Data Submitted (UTC 11): 3/13/2023 4:00:00 AM
First name: David
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Organization: Audubon Vermont
Title:
Comments: Dear Jay:

Please accept the following comments from the Vermont Natural Resources Council (VNRC) and Audubon Vermont on the Notice of Proposed Action and Opportunity to Comment for the Telephone Gap Integrated Resource Project (Telephone Gap IRP) within the Green Mountain National Forest (GMNF), Rochester, and Middlebury Ranger Districts.1

Audubon Vermont (Audubon) is a state program of the National Audubon Society, a nonprofit organization with a mission of protecting birds and conserving the places birds (and people) need to thrive. VNRC is a nonprofit organization working to protect and enhance Vermont's natural environment, productive working landscapes, and rural character. VNRC and Audubon's interests in the Telephone Gap IRP are to promote sustainable forest management practices to optimize benefits for biodiversity, wildlife habitat, climate resilience, carbon storage, natural resource and water quality protection, and the public's use and enjoyment of the GMNF.

We acknowledge the Forest Service's desire to achieve resource goals, objectives, and future conditions as provided by the direction in the 2006 Green Mountain National Forest Land and Resource Management Plan (Forest Plan). We appreciate that the United States Forest Service (USFS or Forest Service) provided this opportunity for public comment on the Telephone Gap IRP before an Environmental Assessment (EA) is conducted. We have a shared interest in implementing the Forest Plan while utilizing the NEPA process to allow for the opportunity to explore a robust set of alternatives in an EA. This approach will allow the Forest Service and public to understand the benefits and effects of a diverse spectrum of management options, including opportunities for improving wildlife habitat, restoring soils, protecting wetlands, sustaining a network of recreation opportunities, managing overall forest composition, structure, and forest products, and improving the GMNF's and adjacent communities' overall resilience to climate change.

Integrated Resource Projects such as this offer an opportunity for the Forest Service to balance timber harvesting to provide wood products for the local and regional economies with enhancement of forest health and diversity through ecological forestry management practices. Moreover, this project provides an opportunity to mitigate greenhouse gas emissions and to demonstrate that healthy, structurally and biologically diverse forests are resilient to climate change.

It is important to note that 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."2 An agency is required to consider reasonable alternatives to the proposed action and to evaluate their impacts upon the environment as well. Reasonable alternatives can include those beyond the authority of the individual agency as well as those which may only partially complete the proposal's goal.3 Courts have historically insisted that agencies "consider such alternatives to the proposed action as may partially or completely meet the proposal's goal."4

With this in mind, we encourage the Forest Service develop one or more alternatives beyond theproposed action to promote ecological forestry and diverse management goals while protectingand recruiting late-successional/old-growth forests for late seral habitat conditions, diverse ageclass representation, carbon storage, and water quality in the project area. Such alternatives would allow our organizations and the public to understand the pros and cons of different management approaches to make an informed decision regarding the project.

We hope the following suggested areas for expanded scoping, questions and concerns, and proposed alternatives are helpful and will inform the development of the Telephone Gap IRP EA.

Detailed Comments

We recommend that the USFS prepare an EA that includes an alternative incorporating ecological forestry practices to promote diverse management goals and diverse age class representation while protecting and recruiting late-successional and old-growth forests for late seral habitat conditions and carbon storage.

The Telephone Gap IRP includes a wide variety of forest and natural resources management activities that we support on the basis of their ecological, social, and economic benefits.

Examples include oak forest restoration and sustainability through prescribed burning, aspen management, conversion of plantations to site-endemic species compositions, enhancement of the coniferous component in mixed woods stands, stream barrier removal and steam crossing improvements, and trail system renovation and improvements.

Other proposed activities[mdash]particularly in light of their wide spatial application and intensity[mdash] raise questions regarding potential negative environmental impacts and undesirable tradeoffs among objectives. As with any National Forest management project of this scope and complexity, there are tradeoffs between economic and ecological objectives that will manifest over time as tradeoffs among outcomes. Consequently, EA alternatives that mix and match tradeoffs with differing emphasis are warranted. We propose that USFS develop an alternative that is targeted at enhancing and protecting late-seral forest habitats in conjunction with the current stated objectives of the Telephone Gap IRP.

Specially, we recommend developing an alternative (for consideration in an EA) that still offers diverse age-class management and timber harvesting opportunities, but also provides both greater protection and recruitment potential for late-successional/old-growth forests, while reducing overall harvesting extent and intensity in the project area. We recommend developing and applying a "Triad" approach for stands greater than 80 years of age. The Triad approach (see below) would utilize site productivity and stand structure/composition criteria to evaluate the developmental condition and potential of mature stands. Based on this evaluation, as well as tradeoff analysis of timber production and habitat diversity goals, mature stands would be allocated to either commercial timber management (e.g., regeneration harvesting, commercial thinning), light silvicultural interventions that promote development of old-forest characteristics,5 or fully-protected reserve inclusions.

While the Forest Service seeks to meet Forest Plan goals through this project, the project has the appearance of favoring an aggressive harvesting approach through extensive regeneration harvesting in mature and late-mature forest stands. The Telephone Gap IRPs stated rationale is to "rebalance" age-class distributions, yet we question whether there is truly a biological, forest health, or sustained yield imperative to create so much early- and mid-successional habitat[mdash]well outside the probable historic range of variability for age class distributions in this landscape. We recommend a more in-depth analysis of the tradeoffs associated with this approach.

Moreover, the openings created by clearcutting, shelterwood with reserves, and large group selection (if too large, these openings will be more comparable to even-aged patch cutting than the forest structure created small group selection emulating natural disturbance gap analogues)6 will very quickly (within 10 to 20 years) develop closed canopies, thereafter going into "stem- exclusion" or the self-thinning stage of stand development.7 Those stands will remain in this condition for decades[mdash]contributing little in terms of biodiversity value (unless re-treated within the near-term, which is costly and unlikely without sufficient merchantable volume). In fact, as the project area shifts to increasing dominance by stem-exclusion stage stands[mdash]net habitat value for most species is likely to decline. For this reason, we recommend reducing the emphasis on large openings (including larger group selection openings), increasing live tree retention (dispersed and aggregated) within openings, and

changing the overall approach for mature stands >80 years old[mdash]particularly those exhibiting the highest potential for redeveloping the structural complexity and biomass associated with old forests.8

We encourage the Forest Service to shift away from an approach grounded in the even-aged forest regulation approach associated with sustained yield models of the early-to-mid-20th century to one that incorporates advances in the field of ecological silviculture[mdash]particularly multi-cohort management. We recommend the development and consideration of an alternative relying on the broader use of multi-cohort management and ecological silviculture, including the irregular shelterwood method. Where applied, the objective would be to convert even and two- age stands to three or more ages classes over multiple entries.

Furthermore, we support the development of an alternative that recognizes the desire to manage for early seral forests while encouraging old, late-seral forest conditions as an important goal.

There need not be a false dichotomy: early and late seral forests are not mutually exclusive, and there should be an alternative that would enhance both early seral and late habitats to levels commensurate with the stated goals while recognizing that late-seral habitats across managed landscapes (such as the diverse backcountry designation) complement and provide important connectivity and diverse forest representation beyond what is represented on Congressionally designated wilderness areas within the GMNF.

A. Proposed "Triad" Model for Mature, Late-Mature, and Old-Growth Stands:

As noted above, our chief concern is that the proposed project does not give sufficient weight to protecting important old forest resources, including late-mature (>120-year-old) stands that provide the recruitment potential for future old forests. While the idea of balancing to provide recruitment potential across young- to mid-successional stands is central to the project, sufficient extension of this idea to late-successional age classes is missing. This extension to late- successional stands is necessary to maintain a diversity of habitat types, carbon storage levels, and connectivity across the project area. We also see an exceptional opportunity to demonstrate how management and safeguards for late-successional forests can be integrated into complex, multi-functional forest management planning such as the Telephone Gap IRP. Such demonstration would test and provide guidance for similar efforts across the nation as part of President Biden's call for a national inventory and protection strategy for late-successional and old-growth forests.9

After reviewing Proposed Action Appendix C1a, we recommend the following:

* The Telephone Gap IRP proposes to log in 477 acres of forest >150 years old, of this 358 would have regeneration treatments. We recommend an alternative approach that would protect all stands >150 years.
* Under the Telephone Gap IRP, another 1,618 acres of late-mature forest (120 - 150 years old) would be cut, creating 531 acres of large openings through clearcutting, shelterwood with reserves, and patch cuts (termed group selection by the scoping documents). These are the same stands that have the greatest potential of recruiting into an old-growth condition, and thus we consider this level of cutting in this age class to be too high.

Thus, we suggest adjusting harvesting in this age class as explained below.

As described in the Telephone Gap IRP, 8,760 acres will be treated in the 60 to 120 age range. Of this, 8,334 acres are 80 to 120 years old and 3,976 acres are 100 to 120 years old, based on origin date. Stands >80 years of age are also prime candidates for recruitment in old-growth conditions. We suggest a mix of treatments that better balance commercial management with approaches that facilitate old forest recruitment either passively or actively.10To elaborate, we suggest developing an alternative that realigns age class targets to better integrate safeguards for late-successional forests. Structurally complex, high biomass, late-successional forests typically have exceptional high levels of carbon storage and continue to sequester and store carbon for long time periods. Consequently, strategies that both protect and recruit these structures and age classes are widely considered to

be effective and integral Natural Climate Solutions,11 and underpin President Biden's "Strengthening America's Forests, Communities and Local Economies" initiative.12

To achieve these goals, we propose a three-prolonged strategy[mdash]or "Triad" approach. This would consist of three allocation categories: 1) fully protected reserve inclusions (sometimes called "forest aging areas"), 2) old forest recruitment stands, and 3) commercially managed mature stands.

1. Category One: The first category would have little or no silvicultural management, except in rarer circumstances where activities like invasive species control and hazard tree removal are needed. This category would apply to all stands currently >150 years old within the project area, as well as a subset of those late-mature stands (120 -150 years old) already exhibiting a high degree of structural complexity development.
2. Category Two: The second category would have the objective of providing the source stands from which old, high biomass, structurally complex forests will recruit over coming decades. Here low intensity silvicultural approaches specifically designed to promote old forest characteristics would be employed.13 This would be assigned to a significant proportion of stands in the 120 to 150 age range, as well as some in the 80 to 120 age range.
3. Category Three: The third category would emphasize commercial management objectives and would be applied primarily to stands in the 80 to 120 age range, although some in the 120 to 150 might also be classified in this way.

Central to our proposed Triad approach would be the development and application of criteria for evaluating the potential of mature stands to develop the structurally complex, high biomass conditions characteristic of old forests.14 Criteria may include site productivity (moderate to high), compositional condition (e.g., site endemic species, favorable advanced regeneration, etc.), and structural indicators (e.g., large tree densities, coarse woody debris densities, H-index of structural complexity, etc.).

In support of our proposed "Triad" approach, we recommend that the Forest Service apply the VCD's definition of old forest:

Old forests are biologically mature forests, often having escaped stand-replacing disturbance for more than 100 years and exhibiting minimal evidence of human-caused disturbance as well as continuity of process, senescence of trees, and regeneration response. In addition, these forests may exhibit many of the following associated characteristics: 1) some trees exceeding 150 years in age for most forest types (100 years for balsam fir, 200 years for eastern hemlock); 2) native tree species characteristic of the forest type present in multiple ages; and 3) complex stand structures that include a broad distribution of tree diameters, multiple vertical vegetative layers, natural canopy gaps, abundant coarse woody material (reflecting the diameters of the standing trees) in all stages of decay and numerous large standing dead trees. It is expected that old forests operate under natural disturbance regimes and may include small areas of regenerating forest as a result of these disturbances."15 The proposal details that the State of Vermont has mapped 765 acres of old-growth forest within the project area.16 Further, the proposal maintains that harvest will not happen in these areas, except for 28 acres of suspected old-growth forest which overlap with treatment areas[mdash]and these 28 acres are spread across the project area[mdash]the greatest being 23 acres with proposed group selection northeast of Chittenden Reservoir.

What remains unclear are the specific conditions and management efforts that will prioritize the preservation and enhancement of existing old-growth characteristics within old forest designations. As the Forest Service explains:

Some types of vegetation management do not inherently conflict with old forest designations since they are intended to promote structural complexity of stands and actively manage areas toward enhancing old forest characteristics.17

However, according to VCD: "Old forests should operate under natural disturbance regimes and need to be maintained in patches large enough to accommodate natural disturbance regimes without compromising old forest characteristics dominating the patch".18

Based on VCD, and as described in our proposed "Triad" approach described above, we recommend that the Forest Service follow the guidance of VCD and leave untouched any areas of suspected/potential old-growth forest.

Moreover, across other proposed treatments, 8,760 acres of forest 60-119 years old are proposed for entry and 2,095 acres within the 120+ year-old age class are proposed for entry, among which 477 acres are between 150-160 years old. We recommend an approach in which all stands >150 years of age are excluded from harvest and left to a natural disturbance regime.

In addition, we recommend an alternative in which the oldest forests within the proposed treatment areas[mdash]specifically those over 120 years old, which, as a function of their age are most likely to currently exhibit old forest conditions[mdash]should be managed in ways that facilitate old forest characteristics and recruitment, either passively or actively.19

Finally, we recognize that there is superior ecological value in forests that functionally exhibit old forest characteristics yet may escape old-growth designation. We recommend following science-based guidance that tree age alone is not necessarily the definitive element by which superior forests can be identified.20 We propose that stands 80-120 years of age receive treatments that balance commercial management with approaches that facilitate old forest recruitment. Also, any stands greater than 80 years old should be evaluated for existing old forest attributes and strategies in these stands should be compatible with enhancing old forest characteristics, tailored to address stand-specific attributes that are lacking.21

Harvest strategies that can be compatible with enhancing old forest characteristics and carbon storage include:22

* Single-tree and group selections [0.1 to 0.5-acre openings with retention in larger openings]
* Irregular shelterwood method
* Variable-density thinning
* Crown release of dominant and co-dominant canopy trees
* Downed large woody debris retention and enhancement
* High levels of structural retention after regeneration harvesting
* Retention and recruitment of large diameter (>20" dbh) standing dead trees (snags)

The Forest Service has a unique opportunity to apply modern science-based ecological forestry through the application of these practices.

We also recommend referencing VCD in setting targets for the proportion of young forest within the regions encompassing the treatment areas. Specific targets referenced in VCD include:23

* Northern Green Mountains [mdash]5% target, estimated currently at 1.2%
* Southern Green Mountains[mdash]3-4% target, estimated currently at 0.2%

Proposed even-aged and two-aged regeneration treatments in the Telephone Gap IRP, which will contribute to young forest targets, are prescribed for 1,464 acres total[mdash]almost 13% of total treatment area (11,280 acres).

Additionally, proposed group selection harvests in the Telephone Gap IRP of 2-acres in size, prescribed for 3,676

acres of the treatment areas, will further contribute young forest to the treatment area.

This volume is well above young forest targets for the region according to VCD (per unit area treated this cycle). We recommend that any proposed treatments resulting in young forest habitat (i.e., any treatment resulting in regeneration patches greater than 2-acres in size) be limited, in total, to 3-5% of the treatment area this cycle, in accordance with targets set for the region by VCD.

Additional Ecological Forestry Elements to Promote Bird Habitat:

a. Snags, Cavity Trees, Down Coarse and Fine Woody Material.

Standing snags, cavity trees, coarse woody material (>4" DBH ("Diameter at Breast Height")), and fine woody material are important forest habitat elements for birds and other wildlife that can be maintained or improved during management efforts. We recommend that efforts are employed across all proposed treatments to ensure that ecologically important elements are maintained in the following ways according to Audubon's Silviculture with Birds in Mind:24

* At least 6 snags are retained per acre, 1 over 18" and 3 over 12" where possible.
* Recruit snags where lacking, or will be lacking post-harvest (given snags may be removed by operators for safety), by girdling some poor-quality dominants.
* Retain some senescent paper birch, aspen, or dry hardwood cavity trees >9" DBH in which yellow-bellied sapsuckers and/or northern flickers may excavate nesting cavities.
* Identify and retain as potential cavity trees a proportion of trees with well-developed heart rot in the bole or with dead limbs greater than 4" in diameter. Strive for relatively even distribution of cavity trees.
* Operators are instructed to not lop slash during harvest.
* Leave as much woody debris on site as possible. Avoid whole-tree harvesting when feasible. When appropriate, return landing debris to the woods.
* Leave several large, downed logs well-distributed throughout the stand to serve as drumming sites for ruffed grouse and important habitat for many organisms.
* Create scattered slash piles of fine woody debris where possible, post-harvest, to enhance songbird cover and foraging opportunities.

b. Retention of Non-Merchantable Species During Site Preparation for Natural Regeneration.

Regarding proposed Site Preparation for Natural Regeneration,25 the 1-8" DBH size class corresponds with non-merchantable understory and mid-story woody species such as hobblebush, mountain ash, mountain maple, striped maple, hophornbeam, yellow birch, pin cherry, black cherry, and serviceberry, among other shrub species[mdash]all of which are important for birds and greater wildlife[mdash]as nesting structure, foraging habitat, and fruit-bearing species.

We recommend that efforts are employed across proposed treatments to ensure that these elements are maintained in the following ways according to Audubon's Silviculture with Birds in Mind:26

*
* Retain, release, and regenerate soft mast species such as black cherry, serviceberry, and apple that produce food sources in late-summer which are critical for preparing for successful migration. As well as flowering plants (e.g., Rubus spp such as blackberries) that dominate openings are also important sources of soft mast for birds.
* Retain, release, and regenerate yellow birch whenever possible since the branches and foliage of this species are preferentially chosen foraging substrates for many insect- eating bird species including blackburnian warbler, black-throated green warbler, and scarlet tanager.

c. Seasonality of work prescribed.

Birds are most susceptible to disturbance when management happens during the bird breeding season. For this reason, we recommend that efforts be made to minimize disturbance during the peak avian breeding season, mid-May to mid-July.

d. Supported Actions.

The following proposed actions are important and should be retained in any proposed alternative:

* Planting of oak as a climate adaptation strategy.
* Targets for increasing softwood composition across the forest.
* Targets for harvesting plantations and promoting revegetation of native cover types.
* Targets to refresh and maintain stands characterized by pole-sized birch, to benefit grouse.

Protecting Streams, Wetlands and Water Quality:

VNRC and Audubon Vermont support the proposed dam removal and culvert replacement elements of the Telephone Gap IRP. We encourage full dam removal to increase benefits to aquatic and terrestrial wildlife, while maximizing the river's freedom of movement and ability to achieve a natural equilibrium. A partial dam removal allows for aquatic organism passage, but constricts the channel and does not allow the river to move nor reconnect with the floodplain.

Additionally, we support the replacement of the two existing, undersized culverts with bottomless arch culverts or bridge systems to improve aquatic organism passage, flood resilience, river connectivity and water quality.

Comparing the areas of proposed timber harvest with the USDA NRCS Soil Types Map, there is overlap between wet soils and timber harvest. Additionally, there is potential for timber harvest areas, temporary timber access roads (12.6 miles), and log landings to be located within unmapped wetland areas; as well as all perennial and first-order streams and vernal pools.

Harvesting timber and/or constructing or repurposing existing access roads within any of these fragile areas may increase erosion, degrade water quality, impact wildlife, and cause undue damage to these wet ecosystems. Based on this concern, VNRC and Audubon propose the following to ensure wetland protection, maintain water quality, and long-term forest ecosystem health:

* All wetlands including vernal pools and first-order streams within the timber harvest areas and proposed access areas should be delineated by a qualified wetland scientist, and subsequent wetland mapping should be depicted on all proposed treatment maps.
* The Telephone Gap IRP Wetlands Map (found within the pre-scoping documents) depicts some wetlands at a coarse scale within the IRP boundary. We recommend that the Forest Service provide spatial data used for the creation of this map, and if necessary, revise the map and scale to include the Vermont Significant Wetland Inventory Map layer, the Vermont Wetland Advisory Layer, and the NRCS Hydric Soils Layer. In addition, none of the Scoping Project Maps or Story Map provide an overlay of the wetlands, vernal pools, and small streams within the proposed timber management areas and access roads. We propose that the Forest Service provide this information for future reference.
* We are also concerned with erosion and compaction of fragile, high-elevation hydric soils and/or access roads and harvest on steep slopes. We believe water quality and forest/wetland ecosystem health should be maintained within these areas. We request that the Forest Service provide a detailed map that depicts timber harvest and access areas on slopes greater than 20%, and/or above 2,500 feet if applicable. We also request

that the Forest Service provide GIS shapefiles of Telephone Gap IRP boundaries, proposed timber harvest areas, and access roads for VNRC and Audubon to review independently.

* Following delineation of wetlands, vernal pools, and small streams: we recommend the avoidance of all wetland and riparian buffer impacts[mdash]including logging and logging access within delineated wetland and surface water areas to reduce erosion, maintain water quality, and protect important habitat and as per compliance with Executive Order 11990 (the IRP must provide a 100-foot buffer from wetlands)27 and the Vermont Wetland Rules.
* We support the proposed erosion stabilization measures on existing roads, as well as the realignment of Forest Road 394, but request that these practices are in compliance with the VT Wetland Standards and VT Acceptable Management Practices (AMPs). We request that the Forest Service provide any additional information as to the location and proposed design details applied for the "Erosion stabilization of approximately 6.1 miles of existing unclassified roads."28
* We request that the Forest Service please provide additional information including design details on the proposed realignment of approximately 500 ft of ForestRoad 394.29 We agree that the GMNF should place all roads out of riparian areas including river corridors and floodplains as well as steep slopes, wetlands, and hydric soils.
* Following a timber harvest of this magnitude, we request that follow-up, long-term water quality monitoring and invasive species monitoring commence for a 5-year period (baseline data collection pre-harvest and subsequent data collection 5 years post-harvest) to ensure adequate protection of GMNF ecosystems.
* Telephone Gap IRP identifies the potential need for 53 new log landings each approximately one-quarter to one-half acre in size and an undefined amount of ski roads/skid trails.30 No locations have been identified for these areas as of yet. We recommend that these locations avoid all wetlands and provide a 100-foot buffer from these freshwater resources.31

Additional Specific Points:

* The detailed project scoping document does not provide a treatment schedule (i.e., a timeline for the proposed treatments). We recommend the inclusion of a treatment schedule to assist the public's ability to understand the mid- to long-term implications for forest age class distributions and habitat availability.
* The scoping documents present no modeling of long-term implications for age class distributions or habitat availability. Adding this would allow us to understand how early successional habitat objectives, in particular, will be met and sustained. For example, will repeated, iterative cutting be necessary and how will that increase other, less biodiverse developmental stands as early successional openings move into stem exclusion. In addition, the EA should analyze how natural disturbances will help to meet early successional targets, and whether they will raise the overall proportion of this type of habitat above targets given the extent of proposed silvicultural openings.
* The scoping documents provide little to no justification for logging/treating 447 acres of old-growth forest >150 year of age. As explained above, these stands should be protected unless there is an extenuating circumstance not to (e.g., conversion cutting in old plantations of non-site endemic species to native species).
* The scoping document states that the objective of stand improvement cutting is to improve carbon storage. Yet the carbon benefits of thinning are uncertain. We suggest reviewing and presenting the science behind this question because thinning[mdash]counter intuitively[mdash]does not always increase carbon storage. For instance, removals may exceed the opportunity cost of total biomass accumulation trajectories. Analysis is needed to substantiate this rationale.
* The scale of the group selection cuts is not within the range of variability for disturbance gaps, particularly at the larger end of the size range prescribed. The project documents should explain the rationale for classifying regeneration openings >0.5 acres as group selection. At this scale, the harvesting may not qualify as uneven-aged management if it produces a collection of relatively large even-aged patches. The structure and pattern of late-successional, uneven-aged forests in the Northeast, in which the mean disturbance gap and resulting stand patch, is one-eighth of an acre.32 These opening sizes are commensurate with the scale of intermediate intensity

disturbances, but those disturbances have return intervals of >200 years[mdash]meaning only a relatively small proportion of the landscape would be in this condition at any one moment in time. Moreover, intermediate intensity openings are irregularly structured, with abundant carryover of residual trees, both live and dead, dispersed and aggregated in clumps.33 The irregular shelterwood method (not the same as the two-aged treatment unless multiple conversion entries are proposed over time) is more analogous to intermediate intensity disturbances, and thus is worthy of consideration for larger openings.34

* The scoping documents state that "more than 5,000 acres of timber stands in the project area are overstocked with trees and are experiencing reduced growth and increased density-caused mortality."35 "Overstocked" also implies high levels of biomass and carbon storage, relating to stands likely undergoing density-dependent and density- independent mortality indicative of late-successional forest development. These are old forests that also provide important habitat. Density-dependent mortality will come down, not go up, in post-mature forests as self-thinning declines and large tree spacing increases. The project's justification for harvesting based on "overstocked" conditions in uneven-aged stand is not scientifically defensible; except from a very strict (now outdated) timber growth and yield perspective. Overstock harvesting is applicable to thinning prescriptions in even-aged stands when and if stocking tables are being used to guide thinning intensity.
* The project rationale is that logging is needed to create age class diversity, and that insects and disease are causing too much tree mortality. The EA should recognize that tree pathogens and insects will also help diversify stand structure and landscape pattern.
* The project proposes no new permanent roads. We commend and support this. The project proposes 9.3 miles of temporary roads. We understand that there are thresholds to limit impacts to the undeveloped character of inventoried roadless areas. We recommend that the EA provide a detailed analysis of how the undeveloped character of the Pittenden Roadless Area will be maintained if road construction and harvesting occurs in this area. Furthermore, we believe an alternative in the EA should analyze the effects of limiting harvesting and road building to areas outside of the Pittenden Roadless Area.
* We commend the use of prescribed fire in oak stands, as well as the objective for black ash preservation.
* We support the decommissioning of 13 miles of trail and request that EA explain the resource benefits of this decision.
* Regarding clearcutting and shelterwood with reserves, the EA should disclose the density and minimum size for retention trees.
* The scoping documents incorrectly state that age class cannot be assigned to uneven-aged stands. In fact, a variety of methods can be based be used to assign a relative age (as an indicator of potential structural development) to uneven-aged stands. These include stand origin date (as used in Tables C8 for example), dominant tree age, or average canopy tree age over a given size threshold.36
* The suggestion in Telephone Gap IRP documents that 80% of suitable lands on the GMNF can be managed with even-aged systems (notwithstanding the 2006 plan) is out of alignment with developments in ecological silviculture since 2006[mdash]particularly with respect to multi-aged systems. The project includes two aged systems, but these are at the low-end of irregular structure while the project leans heavily toward clear cuts with low reserves.
* Most of the literature references in the scoping document are about early-successional habitat management. The literature and guidance on late-successional habitat management is largely missing, and we encourage the Forest Service to bolster this in the EA.

Conclusion:

We appreciate your attention to the issues, questions, and concerns raised above. We encourage you to take a closer look at an alternative, or range of alternatives, that incorporate(s) the principles of ecological forestry as described above. This will allow our organizations and the public to make an informed decision about Telephone Gap IRP through the NEPA EA process. We are available to discuss further and to respond to any questions you may have about our comments.

Sincerely,

David Mears, Executive Director Audubon Vermont

Jamey Fidel, General Counsel and Forest and Wildlife Program Director Vermont Natural Resources Council

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