See* E-mail from Theresa Corless, Forest Planner and Env’t Coordinator, White Mountain Nat’l Forest, to Zack Porter, Exec. Dir., Standing Trees (Mar. 27, 2024) (Exhibit 8).

<sup>80</sup> Scoping Comments at 9; Draft EA Comments at 4–12, 57.

<sup>81</sup> Tackling the Climate Crisis at Home and Abroad, Exec. Order No. 14008, 86 Fed. Reg. 7619, 7626 (Feb. 1, 2021).

<sup>82</sup> *Id.* at 7627.

Forest Service, along with other federal agencies, to draft an action plan to improve adaptation and increase resilience to climate change.<sup>83</sup>

The Forest Service responded to this latter mandate by publishing its Climate Change Adaptation Plan in July 2022, which explicitly acknowledged the importance of mature and old forests to overall ecosystem health:

Old-growth and mature forests, and other forests with similar characteristics, are an ecologically and culturally important part of the National Forest System. They reside within a continuum of forest age classes and vegetation types that provides for a wide diversity of ecosystem values. Many forests with old-growth characteristics have a combination of higher carbon density and biodiversity that contributes to both carbon storage and climate resilience.<sup>84</sup>

And to the extent that it acknowledges the relevance of the Plan, the Final EA merely concludes that “[t]he proposed action is consistent with adaptation strategies identified in the USDA Forest Service Climate Adaptation Plan. . . .”<sup>85</sup> Such cursory analysis does not provide enough information to demonstrate to the public that such action is wise or justifiable.

4. The Final EA’s conclusory assertions with respect to carbon storage do not adequately account for the carbon-storage benefits at risk due to the proposed Project.

Timber harvest accounts for 86% of annual forest carbon loss across the Northeast.<sup>86</sup> Despite this evidence, the Forest Service incorrectly implies that the prescribed treatments will enhance the forest’s ability to absorb carbon. The Forest Service concludes that the overall climate effects of the Project are “negligible”<sup>87</sup> because as the forest regrows, young trees will remove carbon from the atmosphere.<sup>88</sup> This is based on a common misconception that young forests are better than old at removing carbon, and ignores strong scientific evidence that carbon storage and sequestration is maximized in un-logged stands in northern New England.<sup>89</sup> Old forests store

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<sup>83</sup> *Id.* at 7625.

<sup>84</sup> U.S. FOREST SERV., CLIMATE ADAPTATION PLAN 13 (2022) (Exhibit 9).

<sup>85</sup> Final EA at 26.

<sup>86</sup> N.L. Harris et al., *Attribution of Net Carbon Change by Disturbance Type Across Forest Lands of the Coterminous United States*, CARBON BALANCE & MGMT., Nov. 2016, at 1, 12 (Exhibit 10).

<sup>87</sup> See discussion *supra* at 16.

<sup>88</sup> Final EA at 26.

<sup>89</sup> See, e.g., William S. Keeton et al., *Late-Successional Biomass Development in Northern Hardwood-Conifer Forests of the Northeastern United States*, 57 FOREST SCI. 489 (2011) (Exhibit 11); Edward K. Faison et al., *Adaptation and Mitigation Capacity of Wildland Forests in the Northeastern United States*, 544 FOREST ECOLOGY & MGMT. 121145 (2023) (Exhibit 12).

more carbon than young forests, and they continue to accumulate carbon over time.<sup>90</sup> Indeed, the rate of carbon sequestration actually increases as trees age.<sup>91</sup> As raised in our earlier comments,<sup>92</sup> recent studies show that among land uses in New England, timber harvest is the leading cause of tree mortality<sup>93</sup> and has the greatest impact on aboveground carbon storage.<sup>94</sup> Forests in New Hampshire are still recovering from extensive clearing in the 18th and 19th centuries. Timber harvesting in New England has been found to have a larger effect than forest conversion to non-forest uses on aboveground carbon storage.<sup>95</sup> In addition, as noted in our previous comments but unacknowledged by either the Service’s response to comments or the Final EA, a 2014 study of the effects of logging on soil-carbon resources in New England—which assessed sites quite near the Project area—“found a significant negative relationship between time since forest harvest and the size of mineral soil [carbon] pools, which suggested a gradual decline in [carbon] pools across the region after harvesting.”<sup>96</sup>

Despite the significant, well-researched advantages of older forests compared to younger ones with respect to carbon storage, the Final EA fails entirely to address this distinction by, for example, explaining why its proposal to log primarily mature and old trees is consistent with the Service’s obligation to conserve mature trees under Executive Order 14072.

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For the foregoing reasons, the Forest Service’s Final EA for this Project fails to satisfy the Service’s obligations under NEPA to take a “hard look” at the potential climate impacts of the Project.

**Requested Remedy:** The Forest Service must acknowledge the significance of the Project’s myriad likely climate impacts on mature and old-growth forest conditions, withdraw the

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<sup>90</sup> See, e.g., Heather Keith et al., *Re-Evaluation of Forest Biomass Carbon Stocks and Lessons from the World’s Most Carbon-Dense Forests*, 106 PNAS 11,635 (2009) (Exhibit 13); Sebastiaan Luyssaert et al., *Old-Growth Forests as Global Carbon Sinks*, 455 NATURE 213 (2008) (Exhibit 14); Robert T. Leverett et al., *Older Eastern White Pine Trees and Stands Sequester Carbon for Many Decades and Maximize Cumulative Carbon*, FRONTIERS, May 2021 (Exhibit 15); Dominik Thom et al., *The Climate Sensitivity of Carbon, Timber, and Species Richness Covaries with Forest Age in Boreal-Temperate North America*, GLOB. CHANGE BIOLOGY, Mar. 2019 [hereinafter “Thom et al.”] (Exhibit 16).

<sup>91</sup> N.L. Stephenson et al., *Rate of Tree Carbon Accumulation Increases Continuously with Tree Size*, 507 NATURE 90 (2014) (Exhibit 17).

<sup>92</sup> Scoping Comments at 28–29; Draft EA Comments at 26.

<sup>93</sup> See Michelle Brown et al., *Timber Harvest as the Predominant Disturbance Regime in Northeastern U.S. Forests: Effects of Harvest Intensification*, ECOSPHERE, Mar. 2018, <https://esajournals.onlinelibrary.wiley.com/doi/full/10.1002/ecs2.2062> (Exhibit 18).

<sup>94</sup> See Matthew J. Duveneck & Jonathan R. Thompson, *Social and Biophysical Determinations of Future Forest Conditions in New England: Effects of a Modern Land-Use Regime*, 55 GLOB. ENV’T CHANGE 115 (2019) (Exhibit 19).

<sup>95</sup> *Id.*

<sup>96</sup> Chelsea L. Petrenko & A.J. Friedland, *Mineral Soil Carbon Pool Responses to Forest Clearing in Northeastern Hardwood Forests*, 7 GCB BIOENERGY 1283, 1283 (2014) (Exhibit 20).

deficient EA, and prepare an EIS. The analysis therein must include, at a minimum, some explanation of how the Service's proposed actions comply with its obligation to conserve mature and old-growth forests under Executive Order 14072; quantifiably assess and disclose the Project's probable climate impacts, using either CEQ's standardized methodology or, if the Service prefers, the agency's own methodology for such assessment, so long as the choice is clearly explained; and incorporate all supporting documents from the *beginning* of the planning process.

C. The Final EA violates NEPA because it does not explain any proposed deviation from Forest Plan guidelines or develop adequate baseline data to enable the agency to assess any future impacts to water quality resulting from the Project.

Despite Objectors' requests throughout the planning process for the Service to perform further water quality analysis (ideally as part of an EIS),<sup>97</sup> the Final EA fails to provide the requisite analysis of impacts to water quality in the Unit. Specifically, the Final EA is deficient under NEPA (1) because it fails to adequately justify its proposed decision to conduct Project activities that will result in 35.8% reduction to the basal area of a particular watershed; and (2) because the Service purports to move forward with its proposed action despite apparently not having ascertained any baseline for water quality on the Unit. In particular, because the Service has not performed any stratigraphic or hydrological analysis of the proposed treatment area, it did not accurately ascertain the Project's likely impacts on water quality.

Further analysis would be warranted to ensure that watershed effects are permissible because the Project exceeds the Forest Service's 20% basal area-removal limit to prevent negative effects on water quality for a single watershed. One watershed has a proposed basal area reduction of 35.8%, which could result in "a decrease in pH making the water more acidic, or an increase in aluminum."<sup>98</sup> Without making a baseline analysis, the Forest Service then asserts that the impacts from these treatments would not be irreversible or irretrievable such that they would interfere with potential designation.<sup>99</sup>

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<sup>97</sup> See Draft EA Comments at 29–31.

<sup>98</sup> Final EA at 25. Further, the Forest Plan's forest-wide guideline for vegetation management G1 requires that "[n]o more than 15 percent of the area of watersheds of first and second order perennial streams should be treated with even-age regeneration methods in a five-year period." 2005 PLAN at 2-1, 2-29. The Final EA makes no mention of this standard or whether the Project complies with it.

<sup>99</sup> The Forest Plan's forest-wide guideline G-1 for Riparian and Aquatic Habitats states that "[t]ree cutting and harvest should not occur within 25 feet of the bank of mapped perennial streams[.]" 2005 PLAN at 2-24. The Forest Service has not provided any map of the project area that indicates the location of perennial streams relative to the harvest-unit boundaries. The agency's failure to mention this guideline—or to make clear that these 25-foot buffers have been thoroughly considered as part of the Project design—fails to satisfy NEPA's hard-look requirement, especially given that Standing Trees raised this issue during the Draft EA comment period as well. See Draft EA Comments at 29–31.



Instead of providing potential mitigation techniques or using a buffer zone to protect the perennial stream, the Final EA claims the effects will be reduced by the inherent qualities of that stream:

First, the perennial stream in this watershed is not a fish-bearing stream as the channel is quite small. Second, the slope of the watershed is lower than most, which leads to increased infiltration and slower water movement through the watershed. This allows more time for water to pick up ions along its path to the stream, making the stream better buffered against acidification and aluminum toxicity risks. Third, beaver activity in this watershed further slows down water and stores water, further reducing acidification and aluminum toxicity risks.<sup>100</sup>

However, there is no supporting documentation that indicates the effectiveness of these methods, nor of the “quite small” stream’s capacity to detoxify itself. The stream’s natural deacidification capacity could be entirely overwhelmed by the Project, thus polluting the larger wetland and decreasing the Cold River’s water quality.<sup>101</sup> And while the Final EA acknowledges that the Cold River is “an eligible wild and scenic river with a ‘scenic’ classification,”<sup>102</sup> it does not prescribe any mitigation measures for protecting the Cold River’s water quality, and it instead plans treatments for the area that include clearcuts and other even-aged prescriptions.<sup>103</sup>

Additionally, the Final EA fails to satisfy NEPA with respect to water-quality analysis because the Service has neglected to establish a baseline for water quality on the Unit. Pursuant to NEPA’s “hard look” mandate, an agency must rely on adequate baseline data that enables the agency to carefully consider information about direct environmental impacts and may not rely on outdated data to do so.<sup>104</sup> Indeed, “establishing appropriate baseline conditions is critical to any NEPA analysis,” because without establishing a baseline, “there is simply no way to determine what effect the [project] will have on the environment and, consequently, no way to comply with NEPA.”<sup>105</sup> When a federal agency fails to establish such a baseline, then, it fails to comply with NEPA.

Whether baseline data were even gathered for use in the Final EA’s analysis is unclear because no such information was presented or referenced. Without knowing the baseline for water quality in the Project area—or, consequently, the potential impacts to water quality that could result from the Project—it is impossible for the public to meaningfully evaluate or weigh in on the adequacy of the Service’s analysis. In particular, the Service ought to define the treatment unit

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<sup>100</sup> Final EA at 25.

<sup>101</sup> *Id.*; see also 2005 PLAN at 2-31.

<sup>102</sup> Final EA at 30.

<sup>103</sup> *Id.* at 25.

<sup>104</sup> See, e.g., *N. Plains Res. Council v. Surface Transp. Bd.*, 668 F.3d 1067, 1083–87 (9th Cir. 2011); *Cascade Forest Conservancy v. Heppler*, 2021 WL 641614, at \*17–20 (D. Or. Feb. 15, 2021).

<sup>105</sup> *Great Basin Res. Watch v. Bureau of Land Mgmt.*, 844 F.3d 1095, 1101 (9th Cir. 2016).

boundaries prior to any implementation because of the potential for such boundaries to stray into protected riparian areas. Curiously, the Final EA states that there *will be* field visits prior to project implementation aimed at “further refin[ing] treatment units based on site conditions,” including potentially “reduc[ing acres] to meet visual and water quality objectives, to incorporate reserve patches of uncut trees in final harvest stands, or incorporate protective buffers around features such as vernal pools, cultural resources, nest trees, and riparian zones.”<sup>106</sup> In other words, the Service seeks to put the cart before the horse—first making a decision to proceed with the project public approval of its decision and, if necessary, only *then* establishing the baseline that might permit the public to make the reasoned judgment needed to make that decision. With respect to the resources mentioned, these on-site baseline conditions were required to be identified *before* commencing the NEPA analysis so as to permit the Service to make an informed decision. Because they were not, the Final EA is unlawfully deficient.

Currently, the lack of any site-specific data or analysis to support the Forest Service’s approval of the proposed water quality impacts renders it impossible for the public to assess—or the Service to establish—the adequacy of the Final EA’s water-quality assessment. The absence of such a baseline also means that the Service is unable to meaningfully respond to the aforementioned concerns about the 35.8% reduction in one affected watershed’s basal area. The Forest Service’s decision to explain away such a discrepancy in a matter of three sentences falls far short of the “hard look” NEPA requires it to take.

***Requested Remedy:*** For these reasons, the Service must withdraw the legally suspect EA and prepare an EIS, which must establish baseline for water quality on the Project area by performing a thorough stratigraphic and hydrological analysis of the entire proposed treatment area and adjacent forest. Such analysis must include particular focus on the likely impacts of Project-related road construction and reconstruction as well as site-specific analysis of the perennial stream mentioned above.

D. The Forest Service failed to sufficiently evaluate the Project’s impacts on the continued existence of federally listed species like the Northern Long-Eared Bat.

The Service did not give sufficient analysis in the Final EA to the Project’s impacts on sensitive, threatened, or endangered species that may be present in the Project area. On November 30, 2022, Fish and Wildlife published a final rule reclassifying the NLEB, uplisting the bat from threatened to endangered under the Endangered Species Act.<sup>107</sup> The NLEB is now definitively endangered, and part of its known habitat range is within the Project area. The Final EA acknowledges the NLEB’s newly endangered status but makes no changes to the proposed

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<sup>106</sup> Final EA at 10.

<sup>107</sup> Endangered and Threatened Wildlife and Plants; Endangered Species Status for Northern Long-Eared Bat, 87 Fed. Reg. 73488 (Nov. 30, 2022) (Exhibit 21).

action.<sup>108</sup> This is insufficient, as what little analysis was performed with respect to the NLEB in the Final EA relies solely on a flawed Biological Opinion (“BiOp”) from Fish and Wildlife.

Rather than analyze the impact of each proposed action on listed species and their habitats, the BiOp provides a blanket assessment of nearly 3,000 Forest Service projects, of which the Project is only one: “[d]ue to the number of planned and ongoing projects and the similarity of effects, the projects will be combined and collectively evaluated to determine the projects’ effects on NLEB.”<sup>109</sup> There are a litany of potential harms to the NLEB and their habitat from projects like this one, and the lack of reliable data on where NLEB colonies persist and the likelihood of impacts from these projects is used as justification for continuing with the planned forest management projects.<sup>110</sup> Incoherently, the Biological Opinion—utilizing the same sweeping disregard as the Forest Service’s own blanket analyses—authorizes projects like the Sandwich VMP without any site- or Project-specific study or analysis. In other words, based on available science, endangered NLEBs are assumed to exist in the Project area, but the Service intends to change nothing about the Project to protect them. This decision is in blatant derogation of the purpose and procedures of the ESA,<sup>111</sup> and the Forest Service cannot lawfully rely on this approach.<sup>112</sup>

The 2023 Biological Evaluation for the Project indicates that the NLEB was documented throughout the National Forest and that roosting and foraging habitat exists within the action area.<sup>113</sup> The Forest Service has not attempted to conduct any surveys.<sup>114</sup> Furthermore, the Forest Service’s evaluation of direct effects haphazardly concludes that, because white-nose syndrome has reduced populations, “the likelihood of a bat being in a tree [during active, non-hibernation

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<sup>108</sup> Final EA at 7.

<sup>109</sup> U.S. Fish & Wildlife Serv., Biological Opinion: Effects to the Northern Long-Eared Bat from Planned and Ongoing Activities Being Implemented in the Eastern and Southern Regions of the U.S. Forest Service, at 4 (Mar. 31, 2023) [hereinafter “BiOp”] (Exhibit 22).

<sup>110</sup> *Id.* at 18, 30–35 (“[I]t is reasonable to conclude there will be some impacts to some individual NLEBs in areas where they have yet to be documented (i.e., specific areas where they are not reasonably certain to occur). Given the nature of forest management and overlap with suitable habitat, the best available science indicates that forest management practices are anticipated to have at least some negative impact on some individual NLEBs in unknown locations, as opposed to the assumption that forest management will have a large impact on all of the or most NLEBs.”).

<sup>111</sup> See *WildEarth Guardians v. Jeffries*, 370 F.Supp.3d 1208, 1235 (D. Or. 2019) (“The problem is that, without data identifying the location of calving sites and wallows, the Forest Service cannot meet its obligation to protect those sites or minimize disturbance to [elk.]”); *Sierra Club v. Martin*, 71 F.Supp.2d 1268, 1319 (N.D. Ga. 1996) (finding that, because there was no population data, quantitative data, or other adequate information, the Forest Service did not have sufficient facts or evidence regarding sensitive and endangered species to support its finding of no significant impact).

<sup>112</sup> See *Ctr. for Biological Diversity v. U.S. Forest Serv.*, No. CV 22-114-M-DWM, 2023 WL 5310633, at \*7 (D. Mont. Aug. 17, 2023) (“[A]n agency violates the ESA if it relies on a legally flawed BiOp.”).

<sup>113</sup> U.S. Forest Serv., White Mountain Nat’l Forest, Saco Ranger Dist., Sandwich Vegetation Management Project Biological Evaluation for Federally Listed, Proposed and Candidate Species, at 10 (July 2023) [hereinafter “Biological Evaluation”].

<sup>114</sup> *Id.* at 11.

season] when it is cut is low.”<sup>115</sup> For these reasons, information on the activity of NLEB in the Project area is not only scarce and inadequate, but also outdated. The Biological Evaluation concedes that, in the Project area, NLEB roosts may be removed during project activities.<sup>116</sup>

Moreover, even using the Biological Opinion’s own terms and methodology—and the accompanying NLEB tools from Fish and Wildlife—the Project fails to comply with those requirements. The Forest Service’s Biological Evaluation indicates that the Forest Service used Fish and Wildlife’s Information for Planning and Conservation (“IPaC”) website to determine which federally listed species may occur within the action area.<sup>117</sup> However, neither the Final EA nor any other Project documentation discusses whether the Forest Service completed the Determination Key review process (“DKey”) to evaluate the effects of the project on the NLEB. This illustrates how the Service has not supported its assertion of compliance with the ESA. The Biological Evaluation indicates that “[t]here are no known hibernacula within the action area.”<sup>118</sup> It is unclear what field studies or actions—if any—the Forest Service actually undertook to reach this conclusion. Without any supporting data, studies, or evidence, this appears to be a conclusory statement of, in essence, “see no evil, hear no evil.” This logic used by the Service is inadequate and fails to indicate how the Service came to any practical determination on the presence of this species.

***Requested Remedy:*** Due to the severe impact on the species that the Project could cause, the Forest Service must withdraw the legally deficient EA and instead prepare an EIS. As part of that EIS, the Service must conduct additional studies to determine the current status of the NLEB in the Project area before taking any action.

E. The Final EA fails to account for potential aesthetic and other scenery-related impacts to several viewsheds and thereby violates NEPA.

Despite the fact that the Unit sits in the gateway to the White Mountains and that the Project area is visible from iconic Mount Chocorua, the Forest Service has issued a Final EA that both fails to square potential discrepancies between the Project and the Forest Plan—which, as Objectors mentioned in previous comments, does not constitute the requisite hard look at the Project’s potential impacts on this viewshed—and fails to provide the thorough assessment of aesthetic and other recreational impacts that NEPA requires.

As proposed, the Project is at odds with certain aspects of the Forest Plan but unlawfully and illogically fails to analyze those inconsistencies in the Final EA. For example, the Forest Service has not upheld its obligation to ensure that all projects on the National Forest be “minimally

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<sup>115</sup> *Id.*

<sup>116</sup> *Id.*

<sup>117</sup> *Id.* at 5.

<sup>118</sup> *Id.* at 8.

evident from trail, road, or use area vantage points,” with openings “appear[ing] as natural occurrences” and “well-distributed in the viewed landscape.”<sup>119</sup> Unit 06, for example—which the Forest Service admits will be highly visible from Mount Chocorua and no doubt many other viewpoints in the area—has a high Scenic Integrity Objective but is proposed to undergo clearcutting with 4.14 visible acres, which exceeds the low end of the threshold for determining scenic resource impacts.<sup>120</sup> The Scenery Resources Effects Analysis (“Scenery Report”), however, claims the Project’s effects do not even “approach a threshold” under the Forest Plan.<sup>121</sup> The Agency provides no explanation for the discrepancy, despite Objectors having raised these issues during the prior comment period.<sup>122</sup>

In addition to this potential discrepancy, the reasoning on which the Service relies for its conclusion that the Project will have no significant impacts on scenic integrity in the Project area fails to satisfy NEPA’s hard-look standard for federal agency action. The Project proposes either logging, burning, or both near several popular trails into the Sandwich Range Wilderness and Mount Chocorua Scenic Area, including the Old Mast Road, Kelly Trail, Cabin Trail, Big Rock Cave Trail, Old Paugus Trail, Brook Trail, and Liberty Trail. The Final EA gives virtually no attention to the potential impacts of logging several hundred acres of mature forest on the Project area’s scenic integrity, other than to note and quickly dismiss such activities as minor and temporary.<sup>123</sup>

In addition to the scenic integrity of Unit resources, the Final EA also fails to adequately account for the recreational impacts of Project activities, including effects on the surrounding community, hikers, skiers, and other users of the Old Mast Road, Kelly Trail, Cabin Trail, Big Rock Cave Trail, Old Paugus Trail, Brook Trail, and Liberty Trail. Moreover, although views will be impacted from the summit of Mount Israel and Mount Whiteface, popular hiking destinations within the Project area, these viewsheds have gone entirely unanalyzed. In its Response to Comments for the Project, the Service acknowledged that it did not select those viewpoints for analysis because they were “determined to have minimal view of the treatment units” and that “views from the valleys will be less impacted than from the analyzed viewpoint due to screening from topography and vegetation.”<sup>124</sup> Further, despite the Service’s proposing 65 acres for prescribed burn treatment, potential impacts from prescribed burns for the users of abutting Liberty Trail and other hiking trails are not mentioned. A recent visit to the Liberty Trail

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<sup>119</sup> *Id.* at 3–6.

<sup>120</sup> *Id.* at G-3 (“Maximum observed size [of created openings] should not exceed 4-5 acres.”).

<sup>121</sup> U.S. Forest Serv., White Mountain Nat’l Forest, Sandwich Vegetation Management Project Scenery Resources Effects Analysis, at 1 (Jan. 17, 2024).

<sup>122</sup> Draft EA Comments at 31–32.

<sup>123</sup> *See, e.g.*, Final EA at 23 (“The proposed action will have visual impacts similar to other vegetation management activities. . . . These impacts will fade and blend over time. . . . Based on the scenery analysis using these three viewpoints, the design of the proposed action was found to be consistent with the relevant forest plan guidelines for evaluating cumulative effects. . . .”).

<sup>124</sup> Response to Comments at 8 (Exhibit 32).

revealed a beautiful, late-successional forest that would be harvested under the Project, radically transforming the visitor experience for decades to come. In sum, the analysis in the Final EA and accompanying Scenery Report falls short of providing a robust assessment of the Project's effects on the Unit's recreational resources and renders it impossible for the public to provide meaningful input.

***Requested Remedy:*** In order to square its analysis of the Project's scenic and recreational impacts with NEPA's substantive requirements, the Forest Service must withdraw its flawed EA and, as part of an EIS: (1) either explain why clearcutting 4.14 acres on Unit 06 does not merit further justification or reconsider such action altogether; (2) conduct a thorough analysis of the Project's impacts on Scenic Integrity Objectives in the Project area; and (3) assess the Project's impacts on recreational resources.

F. The Final EA's cursory review of soil-related impacts violates the Service's obligation to take a "hard look" at soil resources in the Project area.

For three reasons in particular, the Forest Service's Final EA and accompanying Soils Report do not constitute the requisite "hard look" at the Project's likely impacts on soil resources in the Project area.

First, as with the Service's missteps with respect to preliminary water quality analysis, nowhere in the Final EA and Soils Report does the Forest Service indicate that it has acquired a valid baseline upon which to conclude that conditions in the Project area are suitable for timber harvest. The closest the Service comes is to suggest that "soil productivity [in the Project area] has been maintained following previous harvest" and that such results are consistent with Forest-wide data on desired soil conditions.<sup>125</sup> Just as was true regarding its failure to obtain a water quality baseline, the Service has attempted to substitute historical, National Forest-wide data for more current, site-specific data.

Second, the Final EA fails to satisfy NEPA's hard-look standard because the Service has proposed actions that will likely require a site-specific modification of guidelines in the 2005 Plan without providing sufficient rationale for that modification. Guidelines permit the Service to "respond to variations in conditions" and may be modified or not implemented if "the rationale for doing so [is] documented in a project-level analysis and signed decision."<sup>126</sup> In this case, the Soils Report acknowledged that the topography of the Project area means that skid trails would likely need to be built on grades of up to 35%<sup>127</sup>—which is inconsistent with Vegetation

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<sup>125</sup> U.S. Forest Serv., Sandwich Vegetation Management Project Environmental Assessment Soils Report, at 1 (Jan. 2024) [hereinafter "Soils Report"]. Additionally, Agency statements referencing field examinations on the Project area cite a 2020 report. *See id.*

<sup>126</sup> 2005 PLAN at 2-3.

<sup>127</sup> Soils Report at 3.

Management Guideline G-5's requirement that skid trails be located on grades below 20%<sup>128</sup>— but asserts that “detrimental effects to soil productivity would be avoided in the project area . . . as long as soil and water best management practices and design features are followed.”<sup>129</sup> This assertion fails to justify the Service's planned departure from Guideline G-5. Presumably, the 20% figure represented in the Forest Plan was not chosen arbitrarily—i.e., the Forest Plan might just as easily have prohibited skid roads being constructed on roads with a grade below 35% but did not—and surely the Forest Plan was drafted under the presumption that the Service would adhere to best management practices (“BMPs”) where feasible. The Forest Service cannot logically justify its departure from a particular guideline in the Forest Plan by explaining that the Service will mitigate the negative impacts by going about things in the usual way.

Third, the Final EA's unsupported assertion that “temporary compaction [is] expected on main skid trails” but that such compaction will “be minimized by design features” violates NEPA's requirement that agencies take a hard look at the reasonably foreseeable impacts of their actions. This curt dismissal of reasonably foreseeable impacts to soils that would recover from compaction within *at best* three years from the end of operations defers the development of those mitigating design features to a later time, removing any opportunity for the public to assess their validity or necessity. NEPA does not permit such agency action.

***Requested Remedy:*** For these reasons, too, the Forest Service must withdraw its EA and prepare an EIS that comprehensively assesses the competing values of resources in the Project Area. With respect to soil resources, that EIS must contain, at a minimum, the Service's establishment of a baseline for soil quality on the Project area; a more thorough explanation of the Forest Service's conclusion that the impacts of Project activities on soil resources will be totally mitigated by its adherence to BMPs; and evidentiary support for the proposition that design features would “minimize[]” temporary compaction of soils in the Project area.

G. The Final EA fails to satisfy NEPA's “hard look” requirement by asserting, without scientific support, that logging in two separate roadless areas will have no impact on the areas' wilderness potential and failing to acknowledge these areas' independently unique qualities outside of the potential for wilderness designation.

The Forest Service's analysis of impacts to roadless areas fails to satisfy NEPA's “hard look” requirement in two main respects: first, because the analysis goes only so far as to determine whether the future eligibility of such areas for wilderness recommendation will be affected but disregards the other three factors influencing their suitability for future recommendation or designation as well as their independent, unique features; and second, because even within that limited scope of analysis, the Service's assessment proves too cursory.

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<sup>128</sup> 2005 PLAN at 2-30.

<sup>129</sup> Soils Report at 3.

As the Forest Service now concedes, it failed to acknowledge the existence of Forest Plan Inventoried Roadless Areas or Roadless Area Conservation Rule Areas in the Project area in either the NOPA or the Draft EA. Standing Trees first requested information pertaining to the location of roadless areas by email on June 16, 2022 (during the scoping comment period), but the Forest Service failed to respond by the comment deadline. The Draft EA remained deficient as to its treatment of apparent Project impacts to roadless areas, partly because—as an August 9, 2023 email from District Ranger Jim Innes noted—the Service lacked such information to begin with.<sup>130</sup> Later on, in an August 25, 2023 email from Theresa Corless to Zack Porter, the Forest Service admitted that it had erred in omitting those areas from the Draft EA.<sup>131</sup>

The Forest Service’s failure to respond to Standing Trees’ request for information during scoping or to disclose such information in the Draft EA highlights at least two legal deficiencies with the Service’s analysis. First, the Service’s failure to acknowledge the omission until the release of the Final EA means that the public never had an opportunity to adequately comment on the proposed impacts to roadless areas. Second, the Forest Service’s failure to include such information in its analysis clearly indicates that it did not have crucial information available to inform decisions related to alternative development, including alternatives requested for review by Objectors in our scoping and Draft EA comment letters.<sup>132</sup>

The Final EA acknowledges that two inventoried roadless areas (“IRAs”) are planned for timber management: 248 acres are slated for logging in the Chocorua IRA, as are 12 acres in the Sandwich 1 IRA.<sup>133</sup> Because the Chocorua and Sandwich 1 IRAs were inventoried after promulgation of the 2001 Roadless Area Conservation Rule, the Forest Service has seen fit to analyze the Project’s impacts on these areas solely by assessing whether Project activities will affect such areas’ eligibility for consideration in a future Chapter 70 Wilderness inventory and evaluation process.<sup>134</sup> Chapter 70 of the Forest Service Land Management Planning Handbook describes a four-part process that addresses not only an area’s minimum eligibility, but also an area’s suitability for future wilderness designation and management. Steps include: (1) inventory of eligible lands; (2) evaluation of wilderness characteristics; (3) analysis; and (4) recommendation.<sup>135</sup> The Forest Service’s single-minded focus on “eligibility” for consideration

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<sup>130</sup> See E-mail from Jim Innes, Dist. Ranger, White Mountain Nat’l Forest, Saco Ranger Dist., to Zack Porter, Exec. Dir., Standing Trees (Aug. 9, 2023) (“We do not have a map that displays the management area and the IRA’s and RACR.”) (Exhibit 23).

<sup>131</sup> See E-mail from Theresa Corless, Forest Planner and Env’t Coordinator, White Mountain Nat’l Forest, to Zack Porter, Exec. Dir., Standing Trees (Aug. 25, 2023, 12:26 EST) (“Re Sandwich, we do know that we omitted the IRAs. We thought we corrected it for the draft EA, but didn’t. We have corrected it for the final EA.”) (Exhibit 24).

<sup>132</sup> See Scoping Comments at 6-7; Draft EA Comments at 45-48.

<sup>133</sup> Final EA at 29.

<sup>134</sup> *Id.*

<sup>135</sup> See U.S. FOREST SERV., FSH 1909.12 – LAND MANAGEMENT PLANNING HANDBOOK CHAPTER 70 – WILDERNESS (2015) (Exhibit 25) [hereinafter “CHAPTER 70”].



in a future Chapter 70 Wilderness Inventory and Evaluation—one part of the Forest Plan revision process under the 2012 Planning Rule—believes either a lack of understanding of the Chapter 70 process or a deliberate attempt to hide from public scrutiny the impacts of the Proposed Action.

The Final EA limits its consideration of Inventoried Roadless Area impacts to merely part one (eligibility), concluding that management activities will not exceed thresholds for a future Chapter 70 inventory.<sup>136</sup> Even if we take the Forest Service’s eligibility analysis at face value, the Service still fails to account for the Project’s impacts on the remaining three “suitability” components of the Chapter 70 wilderness-evaluation process: (1) the future evaluation of wilderness characteristics; (2) analysis; and (3) recommendation. For example, Chapter 70 asks Forest Service staff to “[e]valuate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man’s work substantially unnoticeable.”<sup>137</sup> How will proposed timber-harvest activities and prescribed burns impact “the degree to which the area generally appears to be affected primarily by the forces of nature?” The Final EA has made no effort even to pose—much less begin answering—such questions.

Furthermore, as Objectors previously raised in response to the NOPA for this Project and again in comments on the Draft EA,<sup>138</sup> we urge the Forest Service to analyze—and seek to mitigate or avoid—impacts to roadless areas and their unique attributes *regardless* of whether those roadless areas are managed under the 2001 Roadless Area Conservation Rule (“Roadless Rule”). The Roadless Rule largely prohibits logging and road construction in roadless areas, recognizing that such areas possess special attributes with respect to water, biodiversity, primitive recreation, and other elements regardless of whether an area is ever recommended for wilderness designation by the Forest Service or designated as “Wilderness” by Congress.<sup>139</sup> Rather than protecting these characteristics on the National Forest, though, the Forest Service proposes to treat Forest Plan IRAs the same as any other part of the Unit simply because the Service is permitted to manage such areas subject to the crude, sweeping management allocations under the 2005 Forest Plan.

Instead, the Forest Service must seek to identify and minimize impacts to all roadless areas by producing an EIS and conducting the environmental impact analysis it entails. Such an analysis must consider the potential effects of roadless area logging and road construction on existing roadless area conditions and values—regardless of whether a roadless area is managed according to the Roadless Rule—as well as on future Chapter 70 wilderness inventories and evaluations and the potential for Congress to include these lands in the National Wilderness Preservation System. This is especially important because the Project is geographically close to the Sandwich Wilderness area and, consequently, road construction and timber harvest may prevent future designation of adjacent parcels.

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<sup>136</sup> Final EA at 29.

<sup>137</sup> CHAPTER 70 at 11.

<sup>138</sup> Scoping Comments at 16; Draft EA Comments at 33.

<sup>139</sup> See 66 Fed. Reg. 3244, 3245 (Jan. 12, 2001) (defining roadless area values and characteristics) (Exhibit 26).

Additionally, even given the unjustifiably limited scope within which the Service has chosen to perform its assessment, the level of analysis here fails to show that the two IRAs in question will necessarily retain their eligibility for wilderness designation throughout the timber harvests proposed. The Chocorua IRA is noted for its high scenic integrity,<sup>140</sup> complete absence of non-native species,<sup>141</sup> and immense popularity for backcountry recreation,<sup>142</sup> all of which will be negatively impacted by proposed logging and burning. In addition, the proposed logging in Harvest Unit 39 could have direct and indirect impacts on the Sandwich Range Wilderness because Unit 39 directly abuts the Sandwich Range Wilderness to the south. Finally, as Objectors similarly raised in comments on the Draft EA, nowhere does the Final EA consider whether or to what extent harvesting activities might impact any one of the four qualities of wilderness character that qualify an area for wilderness designation by Congress: (1) naturalness; (2) sufficient size; (3) opportunities for solitude or primitive, unconfined recreation; and (4) the presence of ecological, geological, or other value.<sup>143</sup>

***Requested Remedy:*** To correct its roadless-area and wilderness-related deficiencies, the Forest Service must withdraw the EA and instead prepare an EIS that carefully examines the effects of Project activities on such areas. In particular, that analysis must take into account not merely the factors determining such areas' potential for future wilderness evaluation and designation, but also the unique values they provide, regardless of future wilderness designation by Congress—values long ago recognized by the 2001 Roadless Rule.

H. The Final EA fails to take a “hard look” at how planned road construction and reconstruction are likely to impact environmental resources on the Unit.

The Forest Service's analysis of transportation resources on the National Forest is legally deficient in four main respects. First, although the Forest Service asserts that the Project is partially being implemented to address “transportation system needs,”<sup>144</sup> the section discussing “Environmental Impacts” provides no analysis of the current state of transportation on the Unit that might justify its being listed as a “need” under the purpose-and-need section of its EA.<sup>145</sup> Consequently, the public has no idea, for example, why the Service might propose to reconstruct a road as part of a Project that does not require its use simply because the National Forest's Travel Analysis Report “recommends adding it to the system for potential future use.”<sup>146</sup>

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<sup>140</sup> U.S. Forest Serv., White Mountain Nat'l Forest, Final Environmental Impact Statement for the Land and Resource Management Plan, at C-47 (Sept. 2005) [hereinafter “2005 Plan Final EIS”].

<sup>141</sup> *Id.*

<sup>142</sup> *Id.* at C-46.

<sup>143</sup> 16 U.S.C. § 1131(c).

<sup>144</sup> Final EA at 5.

<sup>145</sup> *Id.* at 20–31.

<sup>146</sup> *Id.* at 26.

Second, the Final EA's analysis fails to satisfy NEPA's requirement that the Service consider the reasonably foreseeable environmental impacts of the Project by neither accounting for nor attempting to mitigate the acknowledged impact of road reconstruction in the Unit on perennial streams. The Forest Plan recommends that existing roads be "considered for relocation as part of normal project planning,"<sup>147</sup> and that existing roads should be considered for decommissioning (a) when there is no longer any need for the road; (b) when alternative routes may be available; or (c) to protect natural and cultural resources or to meet other resource needs.<sup>148</sup> Even so, the Forest Service proposes to reconstruct many unauthorized, existing roads, several of which cross perennial streams:

Eight of the 18 unauthorized routes proposed for conversion to maintenance level 1 have stream (intermittent and perennial) crossings. Unauthorized Route 5230 crosses Paugus Brook and its relatively broad floodplain. The use of this road in the future would require a bridge to be constructed. If a bridge were to be constructed, *sustainability would be questionable because abutments would be in the floodplain.* Unauthorized Route 4061.2 (as mapped) goes through wetlands and a pond, *impacts to these wetlands from the use of this road are likely* if mapping matches the on-the-ground location.<sup>149</sup>

In other words, the Forest Service concedes that the "sustainability" of water resources in the Paugus Brook area is "questionable" and that impacts to wetlands from Unauthorized Route 4061.2 are "likely," but it has determined to proceed with the action without considering alternatives to such actions or whether they might otherwise be mitigated. Given that the Forest Plan requires the Service to consider decommissioning roads that threaten natural resources (i.e., water quality) as part of standard project planning,<sup>150</sup> it is incumbent on the Service here to at least explain why these particular inconsistencies with the Forest Plan are excusable. Despite the proposed action's seeming conflict with the Forest Plan, the Final EA fails to provide the reader with any clear indication of the extent of the impact on those perennial streams, floodplains, and other potentially affected resources.

Third, the Final EA fails to indicate how many units proposed for timber harvest will be accessed, suggesting that the Forest Service has either failed to account for the access required for the proposed activities to ensue or has chosen not to disclose the extent of that access and its resulting impacts. For example, in the Guinea Hill area,<sup>151</sup> there is no indication of how timber would be accessed in Units 15, 16, 19, 22, 23, 24, 25, 26, 27, 28, 29, 32, 48, and 49. Similarly, it is unclear how other Harvest Units will be accessed in the Ferncroft portion of the Project area (especially Units 39, 40, and 46), and the Liberty portion of the Project area (especially Units 3,

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<sup>147</sup> 2005 PLAN at 2-25.

<sup>148</sup> *Id.* at 2-29.

<sup>149</sup> Final EA at 26 (emphasis added).

<sup>150</sup> 2005 PLAN at 2-25, 2-29.

<sup>151</sup> Final EA at 11 (Map 1).

4, 5, 6, 9, 10, 11, 33, 34, and 47). Notably, the Liberty portion of the Project area is almost entirely located within the Chocorua IRA. During the most recent comment period, Objectors raised questions concerning, *inter alia*, the supplementary roadwork or modification that might become necessary if the Project were to use a snowmobile trail along a powerline corridor for management action; what the likely impacts would be; and how access would be created to remove timber from units that do not abut existing roads.<sup>152</sup> The Forest Service has not acknowledged or responded to these concerns.<sup>153</sup>

Fourth, the Final EA fails to account for the fact that the Service’s proposed “reconstruction” is often reconstruction in name only, and, as the photographs included in Objectors’ Draft EA comments suggest, would in many cases amount to new road construction. Standing Trees’ site visits on August 12 and 14, 2023 revealed that a number of “roads” proposed for reconstruction are, in fact, not roads in any recognizable or meaningful sense. Consequently, any roadwork is tantamount to “new road construction” and merits being reported and analyzed as such to accurately reflect the impact that Project activities would have and ensure compliance with the Forest Plan, which anticipates just one mile of new road construction per decade of implementation.<sup>154</sup> For example, in the Guinea Hill portion of the Project area, there is an unidentified road segment that branches off FS Road 373, which we believe is depicted as road 5460 in the “Travel Management Rule Subpart A, Minimum Road System” map.<sup>155</sup> This “road” is likely a relic of long-ago agricultural or logging activities, and today, having naturally reforested, is nearly unnoticeable and completely unusable as a road.<sup>156</sup> Based on the size of the trees growing out of the path, it appears that it has been many decades if not longer since this was a road in any meaningful sense; in many areas, no road is discernible at all.

The situation appears similar for what is depicted as FS Road 337A on the same map.<sup>157</sup> Although the first portion of this road is an established logging road, the map incorrectly and misleadingly lumps the entire road together as needing similar maintenance, when in fact the final third of the road depicted, separated by a substantial creek crossing, is not a road in any meaningful sense.<sup>158</sup>

For the reasons listed above, the Final EA does not constitute the requisite hard look at the reasonably foreseeable environmental impacts of planned road reconstruction on the Project area.

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<sup>152</sup> Draft EA Comments at 37–38.

<sup>153</sup> See Response to Comments at 18 (Exhibit 32).

<sup>154</sup> 2005 Plan Final EIS at 2-29.

<sup>155</sup> U.S. Forest Serv., White Mountain Nat’l Forest, Travel Management Rule Sub-Part A, Minimum Road System Final Map [hereinafter “Travel Analysis Map”].

<sup>156</sup> See Draft EA Comments at 39–40. These photos, taken by a member of Standing Trees on August 12, 2023, were provided roughly in order of ascending elevation.

<sup>157</sup> See Travel Analysis Map.

<sup>158</sup> See Draft EA Comments at 41. The referenced photos, taken by a member of Standing Trees on August 12, 2023, demonstrate how this “road” deteriorates following the creek crossing.

**Requested Remedy:** To correct these deficiencies, the Forest Service must withdraw its EA and produce an EIS that solidly establishes the need for such transportation improvements; directly addresses the Project’s likely impacts on perennial streams; transparently discloses the intended access routes for logging activities in the Project area; and reassesses the Project’s compliance with the Forest Plan with the understanding that the proposed road reconstruction is far closer to brand new road-building than it is to routine maintenance.

## **VI. As Proposed, the Project Will Have “Significant” Impacts and Requires an Environmental Impact Statement.**

As discussed in Objectors’ prior comments on the Draft EA and elsewhere in the objection, the Project threatens the affected area with a range of significant impacts in multiple respects. Nonetheless, the Forest Service has concluded that the Project will have “no significant impact” and does not require an Environmental Impact Statement under NEPA.

Objectors oppose the Project on the grounds that, *inter alia*, the Final EA’s FONSI is conclusory, unsupported by the facts provided, and thereby violates NEPA. Because the Project is a major federal action that will significantly impact the quality of the human environment, the Forest Service should conduct additional NEPA analysis in the form of an EIS. Considering the context, intensity, and resulting significance of these impacts, it is evident that an EIS is warranted to comprehensively evaluate the Project’s environmental effects.

### **A. The FONSI is conclusory and lacks factual support.**

A Finding of No Significant Impact must “present the reasons why an action . . . will not have a significant effect.”<sup>159</sup> An agency’s FONSI will be held to the following standard: first, the agency must have accurately identified the relevant environmental concern; second, once the agency has identified the problem it must have taken a hard look at the problem in preparing the EA; and third, if a finding of no significant impact is made, the agency must be able to make a convincing case for its finding.<sup>160</sup>

As previously described in Objectors’ comments and further elaborated here, the Final EA fails to adequately describe the impacted environment or take a hard look at impacts to these resources. This FONSI relies on the flawed analysis presented in the EA, particularly the unsupported assertion that potential environmental effects would be localized to the project area

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<sup>159</sup> 40 C.F.R. § 1508.13.

<sup>160</sup> *Nw. Bypass Grp. v. U.S. Army Corps of Eng’rs*, 470 F.Supp.2d 30, 61 (D.N.H. 2007) (quoting *Sierra Club v. U.S. Dep’t of Transp.*, 753 F.2d 120, 127 (D.D.C. 1985)).

and not measurable at a regional or larger scale.<sup>161</sup> Given the extensive discussion regarding the myriad ways in which the Project poses threats to the outstanding natural resources of the affected area, the Forest Service’s conclusion that an EIS is not warranted violates NEPA.<sup>162</sup>

Here, the Forest Service fails to provide sufficient environmental information to support its FONSI, as illustrated by two examples. First, the Forest Service does not have up to date environmental information regarding the presence of the NLEB in the proposed project area, including where NLEB hibernacula or roosts may exist. Although the New Hampshire Fish and Game Department attempted to catch NLEBs during a two-night excursion in July 2019, this excursion produced no results. Second, the Forest Service relies on the EIS compiled for the 2005 Forest Plan, which is now significantly outdated.<sup>163</sup> It relies on this outdated EIS to determine that the proposed action will not have significant impacts on the forests’ resources because effects are certain to be consistent with past forestry practices.<sup>164</sup> Based on this outdated and logically flawed rationale, the Agency determined that the short-term effects will be an increase in young forest stands and the long term will not “contribute measurably” to cumulative impacts in the analysis area.<sup>165</sup> The Service does not have the comprehensive data to make this determination because the 2005 Plan is outdated and did not conduct an analysis specific to this area.<sup>166</sup> As discussed above, the Forest Service cannot comply with NEPA by acting on the basis of incomplete information.<sup>167</sup>

The FONSI must “present[] the reasons why action . . . will not have a significant effect[.]”<sup>168</sup> It is inadequate to state that because other actions did not have a significant impact, thus this Project will also have no significant impact. Similarly, it is inappropriate to issue an EA without first compiling and then considering a complete account of environmental information. The Final EA’s failure to support its FONSI is alone sufficient to require additional or supplemental NEPA analysis in the form of an EIS.<sup>169</sup>

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<sup>161</sup> Final EA at 32; *see also* Section V *infra* (explaining how the Forest Service relies on data that is either not provided for the public to review or non-existent).

<sup>162</sup> 40 C.F.R. § 1508.13.

<sup>163</sup> 36 C.F.R. § 219.7(a).

<sup>164</sup> Final EA at 34.

<sup>165</sup> *Id.*

<sup>166</sup> *Id.*

<sup>167</sup> *See WildEarth Guardians v. Jeffries*, 370 F.Supp.3d 1208, 1235 (D. Or. 2019) (“The problem is that, without data identifying the location of calving sites and wallows, the Forest Service cannot meet its obligation to protect those sites or minimize disturbance to [elk.]”); *Sierra Club v. Martin*, 71 F.Supp.2d 1268, 1319 (N.D. Ga. 1996) (finding that, because there was no population data, quantitative data, or other adequate information, the Forest Service did not have sufficient facts or evidence regarding sensitive and endangered species to support its finding of no significant impact).

<sup>168</sup> 40 C.F.R. § 1508.13.

<sup>169</sup> *Ctr. for Biological Diversity v. U.S. Forest Serv.*, 444 F.Supp.3d 832, 859 (S.D. Ohio 2020).

***Requested remedy:*** The Forest Service must withdraw its Final EA and produce an EIS because the Final EA’s failure to support its FONSI requires additional or supplemental NEPA analysis in the form of an EIS.

B. The Service fails to define the context in which it has assessed resource-based impacts from the Project.

An EIS is required for all “major federal actions significantly affecting the quality of the human environment[.]”<sup>170</sup> Under NEPA, the analysis of significance requires “consideration of both context and intensity.”<sup>171</sup> As raised in our comments on the Draft EA, the Forest Service’s “analysis” of the context and intensity of impacts is cursory and incomplete. The Final EA falls short of establishing that the context and intensity of project impacts do not merit a finding of significance and the preparation of an EIS for the Project under NEPA procedures.<sup>172</sup>

The Final EA fails to appropriately identify the context within which to evaluate impacts of the Project. Without first establishing the proper context within which to conduct its analysis, it is impossible for the Forest Service to properly evaluate the intensity of a given project’s impact. For example, although a single housefire may be inconsequential on a city-wide scale, the impacts on the affected home are devastating. Context is thus key to determining the significance of an impact, and the appropriate context must therefore be properly defined and supported for each resource being evaluated.

The CEQ’s NEPA-implementing regulations provide that:

[T]he significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend on the effects in the locale rather than in the world as a whole. Both short and long-term effects are relevant.<sup>173</sup>

Establishing the appropriate setting and scale (or “context”) for evaluating the impact of an action is essential. However, the discussion of context in the FONSI fails to establish this framework for analyzing the resources impacted by the Project.

The “Context” section of the FONSI neglects to indicate whether the Project constitutes a major federal action significantly affecting the quality of the human environment; nor does it provide

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<sup>170</sup> 42 U.S.C. § 4332(2)(C).

<sup>171</sup> 40 C.F.R. § 1508.27.

<sup>172</sup> See 40 C.F.R. § 1508.27(b)(1)–(10) (listing the factors of intensity to be considered in evaluating significance).

<sup>173</sup> *Id.* § 1508.27(a).

detailed discussion on the Project's context. The analysis merely states that the proposed project covers approximately 1,325 acres of land within the National Forest's total area of over 800,000 acres and asserts that the potential environmental effects would not be measurable at a regional or larger scale.<sup>174</sup> Other than this, the Forest Service fails to provide any actual analysis placing the impacts of the Project into context; never mentioning the soil related impacts of the Project, the water resources of the Project area, how logging will affect the two separate roadless areas, or how the road construction and reconstruction will impact the area.

The Forest Service's simple numeric measurements of the Project's size and the National Forest area improperly downplays and obscures the localized impacts resulting from Project activities. It is unacceptable for the Forest Service to minimize significant impacts by emphasizing the vastness of the surrounding forest.<sup>175</sup> This is equivalent to the Forest Service proposing to burn the house down and telling the family that impacts are minimal because the rest of the city is still there. As discussed extensively above, there are many areas the EA falls short in the analysis of the Project area; given a more thorough consideration of the context surrounding this Project, the Forest Service would likely recognize it as a "significant" action in the context of NEPA.

C. The Final EA fails to genuinely consider each of ten factors in evaluating the Project's "intensity" under NEPA.

Intensity refers to the "severity of impact."<sup>176</sup> NEPA provides a list of ten non-exclusive factors to consider when evaluating intensity.<sup>177</sup> Because the Forest Service failed to define the context of its analysis for most project-area resources, its analysis of intensity, which is intrinsically linked to the context within which it is evaluated, is also necessarily inadequate. The discussion provided for the majority of the ten consideration factors is cursory, often pointing to the supposed success of prior unnamed projects and referring to unspecified "analysis" to make findings that each factor weighs against a finding of significance. Finally, given that the presence of even one of these factors may warrant the need for an EIS in appropriate circumstances,<sup>178</sup> the Final EA's omission of any discussion of these factors is notable.

- (1) "Impacts that may be both beneficial and adverse. A significant effect may exist even if the federal agency believes that on balance the effect will be beneficial."<sup>179</sup>

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<sup>174</sup> Final EA at 32.

<sup>175</sup> *Pac. Coast Fed'n of Fisherman's Ass'ns v. Nat'l Marine Fisheries Serv.*, 265 F.3d 1028, 1035–37 (9th Cir. 2001) (holding that an agency may not downplay the impact of an action by adopting a scale of analysis so broad that it trivializes the site-level impact).

<sup>176</sup> 40 C.F.R. § 1508.27(b).

<sup>177</sup> *Id.* § 1508.27(b)(1)–(10).

<sup>178</sup> *Ocean Advocs. v. U.S. Army Corps of Eng'rs*, 402 F.3d 846, 865 (9th Cir. 2005).

<sup>179</sup> 40 C.F.R. § 1508.27(b)(1).



The Final EA does not describe potential adverse effects of the Project. For example, there is no mention of the potential impacts of logging on the quality of life and public safety. Logging activities could lead to various adverse effects, including noise and air pollution, damage to local roads, disruptions to emergency services, among others. However, the Final EA dismisses these impacts as “limited” without providing any justification or analysis.<sup>180</sup> Such oversight fails to adequately consider the potential implications of logging on community well-being and safety. Given the significant impacts of the Project on mature forests, this factor also weighs in favor of a finding of significance and the preparation of an EIS. The Forest Service attempts to justify its decision based on the existence of past projects implemented on the National Forest and throughout the region, citing the “routine nature of the actions” and the “relatively long safe history” of timber sales.<sup>181</sup> However, it fails to provide any supporting information or authorities for the public to validate this claim. The possible effects on the human environment are highly uncertain and involve unique or unknown risks because the Project is predicated on “similar proposed activities” implemented in the National Forest.<sup>182</sup> This reasoning disregards the essence of NEPA, which necessitates Project-specific analysis. By denying the public any opportunity to consider this specific Project’s impacts, the Forest Service has prevented the assessment of unique or unknown risks. This flawed analysis underscores the need for a finding of significance and the preparation of an EIS.

- (2) “The degree to which the proposed action affects public health or safety.”<sup>183</sup>

The Final EA states the Forest Service “implemented this type of protect and similar project activities many times on National Forest System lands locally and in the region without substantial impacts to public health or safety.”<sup>184</sup> Making generalized assumptions about past actions to justify future endeavors is an inadequate analysis because NEPA mandates project specific assessments. To rely solely on past occurrences of similar projects overlooks the unique characteristics of each project location. No evidence has been presented to support the claim that there have not been “substantial impacts to public health or safety” from the past projects. NEPA analysis is done on a project specific basis. It would undermine the entire purpose of NEPA to allow for general types of past actions to justify future actions. The Forest Service fails to describe the “potential impacts of public health and safety” or to ensure these are minimized or avoided.<sup>185</sup>

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<sup>180</sup> Final EA at 20.

<sup>181</sup> *Id.* at 35.

<sup>182</sup> *Id.*

<sup>183</sup> 40 C.F.R. § 1508.27(b)(2).

<sup>184</sup> Final EA at 35.

<sup>185</sup> *Id.* at 35.

The Forest Service neglects to delineate the effects on public health and safety or ensure their mitigation or avoidance.<sup>186</sup> For instance, given recent catastrophic flooding events in New England and globally, we urge the Forest Service to consider how protecting and expanding old forests and roadless areas can alleviate the adverse effects of climate change. Old forests and large roadless areas are inherently resilient to climatic shifts, providing crucial ecosystem services such as clean water production, flood prevention, and temperature regulation. These services safeguard downstream communities from flooding, maintain water quality for drinking purposes, and sustain aquatic habitats for fish and wildlife. Another significant public health concern pertains to water quality. The Forest Service has hinted at its intention to target the reduction of beech regeneration. While the use of herbicides for beech “control” has been proposed in projects like the Tarleton Integrated Resource Project,<sup>187</sup> there is no mention of this in the EA here. The Service must conduct an analysis of potential impacts of water quality if it plans to use herbicides for beech control and this must be openly acknowledged.

- (3) “Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.”<sup>188</sup>

In the Final EA, the Forest Service does not analyze the unique characteristics of the geographic area, including its proximity to significant landmarks such as the Sandwich Wilderness Area and Mount Chocorua. The Project area is ecologically critical, especially in light of the NLEB’s recent uplisting. NLEBs are known to exist in the Project area, and yet the Forest Service fails to recognize the importance of mature forests for the species. While the Forest Service obstructs public participation by omitting citations to the data supporting its conclusions, the Biological Evaluation for the Sandwich Project vaguely mentions potential “benefits” to the NLEB.<sup>189</sup> However, the Final EA provides an unpaginated reference to a 169-page document without clear accessibility.<sup>190</sup> This lack of transparency not only hinders informed public engagement but also leads to broad conclusions that contradict credible scientific information.<sup>191</sup> The potential for adverse impacts on the NLEB underscores the necessity for a finding of significance under NEPA. Considering the characteristics of this area, as well as those raised in our comment on the Draft EA, the intensity of potential impacts to this area is high. The unique characteristics of the Project thus weigh in favor of a finding of significance and the preparation of an EIS.

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<sup>186</sup> *Id.*

<sup>187</sup> U.S. Forest Serv., White Mountain Nat’l Forest, Tarleton Integrated Resource Project Final Environmental Assessment, at 18 (Mar. 2023).

<sup>188</sup> 40 C.F.R. § 1508.27(b)(3).

<sup>189</sup> Biological Evaluation at 12.

<sup>190</sup> *See* Final EA at 34.

<sup>191</sup> *See, e.g.*, U.S. Fish & Wildlife Serv., Species Status Assessment for the Northern Long-Eared Bat (*Myotis septentrionalis*) Version 1.2, at 18-19 (Aug. 2022), <https://www.fws.gov/media/species-status-assessment-report-northern-long-eared-bat> [hereinafter “Species Status Assessment”] (Exhibit 27) (describing preferred habitat for NLEB).

- (4) “The degree to which the effects on the quality of the human environment are likely to be highly controversial.”<sup>192</sup>

For the purpose of this factor, “[a] substantial dispute exists when evidence, raised prior to the preparation of an EIS or FONSI . . . casts serious doubt upon the reasonableness of an agency’s conclusions.”<sup>193</sup> The word “controversial” refers to situations where “substantial dispute exists as to [the] size, nature, or effect” of the major federal action.<sup>194</sup> The Forest Service ignores the high degree of scientific controversy over the Project’s implementation and reasoning. Substantial scientific dispute clearly exists related to management for early-successional habitat, management to improve carbon storage and sequestration, management for climate adaptation and resilience, and protection of water quality. Elsewhere in this objection, we elaborate on the importance of mature forests in climate change adaptation and mitigation. The Forest Service has also failed to respond to or independently consider recent studies that support the protection of mature forests. This objection also expands on the failure by the Forest Service to recognize and address the growing importance of mature-forest conservation, in line with Executive Orders 14072 and 14008. The Forest Service’s determinations and reasoning in the Final EA are inconsistent with greater efforts to protect and conserve mature forests and ignores the best available science. Substantial dispute exists as to the effect of the Sandwich VMP on the human environment, which weighs in favor of a finding of significance and the preparation of an EIS.

- (5) “The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.”<sup>195</sup>

The Forest Service attempts to justify its decision based on the existence of past projects implemented in the Forest and the region.<sup>196</sup> Absent from the Final EA, however, is any supporting information or authorities for the public to validate this claim. The possible effects on the human environment are highly uncertain and involve unique or unknown risks because the Project is predicated on “similar actions” implemented in the National Forest.<sup>197</sup> This reasoning ignores the true aim of NEPA: project-specific analysis. This flawed analysis, too, weighs in favor of a finding of significance and the preparation of an EIS.

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<sup>192</sup> 40 C.F.R. § 1508.27(b)(4).

<sup>193</sup> *Nat’l Parks Conservation Ass’n v. Babbitt*, 241 F.3d 722, 736 (9th Cir. 2001).

<sup>194</sup> *Nw. Bypass Grp. v. U.S. Army Corps of Eng’rs*, 552 F.Supp.2d 97, 136 (D.N.H. 2008) (alterations and citations omitted) (quoting *Advocs. for Transp. Alts. v. U.S. Army Corps of Eng’rs*, 453 F.Supp.2d 289, 304 (D. Mass. 2006)); see also *Town of Cave Creek v. FAA*, 325 F.3d 320, 331 (D.C. Cir. 2003) (quoting *N. Am. Wild Sheep v. U.S. Dep’t of Agric.*, 681 F.2d 1172, 1182 (9th Cir. 1982)) (emphasis in original); *Middle Rio Grande Conservancy Dist. v. Norton*, 294 F.3d 1220, 1229 (10th Cir. 2002) (same); *Town of Superior v. U.S. Fish & Wildlife Serv.*, 913 F.Supp.2d 1087, 1120 (D. Colo. 2012).

<sup>195</sup> 40 C.F.R. § 1508.27(b)(5).

<sup>196</sup> Final EA at 35.

<sup>197</sup> *Id.*

- (6) “The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.”<sup>198</sup>

The Sandwich VMP will irretrievably harm the Sandwich Habitat Management Unit, with potential ramifications for the consideration of roadless areas in future Chapter 70 Wilderness Inventory and Evaluation processes, for roadless-area protection, and further evaluation for other resource-protection classifications in Forest Plan revisions. The Forest Service places too much weight on prior implementation of a type of activity, which is irrelevant to the impact of that activity on a specific location. Project-specific evaluation is critical because where and how activities occur in the landscape significantly affects the nature of the impact. This is a dangerous precedent to establish for future actions and weighs in favor of a finding of significance and the preparation of an EIS.

- (7) “Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.”<sup>199</sup>

Above, we discuss the Final EA’s utter lack of analysis regarding cumulative impacts. As previously explained, there are a number of potential cumulative impacts that the Final EA baselessly denies.<sup>200</sup> This factor, therefore, also weighs in favor of a finding of significance and the preparation of an EIS.

- (8) “The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, or may cause loss or destruction of significant scientific, cultural, or historic resources.”<sup>201</sup>

The Forest Service ignores the historic and cultural resources that may merit protection within the project area by failing to account for such resources in the Project’s Final EA entirely. The potential loss of these resources weighs in favor of a “significance” finding and, consequently, the preparation of an EIS.

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<sup>198</sup> 40 C.F.R. § 1508.27(b)(6).

<sup>199</sup> *Id.* § 1508.27(b)(7).

<sup>200</sup> Final EA at 31; *see also* discussion *supra* at 14–16.

<sup>201</sup> 40 C.F.R. § 1508.27(b)(8).

- (9) “The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.”<sup>202</sup>

We expand below on the Final EA’s complete lack of consideration for the endangered NLEB and its insufficient analysis of impacts to tricolored bats. The recent uplisting of the species—as well as the lack of transparency from both the Forest Service and Fish and Wildlife—weighs heavily in favor of a finding of significance, necessitating a full analysis of the impacts to the NLEB, tricolored bats, and other endangered and threatened species in an EIS.

- (10) “Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment.”<sup>203</sup>

As expanded upon at length in this objection, the Forest Service failed to demonstrate its compliance with a number of laws imposed for the protection of the environment, including NEPA, NFMA, and the ESA. And below, we expand on our concern that the Project will lead to violations of the ESA and the requirements imposed for the protection of the NLEB. The Project threatens the violation of numerous federal requirements, weighing in favor of a finding of significance and the preparation of an EIS.

***Requested remedy:*** For all the reasons above, the Forest Service should withdraw its FONSI and prepare an EIS to evaluate the significant impacts posed by this Project.

**VII. The Forest Service Has Violated NEPA’s Core Requirement that the Service Show Its Work by Failing to Provide Sufficiently Detailed Support for Its Decision.**

The NEPA process requires the Service to adequately engage the public in project development by providing the public with supporting documents and sufficient detail for its proposed decision. When relevant documentation is not made available, or when available documents do not actually contain the analysis necessary to support conclusory statements, the public is unable to properly analyze and scrutinize agency decisions. Agency conclusions in an EA “must be supported by some quantified or detailed information, and the underlying environmental data relied upon . . . must be made available to the public to allow for informed public comment on the project.”<sup>204</sup> Agencies must make genuine efforts to involve the public in their NEPA

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<sup>202</sup> *Id.* § 1508.27(b)(9).

<sup>203</sup> *Id.* § 1508.27(b)(10).

<sup>204</sup> *Ctr. for Biological Diversity v. U.S. Forest Serv.*, 444 F.Supp.3d 832, 858–59 (S.D. Ohio 2020).

procedures by providing them with the proper support for its conclusions.<sup>205</sup> The Forest Service fell short of this mark during the planning of this Project.

A. The Forest Service attempts to justify its proposed vegetation management actions without providing the relevant data and relying on outdated science.

At its core, the Final EA suffers from a lack of support for its proposition that existing conditions on the Unit do not meet habitat-composition and age-class objectives set out by the Forest Plan. For example, an assertion that forest stand age should be lower must at least be supported with evidence that stand age is currently too high. Similarly, the Service has remained determined to rely on outdated, cherry-picked science to support its decision. The Service has thus far been unable to adequately justify such actions.

1. The information provided by the Final EA and its supporting documents regarding current stand ages and habitat types in the Project area is flawed for several reasons.

Despite Objectors' having raised the issue in comments on both the NOPA and the Draft EA,<sup>206</sup> the Final EA and accompanying Rationale Habitat Management Unit Objectives ("HMU Rationale") remain largely devoid of any reliable evidence of current stand age, habitat composition, or species composition in the Project area—even though these are the primary rationales used to justify the Project.

First, the Final EA and supporting documents do not contain information on stand age, including tables or maps, which robs the public of its opportunity to meaningfully contribute to the development of alternatives. Agency conclusions in an EA "must be supported by some quantified or detailed information,"<sup>207</sup> and here, the relevant information to decide whether even-aged management was necessary or beneficial would necessarily include such data. The Forest Service states that the "existing conditions in the Sandwich Habitat Management Unit do not meet Management 2.1 Area Habitat Composition and age class objectives described in the forest plan."<sup>208</sup> But from the Final EA and supporting documents, there is no way for the public to assess the veracity of the Forest Service's statements, largely because—unlike comparable analyses prepared and released by the Forest Service with respect to management actions on other planning units—these documents do not include an age-class or habitat-composition map.

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<sup>205</sup> 40 C.F.R. § 1506.6(a).

<sup>206</sup> In addition to having raised the issue at the NOPA and Draft EA stages, Standing Trees also made repeated requests via email for detailed information during these comment periods.

<sup>207</sup> *Ctr. for Biological Diversity*, 444 F.Supp.3d at 858–59.

<sup>208</sup> Final EA at 5.

Nor does the Final EA contain any acknowledgment of Forest-wide progress towards meeting age-class objectives for regeneration and young age classes since the Service issued the Forest Plan.<sup>209</sup> The absence of this information prevents the public from not only checking the Forest Service’s conclusions, but also severely hampers the public’s ability to suggest reasonable alternatives to the Project as proposed. For example, if the public wanted to suggest that the Service seek to focus its harvesting activities in stands classified as regeneration-age or young instead of mature—in line with Executive Order 14072<sup>210</sup>—there would be no way to determine where these stands are located within the Project area. Furthermore, the HMU Rationale fails to adequately demonstrate that the age-class objectives for the Unit are currently unmet because the data it provides identifies only broad categories—“regeneration,” “young,” and “mature”—as opposed to quantifiable ages and because it conspicuously fails to identify any stands as “old” (greater than 120 years old) as defined by the Forest Plan’s age-classification system.<sup>211</sup>

Additionally, the Final EA is legally deficient because it fails to address the agency’s obligation to conserve forests that contain old-growth conditions, in light of the potential for such conditions to arise in predominantly mature stands. The Forest Plan also states that “[n]o harvest will occur in stands identified to provide old forest habitat,”<sup>212</sup> explaining that “[d]esired habitat conditions start with those for mature forest and can include greater size, decadence, [and] structural complexity. . . .”<sup>213</sup> Again, by not providing quantified, detailed information, the Service has failed to demonstrate convincingly that it has considered the likelihood of impacting old-growth forests interspersed throughout mostly mature stands. Despite the fact that these attributes could appear in stands that are otherwise classified as “mature” under the Forest Plan, there has been no consideration of whether or how the Project might protect such stands—indeed, the Project appears to target mature forests.

Finally, the agency’s self-professed identification of 50 acres of old-growth conditions in the Project area,<sup>214</sup> which occurred sometime in between its issuing the Draft EA and the Final EA, demonstrates that the Service is largely unaware of age-class and other conditions on the Unit. In recognizing this previously unknown condition in the Project area, the Forest Service also implicitly acknowledged that the conditions identified as current by the HMU Rationale—in 2022—are definitively inaccurate. By omitting the “Old” category from the document entirely, the HMU Rationale erroneously suggests that no stands in the Project area are within the “Old” age class, defined in Appendix D of the 2005 Forest Plan.<sup>215</sup> Nevertheless, as described above,

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<sup>209</sup> Indeed, the Forest Plan anticipates that regeneration age-class objectives be met by year 10 of the Plan. *See* 2005 PLAN at 1-21.

<sup>210</sup> *See generally* 87 Fed. Reg. 24851 (Apr. 27, 2022).

<sup>211</sup> 2005 PLAN APP’X D at D-2.

<sup>212</sup> 2005 PLAN ABBREVIATIONS, ACRONYMS, & GLOSSARY at 21.

<sup>213</sup> *Id.*

<sup>214</sup> Final EA at 30.

<sup>215</sup> *See generally* 2005 PLAN APP’X D.

the Forest Service identified stands older than the threshold for the “old” age class and that either met the Forest Plan definition for “old-growth forest” or its definition for “old forest habitat” (to further complicate matters for the public, the Final EA does not rely on terms in the Forest Plan Glossary when describing the 50 acres that were removed from potential harvest), prior to issuing the Final EA. The Service’s failures to transparently account for stand ages; rely on accepted terms defined in the Forest Plan Glossary; update the HMU Rationale for the Project; identify old-growth conditions, per the December 18, 2023 direction of Deputy Chief Chris French; or accurately account for regeneration or early-successional conditions across the Project area, the National Forest, and surrounding lands does not satisfy the agency’s obligation to take a “hard look” at the impacts of the Project.

That the Forest Service does not know stand ages on the National Forest is further supported by the contents of an email exchange between Saco District Ranger Jim Innes and Standing Trees Executive Director Zack Porter.<sup>216</sup> The fact that the Service does not possess more up-to-date information is concerning, both because it is common practice for the Forest Service to assign stand ages and because an accurate accounting of stand ages is a necessary prerequisite to determine whether Forest Plan age-class objectives have been met. Without knowing stand ages, classifying stands according to the Forest Plan’s Appendix D age-class matrix, which characterizes the age ranges of regeneration, young, mature, or old forests,<sup>217</sup> is impossible to perform in any meaningful way. Moreover, the Forest Service has not shown that it has complied with the requirements of the Forest Plan, including Standard S-3 and Guideline G-1,<sup>218</sup> nor has it acknowledged the relevancy of the phrase “old forest habitat” as defined in the Forest Plan Glossary.<sup>219</sup> Consequently, the public is unable to weigh the legitimacy of the Project’s purported purpose and need.

Additionally, the Forest Service appears to be ignoring the potential negative consequences of applying even-aged management to uneven-aged stands. In the same August 10, 2023 email referenced above, District Ranger Jim Innes described the stands in the project area as “uneven aged.”<sup>220</sup> The negative impacts of even-aged management on mature, uneven-aged stands like those in the Project area are referenced in the Forest Plan Glossary under Mature Forest Habitat: “Depending on site conditions, thinning and uneven-aged harvest methods can be used in this habitat without negatively impacting habitat quality. Some uneven-aged harvest may enhance

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<sup>216</sup> See E-mail from Jim Innes, Dist. Ranger, White Mountain Nat’l Forest, Saco Ranger Dist., to Zack Porter, Exec. Dir., Standing Trees (Aug. 10, 2023) (Exhibit 23).

<sup>217</sup> 2005 PLAN APP’X D at D-2.

<sup>218</sup> 2005 PLAN at 1-21, S-3 (“Timber harvest is prohibited in old growth forest.”); *id.*, G-1 (“Outstanding natural communities should be conserved.”).

<sup>219</sup> 2005 PLAN GLOSSARY at 21 (“Desired habitat conditions start with those for mature forest and can include greater size, decadence, structural complexity, etc. *No harvest will occur in stands identified to provide old forest habitat.*”) (emphasis added).

<sup>220</sup> E-mail from Jim Innes, Dist. Ranger, White Mountain Nat’l Forest, Saco Ranger Dist., to Zack Porter, Exec. Dir., Standing Trees (Aug. 10, 2023). (Exhibit 23).



vegetative and structural diversity.”<sup>221</sup> The Final EA fails to acknowledge any of the potential negative impacts of applying even-aged management to uneven-aged stands. The gravity of this omission is compounded because the HMU Rationale suggests that “regeneration objectives for this HMU have been set at levels that are higher as [sic] those detailed in the forest plan.”<sup>222</sup>

Ultimately, the Service appears to have once more used the questionable age-class targets laid out in the Forest Plan as the overwhelming driving force in its proposal of timber treatments on the National Forest. Such targets bias the Service against other valid management approaches, constraining the development of alternatives. Here, for example, the Forest Service states that natural means would create less “[d]iversity of age and structure” and “wildlife habitat diversity would continue to decline,”<sup>223</sup> but provides no analysis of: (1) how much regeneration-age or young forest habitat is already present on public lands or surrounding private lands; (2) how much might be created naturally through a no-action alternative; (3) how the “diversity of age and structure” that would be created through logging for “regeneration forest habitat” differs from what would occur naturally in the forest; or (4) how “overall wildlife species diversity” would likely differ between naturally and artificially created early-successional habitat. Collectively, these gaps illustrate how, even on its own terms, the Final EA fails to comply with NEPA’s requirements that the Service conduct reasoned, transparent analysis.

2. The Final EA consistently relies on outdated science to justify Project-level actions.

Another significant issue with the Final EA is that its analysis is not informed by the latest scientific understanding of New England’s natural forest ecology, the benefits of mature forests, or the negative environmental impacts of logging. Additionally, the Forest Service has thus far failed to meaningfully acknowledge, discuss, or respond to the scientific evidence raised in Objectors’ scoping comments and comments on the Draft EA.<sup>224</sup> For example, although the Service responded to comments from Objectors and others expressing concern that the Project’s activities will release soil carbon, the agency continued to adhere to its non-scientific, “before-and-after” position that “[a]s long as land use remains forest, those losses are offset.”<sup>225</sup> Those comments, which summarized science studying the effects of forest disturbance on biodiversity, the relative resilience of unlogged forests, the impacts of logging on mature forests nationwide, and the resulting impacts on forest carbon stocks, are herein incorporated by reference and will be attached as Exhibits.

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<sup>221</sup> 2005 PLAN GLOSSARY at 18.

<sup>222</sup> U.S. Forest Serv, Sandwich Vegetation Management Project Final Environmental Assessment Rationale for Habitat Management Unit Objectives, at 7 (Apr. 2022).

<sup>223</sup> Final EA at 19.

<sup>224</sup> Scoping Comments at 21–25, 28–32; Draft EA Comments at 12–16.

<sup>225</sup> Response to Comments at 6 (Exhibit 32).

Additionally, the Forest Service’s failure to consider the results of robust, on-point scientific research published since the close of the Draft EA comment period means that the Service purports to proceed without an accurate picture of relevant scientific considerations. In particular, the Service ought to have considered one recent paper summarizing the climate mitigation potential of Eastern middle-aged forests.<sup>226</sup> That paper concludes that, in the absence of logging, middle-aged forests (defined as forests between approximately 20 and 100 years old) have the potential to double their current carbon stocks;<sup>227</sup> that in the near-term of 20 to 40 years (a particularly salient timeline, given the nation’s goal of attaining net-zero by 2050), reducing logging will yield the greatest reduction in GHG emissions compared with business as usual;<sup>228</sup> and that ceasing to log over the 73 million-hectare study area would result in an emissions reduction equal to about 7% of the emissions from using fossil energy in that same region by 2050.<sup>229</sup> The Forest Service’s failure to either apprise the public of this pertinent information or describe the extent, if at all, to which such information has informed the agency’s analysis and subsequent decision, violates NEPA’s requirements for public engagement.

In sum, the Final EA must do more to reckon with the implications of the science before it in order to satisfy NEPA’s requirement that agencies rationally explain their reasons for choosing one seemingly legitimate viewpoint over another.<sup>230</sup>

\* \* \*

**Requested remedy:** The Forest Service must withdraw the current EA, which both fails to quantifiably justify its logging decisions and neglects to consider the full scope of relevant science, and instead prepare an EIS that better engages with the Service’s obligations under NEPA to provide reasoned, transparent analysis.

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<sup>226</sup> See generally Richard Birdsey et al., *Middle-Aged Forests in the Eastern U.S. Have Significant Climate Mitigation Potential*, FOREST ECOLOGY & MGMT., Nov. 15, 2023, at 1, <https://www.sciencedirect.com/science/article/pii/S0378112723006072> [hereinafter “Birdsey et al.”] (Exhibit 30). Because the second 30-day public comment period for the Draft EA and Preliminary FONSI closed on Oct. 21, 2023, and the paper was published on November 15, 2023, Standing Trees raises this novel issue as “new information” pursuant to the Forest Service’s procedural requirements for predecisional objections under NEPA. See 36 C.F.R. § 218.8(c) (permitting issues not raised in prior specific written comments only where it is “based on new information that arose after the opportunities for comment”).

<sup>227</sup> Birdsey et al. at 11.

<sup>228</sup> *Id.*

<sup>229</sup> *Id.*

<sup>230</sup> 40 C.F.R. § 1502.9(c) (requiring agencies to disclose, discuss, and respond to “any responsible opposing view”); see also *Bark v. U.S. Forest Serv.*, 958 F.3d 865, 872 (9th Cir. 2020) (holding decision not to prepare EIS arbitrary and capricious where Forest Service failed to “engage with the considerable contrary scientific and expert opinion” and “instead drew general conclusions”).

B. The Forest Service references and bases conclusions on documents that the public cannot access or review.

The Forest Service draws many conclusions from documents that are unavailable to the public for review. This is a fundamental violation of NEPA.<sup>231</sup> For example, the Carbon White Paper discussed in a previous section of this objection was provided at the last minute as a supporting document for analyses in the Final EA, giving the public virtually no time to review the paper to any meaningful extent. Additionally, the Final EA states that “[s]ite assessments and other data indicate that existing conditions in the Unit do not meet Management Area 2.1 Habitat Composition and age class objectives described in the Forest Plan.”<sup>232</sup> Although the Service references the section of the Forest Plan that contains the habitat composition and age class objectives, the Service fails to provide any reference or citation to the “site assessments and other data.” Additionally, in relation to the NLEB, the Forest Service failed to provide an up-to-date Biological Assessment, as it is required to.<sup>233</sup> This is information that the Forest Service is obligated to provide, and the Service’s lack of transparency is a violation of NEPA.<sup>234</sup> For the public to meaningfully participate, the Forest Service must provide the appropriate supporting documentation. Moreover, by failing to provide complete information to the public regarding the stand age classes or listed species affected by the Project, the Forest Service arbitrarily constrains the public’s ability to contribute to the NEPA process *and* limits the potential range of alternatives considered during the NEPA process.

***Requested remedy:*** To meet its obligation to sufficiently permit public participation throughout the Project’s planning process, the Forest Service must withdraw its Final EA and, at a minimum, provide the public with the supporting documentation it used to draft the Final EA.

C. The Final EA unlawfully avoids assessing substantive decisions that the Forest Service will make in the future without providing an opportunity for public comment.

The Forest Service further impedes public involvement in this NEPA process by leaving several parts of the proposed action subject to change dependent upon several conditions. However, the Forest Service does not (1) include an opportunity for the public to participate in the conditional changes or (2) explain when such changes would be implemented. The Forest Service allows for “treatment units . . . [to] be reduced or modified to meet visual and water quality objectives[.]”<sup>235</sup>

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<sup>231</sup> 40 C.F.R. § 1500.1(b) (“NEPA procedures must ensure that environmental information is available to public officials and citizens before decisions are made and before actions are taken.”).

<sup>232</sup> Final EA at 5.

<sup>233</sup> See Section VII(A) *infra* (explaining that the Endangered Species Act requires the Forest Service to complete a Biological Assessment evaluating the potential effects of the action on the listed species).

<sup>234</sup> 40 C.F.R. § 1506.6(a) (“Agencies shall make diligent efforts to involve the public in preparing and implementing their NEPA procedures.”).

<sup>235</sup> Final EA at 10.

The Final EA, like the Draft EA before it, fails to explain what the visual or water quality objectives are or when and whether reserve patches of uncut trees or protective buffers will be necessary to meet those objectives. This theme prevails throughout the Final EA. The Forest Service similarly allows for “[f]inal locations of log landings [to] be modified during project layout subject to applicable forest plan standards and guidelines, best management practices, and other site-specific requirements.”<sup>236</sup> Additionally, the Final EA allows for planned travel management actions to differ from the recommended transportation process for some National Forest System roads.<sup>237</sup> It notes that “these differences are the result of a project-specific analysis of transportation needs based on management goals and objectives for the project area.”<sup>238</sup>

To truly facilitate opportunities for public participation, the Forest Service was obligated to include more detail of these instances of deviation from the proposed action to allow for sufficient public comment on those deviations. Additionally, the Forest Service must narrow the opportunities to stray from a publicly reviewed proposed action without further opportunity for public participation. As it stands, the Travel Analysis Process was not provided to the public for review with the Project documents, and to date the National Forest has only provided a Travel Analysis Process map with no supporting analysis.

Without providing actual analysis, it is impossible to gauge the actual anticipated impact to Project-area resources, the significance of those impacts, and whether they may violate the Forest Plan standards and guidelines. The public is not able to properly scrutinize agency decisions and analysis when relevant documentation is not made available or when available documents do not actually contain the analysis necessary to support the Forest Service’s conclusory statements. In addition, the failure to provide clear analysis—or sometimes any analysis—violates NEPA’s mandate that NEPA documents “shall be written in plain language . . . so that decisionmakers and the public can readily understand them.”<sup>239</sup> The public cannot understand what it is not told. Instances of this persistent defect are identified throughout this objection.

The overall effect of the described inadequacies is the impediment of public participation in violation of NEPA’s clear mandate to “encourage and facilitate public involvement in decisions which affect the quality of the human environment” and to “[m]ake diligent efforts to involve the public in preparing and implementing their NEPA procedures.”<sup>240</sup> The Forest Service’s decisions to impede public participation are in violation of NEPA’s mandate, as the public should not have

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<sup>236</sup> *Id.*

<sup>237</sup> *Id.* at 18.

<sup>238</sup> *Id.*

<sup>239</sup> 40 C.F.R. § 1502.8.

<sup>240</sup> *Id.* § 1506.6(a).

to “parse the agency’s statements to determine” project impacts.<sup>241</sup> To remedy these failings, the Forest Service must return to the drawing board and complete an EIS for the Project with all required public participation opportunities that are part of that process.

***Requested Remedy:*** The Forest Service must withdraw the Final EA and instead complete an EIS that adequately involves the public and makes all supporting documentation publicly available.

### **VIII. The Final EA Fails to Satisfy the Service’s Statutory Obligations to Affirmatively Protect Listed and Sensitive Species, Including the NLEB.**

In Objectors’ scoping comment and our comments on the Draft EA, we expressed substantial concern that the Forest Service had not adequately addressed the need for the Project to protect the NLEB, which was listed as an endangered species on March 23, 2022. Considering the Project’s potential impacts on the NLEB, both the ESA and NFMA require the Forest Service to substantially alter the proposed Project. Such a revision of the Project may only appropriately be undertaken with the benefit of an EIS that will fully address the Project’s impacts on sensitive species, including the NLEB.

#### **A. Because of its significance, the Project requires the Forest Service to complete Biological Assessments of potential impacts on species listed under the ESA.**

Congress passed the ESA in 1973 for the purpose of conserving endangered and threatened species and the ecosystems upon which they rely.<sup>242</sup> According to the Supreme Court, the “plain intent of Congress in enacting this statute was to halt and reverse the trend toward species extinction, *whatever the cost.*”<sup>243</sup> Section 7 of the ESA requires every federal agency to consult with Fish and Wildlife to “insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species.”<sup>244</sup> The Biological Evaluation used in the Final EA claims to have fulfilled that statutory requirement by using Fish and Wildlife’s Programmatic BiOp for the NLEB, though, as Objectors have previously pointed out, this BiOp suffers from egregious shortcomings. The Service violates Section 7 of the ESA because it relies on a deficient BiOp that makes no site- or Project-specific determinations with respect to NLEBs whatsoever.

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<sup>241</sup> *League of Wilderness Defs./Blue Mountains Biodiversity Project v. Connaughton*, 752 F.3d 755, 761 (9th Cir. 2014).

<sup>242</sup> 16 U.S.C. § 1531(b).

<sup>243</sup> *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 184 (1978) (emphasis added).

<sup>244</sup> 16 U.S.C. § 1536(a)(2).

Faulty BiOp aside, the Biological Evaluation the Service prepared for this Project was also insufficient. Agencies are statutorily *required* to prepare a Biological Assessment for actions that are “major construction activities.”<sup>245</sup> The statutory definition of a major construction activity is “a construction project (or other undertaking having similar physical impacts) which is a major Federal action significantly affecting the quality of the human environment as referred to in the [NEPA].”<sup>246</sup> As discussed earlier in this comment, the Project is significant and should be analyzed as a major action significantly affecting the quality of the human environment. It is clear that the Service is required to prepare an official Biological Assessment for the listed species that will be affected by the Project’s actions.

Even more directly, the Project’s proposed clearcuts directly run afoul of Fish and Wildlife’s standards. Fish and Wildlife indicates that only tree clearing projects up to 10 acres are eligible for a predetermined “Not Likely to Adversely Affect” determination, a standard that does not appear to have informed the Final EA whatsoever.<sup>247</sup> Currently, the Biological Evaluation indicates the action “may affect, but is not likely to adversely affect” the NLEB;<sup>248</sup> however, the Final EA asserts that clearcuts in the project area where all trees are removed in a stand will “create large openings (greater than 10 acres but no more than 30 acres).”<sup>249</sup> The Final EA estimates that a total of approximately 65 acres will undergo clearcut treatment in the Project area.<sup>250</sup> This proposed action clearly does not support a “Not Likely to Adversely Affect” finding, which the Forest Service indicated in the Final EA and Biological Evaluation. Such a determination is inconsistent with Fish and Wildlife’s DKey requirements, and the Forest Service is required “to coordinate with the local [Fish and Wildlife] Ecological Services Field Office and/or follow a supplemental consultation process.”<sup>251</sup> This deviation from Fish and Wildlife’s standards shows a clear need for the Forest Service to conduct a Biological Assessment specific to the Project.

***Requested Remedy:*** The Forest Service must withdraw the legally deficient EA and prepare an EIS that includes, *inter alia*, a thorough Biological Assessment that determines the current status of the NLEB and other listed species in the Project area.

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<sup>245</sup> 50 C.F.R. § 402.12(b).

<sup>246</sup> *Id.* § 402.02.

<sup>247</sup> U.S. Fish & Wildlife Serv., Standing Analysis and Implementation Plan – Northern Long-Eared Bat Assisted Determination Key, Version 1.1, 11-12 (Apr. 2023), <https://www.fws.gov/sites/default/files/documents/Standing%20Analysis%20Version%201.1%20April%202023.pdf> (hereinafter “DKey”) (Exhibit 31).

<sup>248</sup> Biological Evaluation at 13.

<sup>249</sup> Final EA at 14.

<sup>250</sup> *Id.* at 9.

<sup>251</sup> DKey at 5.

B. The Forest Service’s failure to investigate the Project site for the presence of sensitive species, including the NLEB, violates NFMA, as does the Service’s failure to contribute to such species’ recovery.

The 2005 Plan requires that “[a]ll project sites must be investigated for the presence of [threatened, endangered, and sensitive] species and/or habitat prior to beginning any authorized ground-disturbing activity at the site.”<sup>252</sup> The Biological Evaluation, which the Final EA incorporates by reference, states that “the northern long-eared bat has been documented throughout the White Mountain National Forest. Roosting and foraging habitat does exist within the action area. Presence of the bat is assumed, as suitable roosting habitat is abundant and available. There are no known hibernacula within the action area.”<sup>253</sup> Yet, the Biological Evaluation admits that “no acoustic surveys were conducted for the Sandwich Vegetation Management Project.”<sup>254</sup> The Forest Service cannot claim that it is complying with its own outdated Forest Plan (and thereby with NFMA) if it has made no effort to determine the location of NLEB hibernaculum, maternity roost sites, or individuals.

A federal court recently ruled on a similar circumstance for another bat species that would have potentially been affected by a Forest Service project in Washington state. In that case, the court found that “the agency’s analysis on the viability of sensitive bat species was deficient,” because the agency did not have sufficient information about the bat’s roosting sites to map the species’ habitat and ensure that the project would not affect the species’ viability.<sup>255</sup> By failing to make a “reasoned decision on viability based on the evidence it had,” the court ruled that the agency violated the NEPA and NFMA.<sup>256</sup> The same is true here: the Forest Service cannot claim to be having a minimal impact on the NLEB in compliance with the NFMA without sufficient information to map the species’ habitat. The agency must do more to understand the prevalence of NLEB in and around the Project area.

The Forest Service further fails to meet its obligations under NFMA as they relate to the NLEB and other sensitive species. The Forest Service’s NFMA implementing regulations outline the 2005 Plan’s species-diversity and -protection requirements.<sup>257</sup> The regulations state:

The plan must include plan components, including standards or guidelines, to maintain or restore the diversity of ecosystems and habitat types throughout the

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<sup>252</sup> 2005 PLAN at 2-13.

<sup>253</sup> Biological Evaluation at 10.

<sup>254</sup> *Id.* at 11.

<sup>255</sup> *Kettle Range Conservation Grp. v. U.S. Forest Serv.*, No. 2:21-CV-00161-SAB, 2023 WL 4112930, at \*10 (E.D. Wash. June 21, 2023).

<sup>256</sup> *Id.*

<sup>257</sup> 36 C.F.R. § 219.9.

plan area. In doing so, the plan must include plan components to maintain or restore . . . [r]are aquatic and terrestrial plant and animal communities[.]<sup>258</sup>

Additional, species-specific NFMA plan components indicate that:

The responsible official shall determine whether or not the plan components . . . provide the ecological conditions necessary to: contribute to the recovery<sup>259</sup> of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern within the plan area. If the responsible official determines that the plan components . . . are insufficient to provide such ecological conditions, then additional, species-specific plan components, including standards or guidelines, must be included in the plan to provide such ecological conditions in the plan area.<sup>260</sup>

The Forest Service’s Biological Evaluation and the Project fail to meet these requirements for several reasons. First, the Biological Evaluation provides an incomplete project effects analysis on the species because it fails to include any discussion of how the Forest Service plans to maintain or restore the NLEB or other sensitive species in the project area.<sup>261</sup> The Forest Service admits to some negative short-term project effects on the NLEB, but then references conflicting scientific evidence to assert long-term benefits. For example, the Biological Evaluation suggests that some of the project activity outcomes (such as open habitat for foraging) may yield long-term benefits to the NLEB.<sup>262</sup> This suggestion is in direct conflict with other studies that describe preferred habitats for the NLEB.<sup>263</sup> Second, the Biological Evaluation fails to explain how the Project will contribute to the recovery of the NLEB to the point at which its listing as endangered is no longer necessary. Finally, the Biological Evaluation indicates the Project activities may indirectly impact the NLEB, but it does not include discussion of species-specific plan components to provide the required ecological conditions necessary for the bat’s recovery. For these reasons, the Forest Service fails to meet its obligations under NFMA as they relate to the NLEB and other sensitive species.

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<sup>258</sup> *Id.* § 219.9(a)(2).

<sup>259</sup> NFMA defines “recovery” as follows: “For the purposes of this subpart, and with respect to threatened or endangered species: The improvement in the status of a listed species to the point at which listing as federally endangered or threatened is no longer appropriate.” *Id.* § 219.19.

<sup>260</sup> *Id.* § 219.9(b)(1).

<sup>261</sup> *See* Biological Evaluation at 6–10.

<sup>262</sup> *Id.* at 7.

<sup>263</sup> *See, e.g.*, Species Status Assessment at 18–19 (explaining that “most foraging occurs . . . under the canopy . . . on forested hillsides and ridges,” which “coincides with data indicating that mature forests are an important habitat type for foraging NLEBs”). Furthermore, NLEBs “seem to prefer intact mixed-type forests . . . for forage and travel rather than fragmented habitat or areas that have been clear cut.” *Id.*



**Requested Remedy:** The Forest Service must substantially alter the proposed Project by withdrawing the Final EA and completing an EIS, which would require the Service to more thoroughly consider its impacts on listed and otherwise sensitive species.

## **IX. Conclusion**

For the foregoing reasons, Standing Trees, the Wonalancet Preservation Association, and New Hampshire Sierra Club object to the Sandwich Vegetation Management Project and request that the Forest Service either drop the Project altogether or address the manifest errors contained in its Final EA. To cure these errors, and given the significance of this Project, the Forest Service must prepare an EIS that adequately evaluates the significant impacts posed by the Project and ensures its compliance with NEPA, the ESA, and NFMA.

Respectfully submitted,

STANDING TREES

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WONALANCET PRESERVATION  
ASSOCIATION

AND

NEW HAMPSHIRE SIERRA CLUB

## TABLE OF EXHIBITS

Number	Exhibit Title
1	Notice of Availability of the Draft Decision Notice, Final Environmental Assessment, and Finding of No Significant Impact, N.H. UNION LEADER (Feb. 15, 2024).
2	Comments of Standing Trees and the Wonalancet Preservation Association Regarding Draft Environmental Assessment and Preliminary Finding of No Significant Impact for Sandwich Vegetation Management Project #57392, Saco Ranger District, White Mountain National Forest (Aug. 30, 2023).
3	Standing Trees Scoping Comments for Sandwich Vegetation Management Projection (July 1, 2022).
4	Mature and Old-Growth Forests: Definition, Identification, and Initial Inventory on Lands Managed by the Forest Service and Bureau of Land Management (Apr. 2023), <a href="https://www.fs.usda.gov/sites/default/files/mature-and-old-growth-forests-tech.pdf">https://www.fs.usda.gov/sites/default/files/mature-and-old-growth-forests-tech.pdf</a> .
5	Chris French, Deputy Chief, U.S. Forest Serv., Letter to Regional Foresters re: Review of Proposed Projects with Management of Old Growth Conditions (Dec. 18, 2023).
6	National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change, 88 Fed. Reg. 1196 (Jan 9, 2023).
7	Land Management Plan Direction for Old-Growth Conditions Across the National Forest System, 88 Fed. Reg. 88042 (Dec. 20, 2023).
8	E-mail from Theresa Corless, Forest Planner and Env't Coordinator, White Mountain Nat'l Forest, to Zack Porter, Exec. Dir., Standing Trees (Mar. 27, 2024).
9	U.S. FOREST SERV., CLIMATE ADAPTATION PLAN (2022).
10	N.L. Harris et al., <i>Attribution of Net Carbon Change by Disturbance Type Across Forest Lands of the Coterminous United States</i> , CARBON BALANCE & MGMT., Nov. 2016.
11	William S. Keeton et al., <i>Late-Successional Biomass Development in Northern Hardwood-Conifer Forests of the Northeastern United States</i> , 57 FOREST SCI. 489 (2011).
12	Edward K. Faison et al., <i>Adaptation and Mitigation Capacity of Wildland Forests in the Northeastern United States</i> , 544 FOREST ECOLOGY & MGMT. 121145 (2023)
13	Heather Keith et al., <i>Re-Evaluation of Forest Biomass Carbon Stocks and Lessons from the World's Most Carbon-Dense Forests</i> , 106 PNAS 11635 (2009).
14	Sebastian Luyssaert et al., <i>Old-Growth Forests as Global Carbon Sinks</i> , 455 NATURE 213 (2008).

15	Robert T. Leverett et al., <i>Older Eastern White Pine Trees and Stands Sequester Carbon for Many Decades and Maximize Cumulative Carbon</i> , FRONTIERS, May 2021.
16	Dominik Thom et al., <i>The Climate Sensitivity of Carbon, Timber, and Species Richness Covaries with Forest Age in Boreal-Temperate North America</i> , GLOB. CHANGE BIOLOGY, Mar. 2019.
17	N.L. Stephenson et al., <i>Rate of Tree Carbon Accumulation Increases Continuously with Tree Size</i> , 507 NATURE 90 (2014).
18	Michelle Brown et al., <i>Timber Harvest as the Predominant Disturbance Regime in Northeastern U.S. Forests: Effects of Harvest Intensification</i> , ECOSPHERE, Mar. 2018, <a href="https://esajournals.onlinelibrary.wiley.com/doi/full/10.1002/ecs2.2062">https://esajournals.onlinelibrary.wiley.com/doi/full/10.1002/ecs2.2062</a> .
19	Matthew J. Duveneck & Jonathan R. Thompson, <i>Social and Biophysical Determinations of Future Forest Conditions in New England: Effects of a Modern Land-Use Regime</i> , 55 GLOB. ENV'T CHANGE 115 (2019).
20	Chelsea L. Petrenko & A.J. Friedland, <i>Mineral Soil Carbon Pool Responses to Forest Clearing in Northeastern Hardwood Forests</i> , 7 GCB BIOENERGY 1283 (2014).
21	Endangered and Threatened Wildlife and Plants; Endangered Species Status for Northern Long-Eared Bat, 87 Fed. Reg. 73488 (Nov. 30, 2022).
22	U.S. Fish & Wildlife Serv., Biological Opinion: Effects to the Northern Long-Eared Bat from Planned and Ongoing Activities Being Implemented in the Eastern and Southern Regions of the U.S. Forest Service (Mar. 31, 2023).
23	E-mail from Jim Innes, Dist. Ranger, White Mountain Nat'l Forest, Saco Ranger Dist., to Zack Porter, Exec. Dir., Standing Trees (Aug. 9, 2023).
24	E-mail from Theresa Corless, Forest Planner and Env't Coordinator, U.S. Forest Serv., to Zack Porter, Exec. Dir., Standing Trees (Aug. 25, 2023, 12:26 EST).
25	U.S. FOREST SERV., FSH 1909.12 – LAND MANAGEMENT PLANNING HANDBOOK CHAPTER 70 – WILDERNESS (2015).
26	66 Fed. Reg. 3244 (Jan. 12, 2001).
27	U.S. Fish and Wildlife Serv., Species Status Assessment for the Northern long-eared bat ( <i>Myotis septentrionalis</i> ) Version 1.2 (Aug. 2022), <a href="https://www.fws.gov/media/species-status-assessment-report-northern-long-eared-bat">https://www.fws.gov/media/species-status-assessment-report-northern-long-eared-bat</a> .
28	<i>Intentionally Omitted</i>
29	New Hampshire Sierra Club Draft EA Comments.
30	Richard Birdsey et al., <i>Middle-Aged Forests in the Eastern U.S. Have Significant Climate Mitigation Potential</i> , FOREST ECOLOGY & MGMT., Nov. 15, 2023, at 1, <a href="https://www.sciencedirect.com/science/article/pii/S0378112723006072">https://www.sciencedirect.com/science/article/pii/S0378112723006072</a> .

31	U.S. Fish and Wildlife Serv., Standing Analysis and Implementation Plan – Northern Long-Eared Bat Assisted Determination Key, Version 1.1 (Apr. 2023), <a href="https://www.fws.gov/sites/default/files/documents/Standing%20Analysis%20Version%201.1%20April%202023.pdf">https://www.fws.gov/sites/default/files/documents/Standing%20Analysis%20Version%201.1%20April%202023.pdf</a> .
32	Comment Period Consideration Summary for the Draft Environmental Assessment.