



April 1, 2019

John Sinclair, Reviewing Officer
Attn: Objections & Litigation Officer
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Milwaukee, WI 53202
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Subject: Early Successional Habitat Creation Project Objection

Dear Reviewing Officer Sinclair,

Pursuant to 36 C.F.R. Part 218, the Vermont Natural Resources Council (VNRC) and Audubon Vermont (Audubon) hereby object to the Draft Decision Notice (DDN) and Finding of No Significant Impact (FONSI) for the Green Mountain National Forest (GMNF) Early Successional Habitat Creation Project (ESHC).

The proposed action calls for the potential harvesting of up to 15,000 acres from a pool of 17,274 acres with up to 12,000 acres of even-aged harvest. To achieve this, the Forest Service plans to construct of up to 25 miles of new roads (including potentially 17 miles of permanent roads) in addition to reconstructing up to 9 miles out of 36 miles of existing National Forest System roads, along with attendant skidder trails. This one project would affect nearly 4% of the forest cover within the GMNF.

Our organizations recognize the importance of a diverse landscape that contains a mix of age classes and forest conditions, including early-successional habitat (ESH), to achieve wildlife habitat and forest plan objectives. Additionally, we recognize the importance of active forest management informed by the best-available science and the role of the forest products industry

in maintaining productive forests in Vermont. Our organizations have a long track record of supporting working forests in Vermont, advocating for funding in the Vermont State House to support working lands, right-to-practice forestry legislation, funding and resources for Vermont's Current Use Program, sponsoring a Forest Roundtable to promote intact forests and a viable forest products industry, in addition to direct technical assistance to forest landowners to manage their forests for wildlife and diverse forest products. Since the issuance of the 2006 Green Mountain National Forest Land and Resource Management Plan (Forest Plan), our organizations have not opposed any proposed timber harvesting activities to meet forest plan goals.

Our objection to this project is rooted in our very serious concern over the curtailment of public involvement in the proposed decision that would authorize a major project with a high degree of associated road building with the potential for significant environmental impacts, in addition to the Forest Service's utilization of several novel environmental review procedures that have never been employed on the GMNF. In the aggregate, these environmental procedures curtail environmental review and leave the public in the dark about important aspects of the project.

More specifically, the Forest Service has limited public input to just the scoping phase of the project, with no opportunity for public comment on the Environmental Assessment (EA). Unfortunately, the Forest Service appears to be setting precedent with this approach as the recently published 30-day comment period for the Somerset Integrated Resource Project also plans to limit public involvement to just the scoping period.

In addition, the Forest Service has limited site analysis for this project by tiering the project to the Forest Plan EIS, and by limiting on the ground analysis through the implementation of a conditional based concept, which delays site specific impact review to a later point in time, which will presumably be done without any public input. This approach is unprecedented on the GMNF, and runs counter to keeping the public informed of the management of our public lands.

The National Environmental Policy Act (NEPA) was enacted to "declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; [and] to enrich the understanding of the ecological systems and natural resources important to the Nation."¹ NEPA functions by prescribing a set of procedural requirements for federal agencies to follow when taking actions which may impact the environment. Central among these are requirements to fully consider the impact of the actions upon the environment and to consider a range of alternative methods to achieve the desired objective, and courts are charged with ensuring that agencies closely follow procedural requirements.²

Our objection to this decision concerns the failure to properly follow NEPA's procedural requirements. As stated, we support a forest management regime which creates a diversity of habitats within the GMNF to support robust and diverse wildlife populations. However, we are concerned that the issuance of an EA, instead of an Environmental Impact Statement (EIS), with

¹ 42 U.S.C. § 4321 (2018).

² *Town of Orangetown v. Gorsuch*, 718 F.2d 29, 34 (2nd Cir. 1983).

no opportunity for public comment shortchanges vital procedural safeguards. By arbitrarily issuing an EA, the Forest Service has also simultaneously reduced the alternatives analysis to just a no action and proposed action analysis, without any disclosure of how different scales of road building could limit impacts on the environment.

This project is significant in both context and intensity and requires a full EIS under NEPA. The completion of an EA and issuance of a FONSI is not sufficient to properly assess the impacts of a project this size, and the Forest Service's decision is arbitrary and unlawful. The Forest Service relies upon tiering the EA to their 2006 GMNF Forest Plan Final Environmental Impact Statement (FEIS), and a condition based analysis, but these combined reviews still fail to satisfy the procedural requirements of NEPA. The proposed actions here have never been given the requisite "hard look" under NEPA.

This decision also cuts off the possibility for further public involvement, a central tenet of NEPA. At this stage, only members of the public who have previously commented during the scoping period are allowed to lodge objections. And yet, the EA is the first chance the public has had to appreciate the specific disclosed impacts of the proposed activities. Here, the project only allowed for one 30-day opportunity for public comment on the proposed action following the publication of the scoping documents. As described in the DDN, there is no opportunity to submit comments on the EA.³ Similar projects of smaller size on the GMNF have included longer comment periods, and the proposed action here deserves more opportunity for public involvement.⁴

Finally, while some of the concerns in our original comment letter were addressed, many of our concerns were not adequately addressed and the EA fails to consider important impacts that should have been disclosed to the public. Conducting an EIS and the associated public process associated with an EIS is the appropriate step for the Forest Service to take in this instance.

The future of Vermont is inextricably tied to the health of our forests, and responsible stewardship of this vital public resource is essential to safeguarding the economic and ecological viability of public lands. Large-scale projects like this one deserve rigorous review and strong public involvement. The Forest Service's approach here has shortchanged these vital procedural components of NEPA while curtailing public involvement in the interest of short-term expediency. We urge the Forest Service to take a different approach which gives full effect to their obligations under NEPA by completing a full EIS with full opportunity for public review.

³ U.S. Forest Service, Early Habitat Successional Habitat Creation Project, Draft Decision Notice and Finding of No Significant Impact (Feb. 2019).

⁴ The Upper White River Integrated Resource Project, covering 1,645 acres, allowed for an additional 30-day comment period after having issued a Preliminary Environmental Assessment. *See* U.S. Forest Service, Upper White River Integrated Resource Project, Preliminary Environmental Assessment Cover Letter (Feb. 2010). The Dorset/Peru Integrated Resource Project, covering 2,047 acres, allowed for an additional 30-day comment period after having issued a Preliminary Environmental Assessment. *See* U.S. Forest Service, Dorset/Peru Integrated Resource Project, Preliminary Environmental Assessment Cover Letter (Aug. 2012). The South of Route 9 Integrated Resource Project, covering X acres, allowed for an additional 30-day comment period after having issued an Environmental Assessment. *See* U.S. Forest Service, South of Route 9 Integrated Resource Project, Invitation for Public Comment on EA (April 2016).

CONTENTS

DESCRIPTION OF THE OBJECTING PARTIES	1
STATEMENT OF FACTS.....	1
STATEMENT OF ISSUES, INCONSISTENCY, AND ILLEGALITY	2
I. THE FOREST SERVICE SHOULD HAVE CONDUCTED AN ENVIRONMENTAL IMPACT STATEMENT FOR THIS PROPOSED ACTION. 3	
A. The Forest Service’s Finding of No Significant Impact is Arbitrary Since This Project is a Major Federal Action Which May Significantly Affect the Human Environment.....	3
B. The Preparation of a Detailed EA and the Discussion of the Many Potential Impacts of the Proposed Harvest is in Itself Evidence that the Project May Have Significant Environmental Impacts.....	7
II. NEPA’S IMPLEMENTING REGULATIONS CHARGE AGENCIES WITH MITIGATING THE ADVERSE ENVIRONMENTAL IMPACTS OF THEIR ACTIONS.	7
III. THE USE OF A PROGRAMMATIC EIS AND “CONDITIONAL BASED” ANALYSIS” THAT DELAYS SITE SPECIFIC REVIEW FAILS TO FULLY SATISFY THE FOREST SERVICE’S PROCEDURAL REQUIREMENTS TO TAKE A “HARD LOOK” UNDER NEPA.	8
IV. THE FOREST SERVICE IS REQUIRED TO PROVIDE ADEQUATE OPPORTUNITY FOR PUBLIC INVOLVEMENT FOR PROJECTS OF THIS SIZE AND NATURE.....	10
V. THE FOREST SERVICE FAILED TO EVALUATE AN ADEQUATE NUMBER OF ALTERNATIVES BEYOND “NO ACTION.”	12
VI. THE FOREST SERVICE FAILED TO PROPERLY ASSESS THE IMPACTS OF THE PROJECT ON INVENTORIED ROADLESS AREAS.....	15
VII. THE FOREST SERVICE FAILED TO CONSIDER CUMULATIVE IMPACTS.	16
VIII. THE PROPOSED ACTION FAILED TO CONSIDER IMPACTS TO THE WHITE ROCKS NATIONAL RECREATION AREA.	17
CONCLUSION	18

DOCUMENTS IN SUPPORT OF VNRC <i>ET AL.</i>'S OBJECTIONS TO THE EARLY SUCCESSIONAL HABITAT CREATION PROJECT	19
EXHIBIT 1: COMMENTS SUBMITTED BY PROFESSOR BILL KEETON, PH.D., TO OBJECTORS ON APRIL 1, 2019.*	25

DESCRIPTION OF THE OBJECTING PARTIES

Vermont Natural Resources Council (VNRC) is non-profit organization whose mission is to engage in research, education, collaboration and advocacy, to protect and enhance Vermont's natural environments, vibrant communities, productive working landscapes, rural character and unique sense of place, and prepare the state for future challenges and opportunities. VNRC was started in 1963, and has a long history of working on environmental policy related to clean water, healthy forests and wildlife, forestry, agriculture, sustainable communities, land use, climate change, and energy. VNRC provides technical assistance throughout Vermont, advocates for sound environmental policy and laws in the Vermont Legislature, and serves as a watchdog organization for government and agency action in Vermont. In this capacity, VNRC believes government should operate in a transparent manner and be accountable to the public.

Audubon Vermont is a state program of the National Audubon Society, which is a non-profit organization whose mission is to protect birds and the places they need to thrive today and tomorrow. By working in the areas of conservation, advocacy, community involvement, and by tapping into an active network of Chapters, volunteers, and partner organizations, Audubon Vermont works to build a better future for our state. Audubon Vermont works closely with forest landowners, state and federal agency partners, and the forest products industry to establish sustainable forestry policies and practices that protect, restore and enhance bird and wildlife habitat. For these reasons, Audubon Vermont has joined in objecting to the Forest Service's proposed decision, reached without sufficient public input or consideration of the potential impacts of the proposed harvest levels on the environment.

On June 8, 2018, the objecting parties submitted substantive comments regarding the ESHC project as part of the project scoping period.⁵ The objecting parties also actively participated in the creation of the 2006 Forest Plan.

The Forest Service plans to implement the ESHC project in the Manchester District of the GMNF.

For the purposes of 36 C.F.R. § 218.8(d)(1), the objecting parties may be contacted at the names, addresses, and telephone numbers indicated in the signature block. For purposes of 36 C.F.R. § 218.8(d)(3), VNRC is the "lead objector."

STATEMENT OF FACTS

The GMNF was established in 1932 by President Herbert Hoover and now encompasses 6% of Vermont's land base and ~50% of the state's public lands. It includes more than 400,000 acres in southwestern and Central Vermont, with forest system lands found within 53 Vermont towns. The GMNF weighs multiple uses by providing ecological and science-based forest stewardship, clean water, diverse vegetation, high-value, high-quality forest products, economic and educational contributions, and trail-based backcountry recreation. As described in the National Forest Management Act, the GMNF must produce and revise a Land and Resource Management

⁵ U.S. Forest Service, Early Successional Habitat Creation Project, Public Comments Received for the Proposed Action, Content Analysis and Response to Comments (Feb. 2019).

Plan (Forest Plan) every 10-15 years.⁶ The GMNF is currently operating under the guidance of the 2006 Forest Plan, which replaced the 1987 Forest Plan. The purpose of the proposed action is to meet Goal 2 of the 2006 Forest Plan. Goal 2 is to maintain and restore quality, amount and distribution of habitats to produce viable and sustainable populations of native and desirable non-native plants and animals.

On May 9th, 2018 the GMNF made public their 31-page scoping document, the Notice of Proposed Action and Opportunity to Comment. The 30-day comment period notification Legal Notice was published in the newspaper of record Rutland Herald on May 10th, 2018. The end of the 30-day comment period was June 11th, 2018. This was explicitly defined as the only opportunity for public comment on the proposed action.

The proposed action will harvest up to 15,000 acres from a pool of 17,274 acres with up to 12,000 acres of even-aged harvest over a 15-year period. The GMNF plans to construct to 25 miles of new roads (including potentially 17 miles of permanent roads) in addition to reconstructing up to 9 out of 36 miles of existing National Forest System roads, along with attendant skidder trails. The purpose of the project is to increase the regenerating age class (0 to 9 years old) of forested lands to create habitat for neotropical migrant passerine birds and other wildlife species requiring early successional habitats. The project is expected to create desired early successional habitat conditions, promote the aspen-birch habitat type, maintain forest health, improve wetland habitat and provide forest products to the local economy.

STATEMENT OF ISSUES, INCONSISTENCY, AND ILLEGALITY

As explained below, this Objection addresses the Early Successional Habitat Creation Project within the Green Mountain National Forest, as well as the Draft Decision Notice. Our specific concerns are noted below.⁷

This Objection identifies the various issues that are inconsistent with law, regulation, and policy. We have identified seven specific ways in which the Forest Service has failed to fully comply with NEPA requirements: (1) the arbitrary determination that the proposed project may not affect the human environment; (2) a failure to take the requisite “hard look” at the effects of the proposed action through the use of tiering to the Forest Plan EIS and condition based analysis as a way to streamline the NEPA process; (3) a lack of open public involvement beyond the scoping period; (4) a failure to address any other alternatives beyond “No Action”, leading inevitably to the foreordained selection of their only proposed action; (5) a failure to comply with regulatory requirements for heightened review for projects affecting inventoried roadless areas (IRA); (6) a failure to consider cumulative impacts; and (7) a failure to consider impacts to the White Rocks National Recreational Area.

⁶ 36 C.F.R. § 219.10 (2019).

⁷ 36 C.F.R. § 218.8(d)(5) (2019).

I. THE FOREST SERVICE SHOULD HAVE CONDUCTED AN ENVIRONMENTAL IMPACT STATEMENT FOR THIS PROPOSED ACTION.

A. The Forest Service's Finding of No Significant Impact is Arbitrary Since This Project is a Major Federal Action Which May Significantly Affect the Human Environment.

For major actions that may have a significant effect upon the environment, the Forest Service is required to complete a full EIS.⁸ Here, the Service completed an EA instead of an EIS. When reviewing an administrative decision to issue an EA instead of an EIS, courts will determine whether the agency's decision was arbitrary or capricious.⁹ While agencies are afforded deference regarding such decisions, courts have generally held that agencies should err on the side of caution when the degree of the impact from a given project is uncertain.¹⁰ This includes actions that are presumptively positive for the environment, as well as those which are negative.¹¹ "A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial."¹²

The Forest Service frames this project as a positive for its creation of wildlife habitat, even while they acknowledge the potential for numerous environmental issues.¹³ However, even for projects with a mix of beneficial and adverse impacts, courts have encouraged agencies to once again err on the cautious side: "Where such adverse effects can be predicted, and the agency is in the position of having to balance the adverse effects against the projected benefits, the matter must, under NEPA, be decided in light of an environmental impact statement."¹⁴

Likewise, for close calls, courts have generally required agencies to complete an EIS.¹⁵ An EIS is required not just for projects that *will* have major effect; it is required for projects with effects that "may be major."¹⁶ Factors to be considered in this analysis include the "degree to which the effects on the quality of the human environment are likely to be highly controversial."¹⁷ Importantly, an EIS is not required only when the proposed action "*will not* have a significant impact on the human environment" (emphasis added).¹⁸

The following provide some of the major significant impacts proposed:

⁸ 42 U.S.C. § 4332(C) (2018).

⁹ *Village of Grand View*, at 657.

¹⁰ *Hanley v. Kleindienst*, 471 F.2d 823 (2nd Cir. 1972).

¹¹ *Hiram Clarke Civic Club v. Lynn*, 476 F.2d 421 (5th Cir. 1973).

¹² 40 C.F.R. § 1508.27(b)(1) (2019).

¹³ U.S. Forest Service, Early Successional Habitat Creation Project, Environmental Assessment (Feb. 2019).

¹⁴ *Friends of Fiery Gizzard v. Farmers Home Admin.*, 61 F.3d 501, 505 (6th Cir. 1995); *see also Sierra Club v. Marsh*, 769 F.2d 868, 880 (1st Cir. 1985).

¹⁵ *Foundation for N. Am. Wild Sheep v. United States Dep't of Agric.*, 681 F.2d 1172, 1178 (9th Cir. 1982); *Save Our Ten Acres v. Kreger*, 472 F.2d 463, 467 (5th Cir. 1973).

¹⁶ 40 C.F.R. § 1508.18 (2019).

¹⁷ 40 C.F.R. § 1508.27(b)(4) (2019).

¹⁸ 40 C.F.R. § 1508.13 (2019).

The scale of the road building may significantly affect the environment. According to the EA, the Forest Service proposes to construct up to 25 miles of new roads on the Manchester Ranger District, with 17 miles being constructed to permanent Operational Maintenance Level (OML).¹⁹ In addition, up to nine miles out of 36 miles of existing roads may require reconstruction.²⁰ To appreciate this scale of road building on the Forest Service, this one proposed project would increase the amount of roads required to implement this project on the Manchester District by 41%. This staggering statistic alone should prompt an EIS, and it is important to recognize that the Forest Service originally proposed the construction of up to 75 miles of new roads on the Manchester District, but reduced that number by increasing skidding distances.²¹ As we articulated in our scoping comments, this kind of proposal, even scaled back to a 41% increase in required roads on the District, is highly controversial and warrants examination through an EIS.²² We believe this level of road building is controversial, not because we oppose road construction for timber harvesting purposes - we understand forestry roads are needed to promote working forests, but because the Forest Service itself said in the 2006 Forest Plan EIS that it expected there to be only a minor potential increase in road development on the entire GMNF, and the proposed project runs counter to what was contemplated and disclosed in the EIS.²³

As an example of the kind of impacts road construction will have in the project areas, the Forest Service discloses that “road construction in the Dover and Wardsboro area has the greatest potential to adversely affect habitat connectivity” and “[a]ll stands with Compartment 51, 52, 53, and 186 proposed for treatment are within, and nearly span the full width of, a highest priority Connectivity Block which serves the important function of connecting two of the highest priority Forest Blocks.”²⁴ Based on this disclosure, the Forest Service should have performed an EIS.

The Forest Service failed to evaluate the long-term maintenance of early successional habitat on forest habitat types. In the EA, the Forest Service does not disclose how it will maintain early successional habitat over time after the proposed project. It is unclear whether the Forest Service will continue to maintain young forests in the area that will be harvested with the extent of new roads that are being created, or whether new areas on the GMNF will need to be utilized with additional road building, which as a cumulative effect, has the potential to significantly affect the environment. Please refer to the cumulative effects discussion below on pages 16–17 for additional discussion on long-term impacts that should have been analyzed in an EIS.

The project may exacerbate the impacts of non-native invasive species. Non-native invasive plants known to occur in or adjacent to stands proposed for ESH harvest activities include goutweed, garlic mustard, wild chervil, common barberry, spotted knapweed, cypress spurge,

¹⁹ U.S. Forest Service, Early Successional Habitat Creation Project, Environmental Assessment, at 15 (Feb. 2019).

²⁰ *Id.*

²¹ U.S. Forest Service, Early Successional Habitat Creation Project, Environmental Assessment, at 9 (Feb. 2019).

²² *National Audubon Society v. Hoffman*, 132 F.3d 7 (2nd Cir. 1997).

²³ U.S. Forest Service, Green Mountain National Forest, Final Environmental Impact Statement for the Land and Resource Management Plan (Feb. 2006).

²⁴ U.S. Forest Service, Early Successional Habitat Creation Project, Environmental Assessment, at 24 (Feb. 2019).

Morrow honeysuckle, purple loosestrife, wild parsnip, common reed, Japanese knotweed, common buckthorn, glossy buckthorn, and multiflora rose.²⁵ Disturbance caused by logging and associated roads and trails can trigger rapid invasive plant population expansion due to increased light, forest floor disturbance, soil compaction, reduced drainage, and changes in soil nutrient content and organic matter.²⁶ Retention of downed woody material can help reduce the spread of non-native vegetation onto disturbed sites.²⁷ The Forest Service proposes, however, that whole-tree harvesting will be used on up to 20% of the total proposed ESH acreage.²⁸ Based on the amount of road building proposed in this project, the Forest Service should have considered the significant impacts of the spread of non-native invasive species in an EIS.

The Forest Service failed to adequately consider the impacts of the proposed harvests on birds. The EA describes the maximum temporary opening size (30 acres) and approximate percentage of even-aged silvicultural treatments (80%) and uneven-aged silvicultural treatments (20%) used to achieve target Forest Plan early successional habitat conditions.²⁹ It fails however to effectively describe the relative use of specific even-aged systems (e.g. what percentage will be clearcut with reserves, patch cuts, or shelterwood) and therefore it is difficult to estimate the average temporary opening size and subsequent impacts to the forest resource.

Some early successional habitat nesting bird species utilize relatively small temporary opening, much smaller than thirty acres. Among these are Chestnut-sided Warbler and Eastern Towhee. Most early successional habitat nesting birds prefer two to ten acre temporary openings. Patch cuts and shelterwood harvests more closely emulate natural disturbance regimes in northern hardwood and mixedwood forests than clearcuts with reserves as would be allowed under the Forest Service proposal. Both of these silvicultural treatments result in early successional habitat and greater use of these over larger clearcuts with reserves may reduce impacts to the forest resource while still meeting bird conservation objectives.³⁰ These issues present important questions about the potential for a significant environmental impact on bird populations that must be addressed in an EIS, not an EA.³¹

The Forest Service cannot avoid a finding of significant environmental impact by relying upon future design and mitigation decisions.

In *National Audubon Society v. Hoffman*, the District Court held that “[a]gencies should not cite inadequately-supported mitigation measures without support for their efficacy.” The Court went on to find that “[t]he record [did] not support a conclusion that any of [the] mitigation measures [would] actually work.”³² This finding was upheld by the Second Circuit which stated that

²⁵ *Id.*

²⁶ Olson, E. *et al.* *Nonnative invasive plants in the Penobscot Experimental Forest in Maine, USA: Influence of site, silviculture, and land use history*. 138 JOURNAL OF THE TORREY BOTANICAL SOCIETY 4, 453 – 464 (2011).

²⁷ Pacific Northwest Research Station, *Logging Debris Matters: Better Soil, Fewer Invasive Plants, Science Findings* (2012).

²⁸ U.S. Forest Service, Early Successional Habitat Creation Project, Environmental Assessment, at 25 (Feb. 2019)..

²⁹ *Id.*

³⁰ S. Hagenbuch, Comments on the Early Successional Habitat Creation Project (March 2019).

³¹ *Id.*

³² *National Audubon Society v. Hoffman*, 917 F.Supp 280, 289 (D. Vt. 1995)

“mitigation measures [must] be supported by substantial evidence in order to avoid creating a temptation for federal agencies to rely on mitigation proposals as a way to avoid preparation of an EIS.”³³ In the present circumstance, the Forest Service is doing precisely what the Second Circuit held is not allowed.

To reach the conclusion that the threshold for adverse effects would not be reached on landscape-scale habitat features, the Forest Service states that any fragmenting effects would be minimized through project design by working with Vermont Agency of Natural Resources staff prior to commencing project activities in these stands (appendix B, Wildlife).³⁴ According to Appendix B, the Forest Service reiterates that to “minimize the potential fragmentation effects in the highest priority Connectivity Block and the regionally significant bear travel corridor located in Dover and Wardsboro, work closely with Vermont Agency of Natural Resources staff to minimize impacts to bears and, when practicable, enhance bear habitat.”³⁵

The EA fails to explain what design or mitigation standards will be employed to minimize fragmenting effects. The essential strategy being deployed by the Forest Service is a version of “trust us, we will work this out later.” At this time, we do not know where the roads will be located, or how the Forest Service will mitigate the impacts. Despite this lack of critical specificity, the Forest Service has found that the proposed alternative is “unlikely” to “adversely affect the connectivity of the landscape” or “the connectedness of black bear habitat or the quantity of hard mast with Dover and Wardsboro with design criteria in place.”³⁶ NEPA requires an EIS unless the Forest Service determines that proposed action “*will not* have a significant impact on the human environment.”³⁷ In the EA, the Forest Service can only say it is unlikely because the Forest Service will consult with a state agency in the future to implement undisclosed policies to reduce the fragmenting effects of the roads. While we respect the Vermont Agency of Natural Resources, such an open-ended approach relying on a state agency to make future, unspecified decisions to mitigate environmental harm is the very essence of arbitrarily succumbing to the “temptation for federal agencies to rely on mitigation proposals as a way to avoid preparation of an EIS.”³⁸ In this case, as in *National Audubon Society v. Hoffman*, the Forest Service lacks any meaningful or defined foundation for reaching a conclusion that future impacts are unlikely to be significant.

In conclusion, individually, each of these potential environmental impacts warrants preparation of an EIS. The cumulative environmental impact of these various risks combined makes it clear that the Forest Service is required to conduct a full EIS and the associated opportunity for public involvement. This project is a perfect example of the type of project that Congress intended to be

³³ *National Audubon Society v. Hoffman*, 132 F.3d 7 (2nd Cir. 1997).

³⁴ U.S. Forest Service, Early Successional Habitat Creation Project, Environmental Assessment, at 24-25 (Feb. 2019).

³⁵ U.S. Forest Service, Early Successional Habitat Creation Project, Environmental Assessment, at B-1 (Feb. 2019).

³⁶ U.S. Forest Service, Early Successional Habitat Creation Project, Environmental Assessment, at 24-25 (Feb. 2019).

³⁷ 40 C.F.R. §1508.13 (2019).

³⁸ *Hoffman*, at 17.

covered by NEPA, to ensure that federal agencies carefully considered the impacts of their decisions, considered alternatives, and provided meaningful opportunity for public engagement.

B. The Preparation of a Detailed EA and the Discussion of the Many Potential Impacts of the Proposed Harvest is in Itself Evidence that the Project May Have Significant Environmental Impacts.

The Forest Service cannot cloak an EA in a detailed analysis as a shield against a finding that it failed to meet its substantial burden to show no possibility of a significant impact; an EA is a preliminary document used to determine if the environmental effects of a proposed action are “significant.”³⁹ An EA is supposed to be a “concise” document that “briefly”⁴⁰ discusses the relevant issues and that leads either to the preparation of an EIS or to Finding of No Significant Impact (FONSI).⁴¹ The very fact that the Forest Service developed a 98 page environmental assessment which provides a detailed analysis of certain potential impacts (including degradation of forest habitat quality; impacts upon threatened, endangered, and sensitive wildlife; impacts upon threatened, endangered, and sensitive plants; increased prevalence of non-native, invasive plants; degradation of aquatic resources; adverse impacts upon soil and wetlands; concerns around carbon and greenhouse gas emissions; impacts upon recreational uses; impacts upon wilderness and inventoried roadless areas; reduced visual beauty of the area; and impacts upon Heritage Resources) but defers questions about those impacts to future harvest design and mitigation steps yet to be decided is itself evidence of the potential for significant impact.

II. NEPA’S IMPLEMENTING REGULATIONS CHARGE AGENCIES WITH MITIGATING THE ADVERSE ENVIRONMENTAL IMPACTS OF THEIR ACTIONS.

Had the Forest Service taken the time to conduct a full EIS, the agency would have been able to conduct a proper analysis of the appropriate mitigation necessary to address the environmental impacts of the proposed harvests. Instead, as noted above, the Forest Service relies on undefined future mitigation to address potential impacts. Not only does this lack of defined mitigation actions fail to address the potential for significant environmental impacts, but it is also a direct violation of NEPA.

NEPA’s implementing regulations require that agencies analyze and propose mitigation measures.⁴² According to the CEQ: “All relevant, reasonable mitigation measures that could improve the project are to be identified, even if they are outside the jurisdiction of the lead

³⁹ 40 C.F.R. § 1501.4(e) (2019).

⁴⁰ *Sierra Club v. Marsh*, 769 F.2d 868, 870 (1st Cir. 1985).

⁴¹ 40 C.F.R. § 1508.9 (2019).

⁴² 40 C.F.R. §§ 1502.14(f), 1502.16(h). *See also Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 351-52 (1989); *Holy Cross Wilderness Fund v. Madigan*, 960 F.2d 1515, 1522 (10th Cir. 1992).

agency or the cooperation agencies”⁴³ According to the CEQ, “[a]ny such measures that are adopted must be explained and committed in the ROD.”⁴⁴

Mitigation “must be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated.”⁴⁵ [O]mission of a reasonably complete discussion of possible mitigation measures would undermine the ‘action-forcing’ function of NEPA. Without such a discussion, neither the agency nor other interested groups and individuals can properly evaluate the severity of the adverse effects.”⁴⁶ A “perfunctory description,” of mitigation, without “supporting analytical data” analyzing their efficacy, is inadequate to satisfy NEPA’s requirements that an agency take a “hard look” at possible mitigating measures.⁴⁷ An agency’s “broad generalizations and vague references to mitigation measures ... do not constitute the detail as to mitigation measures that would be undertaken, and their effectiveness, that the Forest Service is required to provide.”⁴⁸ Moreover, in its final decision documents, an agency must “[s]tate whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not.”⁴⁹

As explained above, the EA fails to explain the specific measures that will be taken to address the impacts of fragmentation of forest roads being constructed in a state ranked highest priority forest block, and this violates NEPA.

III. THE USE OF A PROGRAMMATIC EIS AND “CONDITIONAL BASED” ANALYSIS” THAT DELAYS SITE SPECIFIC REVIEW FAILS TO FULLY SATISFY THE FOREST SERVICE’S PROCEDURAL REQUIREMENTS TO TAKE A “HARD LOOK” UNDER NEPA.

The Forest Service failed to conduct the requisite “hard look” at the environmental impacts of the proposed project, inappropriately relying on an earlier programmatic EIS that did not contemplate the specific risks to the environment posed by this proposed project. NEPA requires that agencies take a “hard look” at the environmental consequences of proposed actions.⁵⁰ These procedural requirements encoded in § 102 of NEPA are inflexible, to ensure that agencies are

⁴³ Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act Regulations, 46 Fed. Reg. 18026, 18031 (March 23, 1981).

⁴⁴ Forty Questions, 46 Fed. Reg. at 18036.

⁴⁵ *City of Carmel-by-the-Sea v. U.S. Dept. of Transp.*, 123 F.3d 1142, 1154 (9th Cir. 1997) (quoting *Robertson*, 490 U.S. at 353).

⁴⁶ *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 353 (1989).

⁴⁷ *Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1380 (9th Cir. 1998).

⁴⁸ *Id.* at 1380-81. *See also Northwest Indian Cemetery Protective Association v. Peterson*, 795 F.2d 688, 697 (9th Cir. 1986), *rev’d* on other grounds, 485 U.S. 439 (1988) (“A mere listing of mitigation measures is insufficient to qualify as the reasoned discussion required by NEPA.”); *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1151 (9th Cir. 1988) (“Without analytical data to support the proposed mitigation measures, we are not persuaded that they amount to anything more than a ‘mere listing’ of good management practices.”).

⁴⁹ 40 C.F.R. § 1505.2(c).

⁵⁰ *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 374 (1989).

considering the impacts of their actions upon the environment.⁵¹ This requirement is abrogated only if there is a clear and unavoidable statutory conflict.⁵²

In 2014, the Council on Environmental Quality (CEQ) provided the following guidance for assessing significance when relying upon a programmatic EIS:

“Confusion over what level of NEPA analysis is required for tiered proposals may occur when a programmatic EIS is complete and the site-specific project will have a significant impact as indicated in the programmatic document. When this occurs, the appropriate question is not if there is a significant impact from the proposed action, but if there is a new significant impact that was not already considered and addressed in the programmatic review. If there are no new significant impacts, an EA may be appropriate instead of an EIS so long as the aspects of the proposed action that involve significant effects have not changed since the PEIS, and the agency presents its reasons for determining that the effects and potential mitigation measures were adequately considered in the PEIS.”⁵³

When reviewing an administrative decision to not issue an EIS, courts undertake a two-step analysis.⁵⁴ In the first step of this analysis, the court will consider whether the agency’s analysis constitutes a “hard look” at the effects of the proposed actions.⁵⁵

Because the proposed ESHC project is tiered to this previous EIS, the Forest Service asserts that the significant impacts of this project have already been considered under that previous broader review. By using this approach, the Forest Service short-changes the vital role that NEPA plays in agency decision-making. Indeed, NEPA’s obligations are stricter at the project level.⁵⁶ Here, the Forest Service presumes that significant impacts of the proposed project were already examined under the Forest Plan: however, the proposed degree of road building was never contemplated or addressed in the Forest Plan EIS.

The 2006 Forest Plan EIS disclosed the following about the cumulative effects of road development and construction:

Cumulative Effects: Analysis of cumulative effects looks at past, present, and reasonably foreseeable future actions. Following direction in the 1987 Forest Plan, there has been relatively little new road construction in the 18 years of Plan implementation to date. The 1987 Plan emphasizes reconstruction and maintenance of the existing transportation system, and restoring roads with environmental resource problems. Over the past 18 years, 19.9 miles of road have been restored to meet their approved road management objective, 10.1 miles have

⁵¹ *Calvert Cliff Coordinated Committee v. Atomic Energy Commission*, 449 F.2d 1109 (D.C. Cir. 1971).

⁵² *Flint Ridge Development Co. v. Scenic Rivers Association of Oklahoma*, 426 U.S. 776, 777 (1976).

⁵³ Michael Boots, EFFECTIVE USE OF PROGRAMMATIC NEPA REVIEWS, Council on Environmental Quality (Issued December 18, 2014).

⁵⁴ *National Audubon Society v. Hoffman*, 132 F.3d 7 (2nd Cir. 1997).

⁵⁵ *Village of Grand View v. Skinner*, 947 F.2d 651, 657 (2nd Cir. 1991); *Sierra Club v. U.S. Army Corps of Engineers*, 701 F.2d 1011, 1029 (2nd Cir. 1983).

⁵⁶ *Ecology Ctr., Inc. v. United States Forest Serv.*, 192 F.3d 922, 923 (9th Cir. 1999).

been reconstructed, and 6.6 miles have been constructed; these figures do not include parking areas (USDA 2004). No road construction or reconstruction has occurred since 1997 except to provide a small number of parking spaces where needed.

No temporary roads have been constructed the past 10 years. Construction of logging roads for timber harvest by loggers has also been minimal. These roads are not generally open to the public and are rehabilitated after use. Miles of road maintenance have also been well below predicted levels because of reduced budgets.

Basing predictions for new road development in the foreseeable future on what has occurred over the past Plan period follows the logic that construction of new permanent or temporary roads is not expected to differ much from that of the recent past.

...

Based on the relatively minor potential increase in new road development, temporary new roads, and road maintenance, through current projects or in the foreseeable future, there would be no measurable cumulative impact in regards to the issue of planning for and managing roads and the transportation system in the short and long-term.⁵⁷

The proposed project would increase construction of new roads at a level that was not contemplated, analyzed or disclosed in the Forest Plan EIS. In addition, the Forest Service does not disclose where any of the proposed 25 new miles of roads will even be located on the Environmental Assessment maps, choosing instead to rely on site-specific analysis at some point in the future closer to implementation, coupled with vague future mitigation measures. This method of analysis, including postponing any meaningful analysis of the environmental impacts, does not satisfy the requirement to take a hard look at the effects of proposed road building in the project area.

IV. THE FOREST SERVICE IS REQUIRED TO PROVIDE ADEQUATE OPPORTUNITY FOR PUBLIC INVOLVEMENT FOR PROJECTS OF THIS SIZE AND NATURE.

A central tenet of NEPA is the requirement to include the public as part of the process.⁵⁸ By issuing an EA instead of an EIS, the Forest Service here has cut off the possibility of further public involvement, with the sole exception of an Objection filed by a party who has previously commented. The only open public commenting period on this project occurred at a point in time when the specifics of this project were too vague to invite sufficiently detailed public

⁵⁷ U.S. Forest Service, Green Mountain National Forest, Final Environmental Impact Statement for the Land and Resource Management Plan, at Page 3-351 (2006).

⁵⁸ 42 U.S.C. § 4331(a) (2018).

comments.⁵⁹ Even now, there are fundamental aspects of this project—such as precise road locations—which are uncertain.

NEPA requires that, “to the fullest extent possible”, agencies are to “encourage and facilitate public involvement in decisions which affect the quality of the human environment.”⁶⁰ Agencies are to “[m]ake diligent efforts to involve the public in preparing and implementing their NEPA procedures.”⁶¹ By issuing an EA here without the opportunity to comment, the Forest Service has formally ended public participation while important management decisions are left unresolved.⁶²

There is little precedent for such limited public involvement for such a project on the GMNF. The Robinson Integrated Resource Project, covering 9,277 acres of timber harvest over a 5-7 year period, included two 30-day comment periods and a public open house meeting.⁶³ The Dorset/Peru Integrated Resource plan, covering 2,047 acres of harvest, included two 30-day comment periods, a public meeting and several public field trips.⁶⁴ The Gilmore Aspen Management Project, covering a harvest of only sixty acres, included two 30-day comment periods and a field visit.⁶⁵ The project that is the subject of these Objections, includes up to 15,000 acres of timber harvest and twenty-five miles of road building stretching across the next fifteen years, yet had just one 30-day comment period and one stakeholder meeting.

The Forest Service is empowered to provide a public review period for certain types of actions:

“In certain limited circumstances, which the agency may cover in its procedures under §1507.3, the agency shall make the finding of no significant impact available for public review (including State and areawide clearinghouses) for 30 days before the agency makes its final determination whether to prepare an environmental impact statement and before the action may begin. The circumstances are: (i) The proposed action is, or is closely similar to, one which normally requires the preparation of an environmental impact statement under the procedures adopted by the agency pursuant to §1507.3, or

⁵⁹ U.S. Forest Service, Early Successional Habitat Creation Project, Invitation for Comments (May 2018); U.S. Forest Service, Early Successional Habitat Creation Project, Notice of Proposed Action and Opportunity to Comment (May 2018).

⁶⁰ 40 C.F.R. § 1500.2 (2019).

⁶¹ 40 C.F.R. § 1506.6 (2019).

⁶² U.S. Forest Service, Early Habitat Successional Habitat Creation Project, Environmental Assessment, at 13 (Feb. 2019).

⁶³ U.S. Forest Service, Robinson Integrated Resource Project, Environmental Assessment (Aug 2018); U.S. Forest Service, Robinson Integrated Resource Project, Invitation for Comments, Environmental Assessment for Public Comment (June 2018); U.S. Forest Service, Robinson Integrated Resource Project, Environmental Assessment for Public Comment (June 2018).

⁶⁴ U.S. Forest Service, Dorset Peru Integrated Resource Project, Final Environmental Assessment (Feb. 2013); U.S. Forest Service, Dorset Peru Integrated Resource Project, Final EA Notice Letter (April 2013); U.S. Forest Service, Dorset Peru Integrated Resource Project, Invitation for Comments (July 2011).

⁶⁵ U.S. Forest Service, Gilmore Aspen Management Project, Legal Notice and Invitation to Comment (Feb. 2014); U.S. Forest Service, Gilmore Aspen Management Project, Preliminary Environmental Assessment 30-Day Public Comment Period (April 2015); U.S. Forest Service, Gilmore Aspen Management Project, Final Environmental Assessment (July 2015).

(ii) The nature of the proposed action is one without precedent.”⁶⁶

Both of these circumstances apply here. As to the first of these circumstances, the 2nd Circuit Court of Appeals found in *National Audubon Society v. Hoffman* that the GMNF’s determination that an environmental impact statement was not necessary for a proposed timber harvesting and road building project in the Lamb Brook area with 1.3 proposed miles of new road was arbitrary and capricious.⁶⁷ With that case as a benchmark, the proposed action is, or is closely similar to one, which normally requires the preparation of an environmental impact statement.

As to the second circumstance, the nature of this project, the sheer scale of the proposed road building combined with the Forest Service’s decision to limit public input, including the failure to let the public comment on the EA, and the lack of disclosure of site specific impacts through conditional based analysis, is one without precedent.

Public involvement and an opportunity to comment is an essential piece of the NEPA full disclosure process and its importance is further raised with a conditional based concept for a project of this scale. It would have been our preference to offer our thoughts through a public comment period. Without that avenue being available, however, we are forced into the submittal of a letter of objection. We call on the Forest Service to implement the regulations to the “fullest extent possible” and put the proposed decision out to public review as required by law.⁶⁸

V. THE FOREST SERVICE FAILED TO EVALUATE AN ADEQUATE NUMBER OF ALTERNATIVES BEYOND “NO ACTION.”

When preparing an EIS, the Forest Service is required to conduct a full evaluation of alternatives and their environmental impacts, including a no action alternative.⁶⁹ The Forest Service failed to conduct an EIS as required and so clearly did not conduct the full alternatives analysis required under that process. Further, even under the EA that was prepared, the Forest Service did not meet its obligation to conduct an alternatives analysis.

An Environmental Assessment:

“(a) Means a concise public document for which a Federal agency is responsible that serves to:

- (1) Briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.
- (2) Aid an agency's compliance with the Act when no environmental impact statement is necessary.
- (3) Facilitate preparation of a statement when one is necessary.

⁶⁶ 40 C.F.R. § 1501.4(e) (2019).

⁶⁷ *National Audubon Society v. Hoffman*, 132 F.3d 7, 13 (2nd Cir. 1997).

⁶⁸ 42 U.S.C. § 4332 (2018).

⁶⁹ 40 C.F.R. § 1502.14.

(b) Shall include brief discussions of the need for the proposal, *of alternatives as required by section 102(2)(E)*, of the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted.”⁷⁰
(emphasis added)

Under these regulations, an environmental assessment must include alternatives, as defined within NEPA. Section 102(2)(E) of NEPA requires that an agency “study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.”⁷¹

An agency’s issuance of an EA does not absolve them of their duty to consider alternatives as in a full EIS. Indeed, “consideration of alternatives is critical to the goals of NEPA even where a proposed action does not trigger the EIS process.” *Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1229 (9th Cir. 1988)). “[F]ederal agencies have a duty under NEPA to study alternatives to any actions that have an impact on the environment, even if the impact is not significant enough to require a full-scale EIS.” *See also City of New York v. U.S. Dept. of Transp.*, 715 F.2d 732, 742 (2nd Cir. 1983).

Reasonable alternatives to study can include those beyond the authority of the individual agency as well as those which may only partially complete the proposal’s goal.⁷² Courts have historically insisted that agencies “consider such alternatives to the proposed action as may partially or completely meet the proposal’s goal.”⁷³ Such alternatives do not need be an exhaustive collection of every possible approach, and courts afford agencies considerable deference. By framing their objectives broadly, an agency can doom a project under the weight of an “infinite number of alternatives.”⁷⁴ However, framing objectives so narrowly that only one alternative would suffice risks the EIS becoming an “foreordained formality”⁷⁵ and allows agencies to “circumvent the requirement that relevant alternatives be considered.”⁷⁶

Here, the Forest Service proposes only a single alternative other than the no action alternative. The fact that the Forest Service considered the possibility of evaluating additional alternatives, but dismissed them, or reduced the amount of proposed road building by adjusting skidder distances, does not constitute the required alternatives analysis under NEPA. As required for both an EA and an EIS, the Forest Service should have considered a range of alternatives that reflected different levels of road building (as we suggested in our scoping comments⁷⁷), including an alternative that does not propose new roads in Inventoried Roadless Areas (IRAs) (we raised a concern about roads in Inventoried Roadless Areas in our comments as well).

⁷⁰ 40 C.F.R. § 1508.9 (2019).

⁷¹ 42 U.S.C. § 4332(2)(E) (2018).

⁷² *Natural Resources Defense Council v. Morton*, F.2d 827 (D.C. Cir. 1972).

⁷³ *Natural Resources Defense Council v. Callaway*, 524 F.2d 79, 93 (2nd Cir. 1975).

⁷⁴ *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 196 (D.C. Cir. 1991).

⁷⁵ *Id.*, at 196.

⁷⁶ *City of New York v. U.S. Dept. of Transp.*, 715 F.2d 732, 743 (2nd Cir. 1983).

⁷⁷ VNRC and Audubon Vermont Comments on Early Successional Habitat Creation Project (June 2018). (“We believe the Forest Service should develop a range of alternatives that minimize road development.”)

Additionally, we suggested that the Forest Service develop a range of alternatives focusing on managing for historic levels of young forests for wildlife species. The Forest Service states on page 6 of the EA that the project as a whole would fall within the 3 to 5 percent range of early successional forest suggested in Vermont Conservation Design, but on page of 27 of the EA, the Forest Service states that “when only considering the National Forest System lands within the analysis area suitable for timber production ...the highest amount of the 0 to 9 year age class would be about six percent.” In light of this disclosure, the Forest Service should have proposed an alternative that maintains ecological historical levels with cumulative effects factored in, and the Forest Service should have analyzed alternatives with variable options for temporary opening sizes that may more accurately mimic natural disturbance.

As noted above in the discussion of significant environmental impacts, the EA describes the maximum temporary opening size (30 acres) and approximate percentage of even-aged silvicultural treatments (80%) and uneven-aged silvicultural treatments (20%) used to achieve target Forest Plan early successional habitat conditions. It fails however to effectively describe the relative use of specific even-aged systems (e.g. what percentage will be clearcut with reserves, patch cuts, or shelterwood) and therefore it is difficult to estimate what the average temporary opening size (acres) and subsequent impacts to the forest resource there will be. Some early successional habitat nesting bird species, utilize relatively small temporary openings (0.5 acres).⁷⁸ Among these are Chestnut-sided Warbler and Eastern Towhee. Most ESH nesting birds prefer 2.5 – 10 acre temporary openings.⁷⁹ Post-breeding use of ESH was greater in 10-22 acre temporary openings than in openings >30 acres.⁸⁰ Patch cuts and shelterwood harvests more closely emulate natural disturbance regimes in northern hardwood and mixedwood forests than clearcuts with reserves. Both of these silvicultural treatments result in ESH⁸¹ and greater use of these over larger clearcuts with reserves may reduce impacts to the forest resource while still meeting bird conservation objectives. The 2006 Forest Plan even states that nesting habitat is created when temporary opening sizes are at least 2 acres. The EA should have included alternatives with variable options for temporary opening sizes that may more accurately mimic natural disturbances.

By comparison with other recent projects on the GMNF, there appears to be little justification for limiting the alternatives analysis to one proposed action. The August 2018 EA for the Robinson Integrated Resource Project, covering 9,277 acres of timber harvest over a 5 – 7 year period, included three total alternatives. The February 2013 EA for the Dorset Peru Integrated Resource Project, covering 2,047 acres of timber harvest, included three total alternatives.⁸² The

⁷⁸ Roberts, H.P. and King, D.I., *Area requirements and landscape-level factors influencing shrubland birds*. 81 THE JOURNAL OF WILDLIFE MANAGEMENT 7, 1298 – 1307 (2017).

⁷⁹ Schlossberg, S. and King, D.I., *Ecology and Management of Shrub-Scrub Birds in New England: A Comprehensive Review*. USDA – NRCS (2007).

⁸⁰ Vitz, A.C. and Rodewald, A.D., *Can regenerating clearcuts benefit mature-forest songbirds? An examination of post-breeding ecology*. 127 BIOLOGICAL CONSERVATION 4, 477 – 486 (2005).

⁸¹ Yamasaki, M., *et al.*, *Effects of clearcutting, patch cutting, and low-density shelterwoods on breeding birds and tree regeneration in New Hampshire northern hardwoods*. Research Paper NRS-26, USDA, U.S. Forest Service, Northern Research Station, Newtown Square, PA (2014).

⁸² U.S. Forest Service, Dorset Peru Integrated Resource Project, Final Environmental Assessment (Feb. 2013).

September 2010 EA for the Upper White River Integrated Resource Project, covering 1,645 acres of timber harvest treatments, included three total alternatives.⁸³ The August 2016 EA for the South of Route 9 Integrated Resource Project, covering 6,591 acres of total timber harvest treatment, included three total alternatives, though one of these was eliminated from detailed analysis.⁸⁴ All of these previous projects, covering barely more acreage combined than the ESHC, included more robust alternatives analysis within the EA.

By failing to consider any other alternatives, the Forest Service has foreordained this one plan as the only possible way to achieve their objectives. NEPA exists to encourage thorough consideration of the impacts of agency actions upon the human environment and to require due diligence on an array of possible approaches to achieve an objective. In this spirit, the procedural requirements imposed by NEPA in Section 102 are to be carried out to the “fullest extent possible.”⁸⁵ The law requires that agencies consider alternatives that would reduce environmental harms. By examining a single alternative, the Forest Service has side-stepped the purpose of NEPA and reached the only conclusion that they could have ever possibly reached. Such an approach renders NEPA review less meaningful and fails to fulfill the Forest Service’s obligations under the law.

VI. THE FOREST SERVICE FAILED TO PROPERLY ASSESS THE IMPACTS OF THE PROJECT ON INVENTORIED ROADLESS AREAS.

The presence of Inventoried Roadless Areas (IRA) is a regulatory trigger for a full EIS. NEPA’s implementing regulations specify projects which “normally require[e] environmental impact statements.”⁸⁶ Class 2 actions which fall under this category are those which “would substantially alter the undeveloped character of an inventoried roadless area.”⁸⁷ An example of this includes “[c]onstructing roads and harvesting timber in an inventoried roadless area where the proposed road and harvest units impact a substantial part of the inventoried roadless area.”⁸⁸ This regulation imposes a specific duty upon the Forest Service to prepare an EIS in this instance.

The EA discloses that while no roads at OML 2 or higher would be constructed for Alternative B, there would be up to 9.84 miles of temporary or OML 1 road construction in inventoried roadless areas.⁸⁹ The EA states this level of proposed construction is anticipated to have a minimal effect on roadless character because the temporary roads would return to natural forested or trail condition following their use,⁹⁰ but the EA does not disclose how these roads over the course of the next fifteen years, plus whatever time it takes to return to forested

⁸³ U.S. Forest Service, Upper White River Integrated Resource Project, Final Environmental Assessment (Sept 2010).

⁸⁴ U.S. Forest Service, South of Route 9 Integrated Resource Project, Environmental Assessment (Aug. 2016).

⁸⁵ National Environmental Policy Act, 42 U.S.C. § 4332 (2018).

⁸⁶ 36 C.F.R. § 220.5(a) (2019).

⁸⁷ 36 C.F.R. § 220.5(a)(2) (2019).

⁸⁸ 36 C.F.R. § 220.5(a)(2)(ii) (2019).

⁸⁹ U.S. Forest Service, Early Successional Habitat Creation Project, Environmental Assessment, at 58 (Feb. 2019).

⁹⁰ Id.

condition, would impact future wilderness designation in the upcoming forest plan revision. This should have been analyzed and disclosed in the environmental analysis.

VII. THE FOREST SERVICE FAILED TO CONSIDER CUMULATIVE IMPACTS.

NEPA requires the consideration of cumulative impacts.⁹¹ The CEQ regulations define cumulative impact as follows:

Cumulative impact is the impact on the environment which results from 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 other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.⁹²

In addition, according to CEQ Regulations, NEPA procedures must:

insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.⁹³

In the EA, the Forest Service states the “cumulative effects analysis considers activities from approximately ten years ago to ten years after implementation of the final timber sale.”⁹⁴ This ten-year time period was selected “because it represents the approximate length of time after harvesting a stand would considered to be in the regeneration (0 to 9 years) stage providing early-successional habitat.”⁹⁵ The EA, however, fails to consider the reasonably foreseeable future action of how this early successional habitat stage will be maintained on the Manchester District over time. The EA does not disclose whether the Forest Service will reenter the timber harvest areas and maintain the early successional habitat that is being created utilizing the roads that will be built as part of this project, or whether the Forest Service will need to target new areas on the GMNF to maintain this condition with additional road building. The EA mentions that the Forest Service intends to allow temporary roads to return to natural forested or trail conditions, which leads us to that the conclusion that the Forest Service will need to identify new areas of the GMNF to maintain early successional forest.

As stated in the scoping document and EA, the purpose of the proposed action is to meet Goal 2 of the 2006 Forest Plan. Goal 2 is to maintain and restore quality, amount and distribution of habitats to produce viable and sustainable populations of native and desirable non-native plants and animals. One of the Objectives under Goal 2 that the proposed action intends to fulfill is to

⁹¹ 40 C.F.R. § 1508.7.

⁹² *Id.*

⁹³ 40 C.F.R. § 1500.1(b).

⁹⁴ U.S. Forest Service, Early Successional Habitat Creation Project, Environmental Assessment, at 26 (Feb. 2019).

⁹⁵ *Id.*

increase the acreage of the regenerating age class (0 to 9 years) to provide a variety of habitat conditions for wildlife and balanced age-class distribution which include 10 – 20% aspen; 5 – 15% each of birch, mixedwoods/softwoods, and oaks; and 5 – 10% of northern hardwoods.⁹⁶ Neither the scoping document nor the EA address the plan for sustaining these levels of early successional habitat beyond the 15-year timeframe of this project.

Dr. Bill Keeton, a professor of Forestry at the University of Vermont’s Rubenstein School of the Environment, who does not join this objection, but provided analysis for the objectors, points out that, “a temporary blip of early successional habitat is likely to achieve little or nothing for those species [early successional] over the long term if the harvesting does not continue progressively across the GMNF or rotationally on previously harvested areas.”⁹⁷

Maintaining the conditions created by the proposed action could have significant impacts on a large footprint of the GMNF. Keeton modeled the potential impacts of harvesting to maintain 10,000 acres in a 0-10 year age class, basing his analysis off of the implicit goal of the proposed action to harvest 1,000 acres annually for 15 years. The analysis revealed that over a 90-year rotation almost one quarter (90,000 acres) of the GMNF could be impacted. After 80 years, the amount of stem-exclusion stage forest (defined roughly as 10-70 years old)—according to Keeton the stage that is the lowest habitat value for most organisms—would exceed early successional forest by a 7:1 ratio. Keeton also modeled the impacts of a scenario where the USFS is able to subsidize re-cutting (through non-commercial, short rotational harvesting) 30% of the previously harvested stands once they reach 20 years or more of age, but before the full economic rotation of 90 years. Based on this 30% recut approach, analysis revealed that over a 90-year rotation 70,000 acres of the GMNF could be impacted. Due to the GMNF failure to consider the long-term impacts of the project, this analysis is the only tool we have for framing the potential impact of maintaining the conditions created by the proposed action. Keeton reinforces that, “With significant questions like these left unanswered, and no range of alternatives considered, the EA is insufficient for a project of such large scope and potential impact. A full EIS is required in my professional opinion.”

VIII. THE PROPOSED ACTION FAILED TO CONSIDER IMPACTS TO THE WHITE ROCKS NATIONAL RECREATION AREA.

Project activities are proposed in the Robert T. Stafford White Rocks National Recreation Area,⁹⁸ According to the Vermont Wilderness Act of 1984, utilization of natural resources within White Rocks National Recreation Area “shall be permitted only if consistent with the findings and purposes in this title.”⁹⁹ As articulated in the Vermont Wilderness Act of 1984:

(b) The purpose of this title is to designate certain National Forest System lands in the State of Vermont as the White Rocks National Recreation Area in order to preserve and protect their existing wilderness and wild

⁹⁶ U.S. Forest Service, Green Mountain National Forest, Land and Resource Management Plan, at 11 (2006).

⁹⁷ See Exhibit 1. Comments and Analysis by Bill Keeton. Please note the numerical analysis is preliminary and subject to revision.

⁹⁸ U.S. Forest Service, Early Successional Habitat Creation Project, Environmental Assessment, at 1 (Feb. 2019).

⁹⁹ Vermont Wilderness Act of 1984. Public Law 98-322. Section 204(a)(2).

values and to promote wild forest and aquatic habitat for wildlife, watershed protection, opportunities for primitive and semiprimitive recreation, and scenic, ecological, and scientific values.¹⁰⁰

The Forest Service fails to disclose in the EA how the proposed harvesting and road building in the White Rocks National Recreation Area would preserve and protect existing wilderness and wild values.

CONCLUSION

While the Early Successional Habitat Creation Project is presented by the Forest Service as a well-intentioned effort to manage the GMNF in a manner to encourage wildlife diversity, we simply do not have enough information to assess whether the benefits of the project will be realized without significantly affecting the environment. The Forest Service's intentions are insufficient to satisfy the requirements of NEPA that potentially significant environmental impacts of major federal projects are carefully assessed. A project of this scale requires a full environmental review with full transparency and engagement with the public. The Forest Service will better be able to ensure their goals for the GMNF by engaging in the full process as required under NEPA and inviting public input through an environmental review process that allows the public to truly understand the impacts of the project, and comment on them. The GMNF should not choose expediency over careful and transparent review, especially when the consequences of its decisions will extend out over many decades to come.



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¹⁰⁰ Id. Section 201(b).

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EXHIBIT 1: COMMENTS SUBMITTED BY PROFESSOR BILL KEETON, PH.D., TO OBJECTORS ON APRIL 1, 2019.*

* Professor Keeton does not join the Objection. This analysis is preliminary and subject to be updated.

I analyzed the age class targets in the EA and produced the attached spreadsheet and figure. The spreadsheet presents a preliminary (and thus coarse) though plausible way in which the proposed harvesting is likely to affect age class distributions over one sugar maple rotation (about 90 years). Additional analysis is needed to validate my estimates and to model alternate long-term outcomes in forest age class distributions.

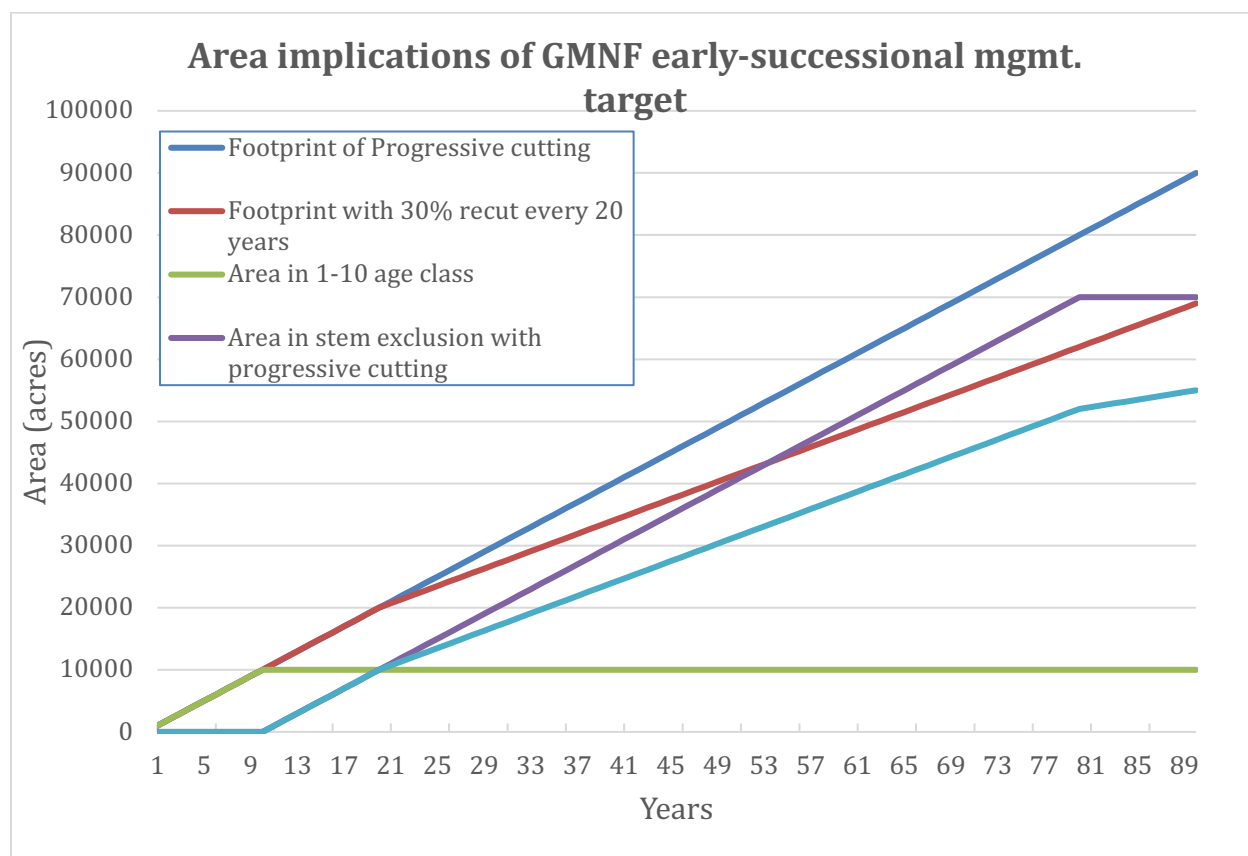
Note that I have modeled the footprint that will accrue over time from: A) progressive harvesting to maintain 10,000 acres in a 0-10 y. age class (this is the implicit goal of the EA's stated intent to harvest 1,000 acres annually for 15 years, from a candidate pool of about 17,000 acres); and B) a scenario in which USFS is able to subsidize re-cutting (through non-commercial, short rotational harvesting) 30% of the previously harvested stands once they reach 20 yrs or more of age, but before the full economic rotation of 90 years. Then for each of those, I modeled the area of stem-exclusion (defined here as roughly 10-70 yr. old) stage forest that would be produced over 90 years as a consequence of early successional management. Note that stem exclusion stage forests generally have lowest habitat value for most taxa in terms of species richness and diversity.

Note that after 80 years the amount of stem exclusion stage forest exceeds the early successional forest by a 7:1 ratio. In my view this constitutes a major impact of the proposed plan, requiring careful consideration and analysis in a full EIS. There are important questions including how this footprint might affect the total (or net) availability of habitats for different groups of species (early, mid, and late-successional). Furthermore, what are the potential resource and environmental impacts of a 90,000 acre footprint (almost one quarter of the GMNF) of this management approach over the long term? What is the plan for sustaining this level of early-successional habitat beyond 15 years? If there is none, and there is no guarantee of the program continuing or of funding to re-cut some portion, then one might question the desirability of this approach in the first place. A temporary blip of early-successional habitat is likely to achieve little or nothing for those species over the long term if the harvesting does not continue progressively across the GMNF or rotationally on previously harvested areas. Yet the latter seems unlikely because the stands will not have attained sufficient commercial value to justify the costs of treatment without heavy subsidization. With significant questions like these left unanswered, and no range of alternatives considered, the EA is insufficient for a project of such large scope and potential impact. A full EIS is required in my professional opinion.

A positive aspect of the current plan is the prioritization of stands heavily infected by beech bark disease. That makes sense, but it should also be acknowledged that there are other beech control methods beyond clearcutting and patch cutting – even those may result in heavy beech re-

sprouting. The analysis could be strengthened by providing more information about the long-term beech control plan and by considering a mix of alternatives.

The current plan relies heavily on clearcutting, patch-cut, and large group selection harvesting methods. Yet, the quantitative targets for large and legacy tree retention are notably weak or vague. For example, the language around “wildlife trees” does not explicitly require large tree retention and appears entirely discretionary. As a result, large tree structure will decline dramatically over almost a quarter of the forest. This is inconsistent with contemporary thinking in sustainable forestry and is potentially deleterious for species requiring those structures, such as large live, dead, and downed tree structures. In my professional opinion, there remain many unanswered questions and potential impacts of this plan; these are significant enough to necessitate a full EIS for NEPA compliance.



Notes:	Each harvest of 1000 acres on a new area to be economically feasible	30% becomes available for subsidized recutting at 20 yrs age	GMNF early successional definition 1-9 yrs, here modeled as 1-10 yrs.	Defined here as 10 to 70 yrs	Defined here as 10 to 70 yrs
	Footprint of Progressive cutting	Footprint with 30% recut every 20 years	Area in 1-10 age class	Area in stem exclusion with progressive cutting	Area in stem exclusion with 30% recut
1	1000	1000	1000	0	0
2	2000	2000	2000	0	0
3	3000	3000	3000	0	0
4	4000	4000	4000	0	0
5	5000	5000	5000	0	0
6	6000	6000	6000	0	0
7	7000	7000	7000	0	0
8	8000	8000	8000	0	0
9	9000	9000	9000	0	0
10	10000	10000	10000	0	0
11	11000	11000	10000	1000	1000
12	12000	12000	10000	2000	2000
13	13000	13000	10000	3000	3000
14	14000	14000	10000	4000	4000
15	15000	15000	10000	5000	5000
16	16000	16000	10000	6000	6000
17	17000	17000	10000	7000	7000
18	18000	18000	10000	8000	8000
19	19000	19000	10000	9000	9000

20	20000	20000	10000	10000	10000
21	21000	20700	10000	11000	10700
22	22000	21400	10000	12000	11400
23	23000	22100	10000	13000	12100
24	24000	22800	10000	14000	12800
25	25000	23500	10000	15000	13500
26	26000	24200	10000	16000	14200
27	27000	24900	10000	17000	14900
28	28000	25600	10000	18000	15600
29	29000	26300	10000	19000	16300
30	30000	27000	10000	20000	17000
31	31000	27700	10000	21000	17700
32	32000	28400	10000	22000	18400
33	33000	29100	10000	23000	19100
34	34000	29800	10000	24000	19800
35	35000	30500	10000	25000	20500
36	36000	31200	10000	26000	21200
37	37000	31900	10000	27000	21900
38	38000	32600	10000	28000	22600
39	39000	33300	10000	29000	23300
40	40000	34000	10000	30000	24000
41	41000	34700	10000	31000	24700
42	42000	35400	10000	32000	25400
43	43000	36100	10000	33000	26100
44	44000	36800	10000	34000	26800
45	45000	37500	10000	35000	27500
46	46000	38200	10000	36000	28200

47	47000	38900	10000	37000	28900
48	48000	39600	10000	38000	29600
49	49000	40300	10000	39000	30300
50	50000	41000	10000	40000	31000
51	51000	41700	10000	41000	31700
52	52000	42400	10000	42000	32400
53	53000	43100	10000	43000	33100
54	54000	43800	10000	44000	33800
55	55000	44500	10000	45000	34500
56	56000	45200	10000	46000	35200
57	57000	45900	10000	47000	35900
58	58000	46600	10000	48000	36600
59	59000	47300	10000	49000	37300
60	60000	48000	10000	50000	38000
61	61000	48700	10000	51000	38700
62	62000	49400	10000	52000	39400
63	63000	50100	10000	53000	40100
64	64000	50800	10000	54000	40800
65	65000	51500	10000	55000	41500
66	66000	52200	10000	56000	42200
67	67000	52900	10000	57000	42900
68	68000	53600	10000	58000	43600
69	69000	54300	10000	59000	44300
70	70000	55000	10000	60000	45000
71	71000	55700	10000	61000	45700
72	72000	56400	10000	62000	46400
73	73000	57100	10000	63000	47100

74	74000	57800	10000	64000	47800
75	75000	58500	10000	65000	48500
76	76000	59200	10000	66000	49200
77	77000	59900	10000	67000	49900
78	78000	60600	10000	68000	50600
79	79000	61300	10000	69000	51300
80	80000	62000	10000	70000	52000
81	81000	62700	10000	70000	52300
82	82000	63400	10000	70000	52600
83	83000	64100	10000	70000	52900
84	84000	64800	10000	70000	53200
85	85000	65500	10000	70000	53500
86	86000	66200	10000	70000	53800
87	87000	66900	10000	70000	54100
88	88000	67600	10000	70000	54400
89	89000	68300	10000	70000	54700
90	90000	69000	10000	70000	55000