

TABLE OF CONTENTS

DECISION NOTICE (DN) AND FINDING OF NO SIGNIFICANT IMPACT (FONSI) North Half Overstory Removal project

Introduction	DN-2
Public Involvement	DN-3
Decision and Rationale for the Decision	DN-4
Mitigation	DN-7
Botanical Resources	DN-7
Recreation Resources	DN-7
Visual Resources	DN-8
Heritage Resources	DN-8
Soil and Water Resources	DN-9
Threatened, Endangered, and Sensitive Species	DN-10
Wildlife Resources	DN-10
Other Alternatives Considered	DN-11
Findings Required by Law and Regulation	DN-12
National Forest Management Act Compliance	DN-12
Lands Suitable for Harvest	DN-12
Appropriateness of Even-Aged Timber Management	DN-13
Other Vegetative Manipulation Requirements Including Assurance of Restocking	DN-13
Endangered Species Act Compliance	DN-15
Other Relevant Laws	DN-16
Finding of No Significant Impact	DN-16
Context	DN-16
Intensity	DN-16
Appeal Rights	DN-21
Table DN-1. Summary of Alternative 3 Vegetation Management Activities by Management Area	DN-22
APPENDIX G: Response to Public Comments Appendix to the Environmental Assessment	DN-23
APPENDIX H: Supplemental Information Report (SIR)	DN-86

DECISION NOTICE
and
FINDING OF NO SIGNIFICANT IMPACT
For the
NORTH HALF OVERSTORY REMOVAL PROJECT
ENVIRONMENTAL ASSESSMENT

USDA Forest Service
Green Mountain & Finger Lakes National Forests
Middlebury and Rochester Ranger Districts
Towns of Ripton, Salisbury, Lincoln & Middlebury, Rochester, Granville and Warren, VT.

DECEMBER 2002

INTRODUCTION

This document describes my decision, and the rationale for the implementation of a timber sale proposed for the North 1/2 Overstory Removal Project (OSR) Area located on the Middlebury & Rochester Ranger Districts, Green Mountain & Finger Lakes National Forests (GMFLNF). The Decision Notice (DN) and Finding of No Significant Impact (FONSI) are based on an environmental assessment of the proposed action and three alternatives to it.

The North 1/2 OSR project Environmental Assessment (EA) was prepared by an interdisciplinary team (IDT) of Forest Service resource specialists as required by the National Environmental Policy Act (NEPA). It describes the purpose and need for action, the alternatives considered, and the potential environmental effects. It further describes the public involvement process used and the individuals, organizations, and agencies consulted during the analysis.

As described on page I-1 in the EA, a proposal for the North 1/2 OSR project was originally presented to the public on May 5, 1999. Analysis was subsequently suspended in order to adequately assess new information in regards to threatened and endangered species, in particular, the Indiana bat. The GMFLNF staff completed an extensive analysis of its threatened and endangered species program. Documentation of this analysis was presented in the EA for the Proposed Amendment of the Green Mountain National Forest Land and Resource Management Plan for Threatened, Endangered, and Sensitive Species, January 2001. This was followed by a DN and FONSI for that EA on September 11, 2001 that amended the Green Mountain National Forest Land and Resource Management Plan (Forest Plan) to incorporate new information for the Indiana bat and all TES by way of updated standards and guidelines, resource protection objectives, and monitoring.

The North 1/2 OSR project environmental analysis then was begun again in spring of 2002 and completed, taking into account this new TES information, and documented in the North 1/2 OSR project EA that was released for a 30-day public comment period on August 20, 2002. The North 1/2 OSR project EA is available for public review at the Rochester Ranger District Office, 99 Ranger Road, Rochester, Vt. 05767 (802-767-4261),

the Middlebury Ranger District Office, 1007 RT 7 South, Middlebury Vt. 05753 (802-388-4362) or the Green Mountain & Finger Lakes National Forest, Supervisor's Office, 231 N. Main St., Rutland, Vt. 05701 (802-747-6700).

The North 1/2 OSR Project area consists of 19 separate stands, in 11 Compartments that were part of initial entry shelterwood harvests in 10 separate timber sales spread throughout two ranger districts. All stands had similar shelterwood regeneration harvests during those sales, which created new young forest stands. In these stands, sawtimber sized trees growing over young trees would be harvested as part of a timber sale to release the young trees from shade and competition produced by the larger trees. The vast majority of the lands surrounding the project sites are GMNF lands. Relatively little private land, mainly in small parcels, lies near the project sites. Approximately 219 acres of federal land, out of 282 acres of timber stands identified for management, would be directly affected by the selected activities.

The EA analyzed four alternatives: the Proposed Action, Alternative 1 - No Action, Alternative 2 – No Harvesting in Oak Stands, and Alternative 3-Modified Harvesting In Oak Stands. I felt this range of alternatives adequately addressed the purpose and need, the issues raised during the initial scoping, and the comments received during the required 30-day notice and comment period. Four additional alternative actions were considered but eliminated from detailed analysis in the EA. The description of these alternatives and rationale for not analyzing them is discussed on Section B, pages 27-29 of the EA.

PUBLIC INVOLVEMENT

Public issues and management concerns related to the Proposed Action were identified by reviewing Forest Plan direction for the area and by contacting interested and affected publics and Forest Service employees in a process called “scoping” as called for in the Council on Environmental Quality (CEQ) regulations for implementing the NEPA (40 CFR 1500-15080, specifically 1501.7 on scoping).

Public comments for the North 1/2 OSR analysis were collected from a number of sources. The first was response to a May, 1999 scoping letter mailed for the original analysis to 382 individuals and organizations. Ten responses were received in the form of written letters and telephone calls.

The project has also been listed many times in the GMNF quarterly Schedule of Proposed Actions that gives information on upcoming projects on the Forest. This report is routinely mailed to over 400 individuals and organizations.

From the original scoping's public comments, five major issues were identified and served as a basis for evaluating the Proposed Action and the alternatives, and assessing the environmental consequences for the original EA. These issues were re-examined, validated as still-valid issues, and were carried forward in the EA. Further details on public involvement and the issues identified are found on pages 18-20 of the EA.

The last component of public involvement that played a major factor in my decision was response to the mailing of the EA for Public Comment. The EA was mailed to 117 individuals and organizations for a required 30-day public comment period that ran from

August 29th (date the legal notice appeared in the Rutland Herald newspaper) through September 27th. The EA was also posted on the GMNF web site. Ten timely comments were received; one late response was received that was in support of the project and raised no additional concerns. As required, a Response to Public Comments was prepared as Appendix G of the EA. That document is being released along with this decision notice. Also, a Supplemental Information Report (SIR) was completed to provide additional effects information.

DECISION AND RATIONALE FOR THE DECISION

Decision

This decision is based on the results of the analysis documented in the North 1/2 OSR Project area EA, SIR and project file, comments received during initial scoping and the 30-day notice and comment period (August 29 – September 27, 2002). It is my decision to select Alternative 3 for implementation but not to include stand 2 in Compartment 28 and stand 21 in Compartment 44. Both are located within one of the Vermont Wilderness Association's (VWA) wilderness proposal areas. See table DN-1 at the end of this document for a listing of treatment units and acres. Alternative 3 as modified will result in the final overstory removal harvest on 17 stands totalling 219 acres. The EA fully describes the selected actions, and their site-specific locations on pages 24 through 33. Mitigation measures that will be followed when implementing Alternative 3 are described further ahead in this document on page 10.

Rationale

The rationale for my decision to implement Alternative 3 with modifications is as follows: Based on the results of the analysis as documented in the EA and SIR, Alternative 3, with modifications, implements direction found in the Forest Plan for Management Areas (MA) 3.1 & 4.1, best meets the purpose of and need for the project, and addresses key issues and concerns raised by both the public and Forest Service resource staff. My selection of Alternative 3, with modifications, is a reasoned, informed decision based on a complete and thorough analysis, and full consideration of public input. Although the decision may not completely satisfy all comments and concerns, and be supported by everyone, I believe that it represents a reasonable balance between the issues raised and the objectives of the North 1/2 OSR project proposal.

Based on this, I have selected Alternative 3 modified to not include two stands because:

1. It meets the need to complete the final step of the shelterwood system on 17 of 19 stands analyzed. As stated on page 9 of the EA, we are far behind in accomplishing the goals for managing forest conditions and harvesting timber, including hardwood regeneration by shelterwood and overstory removal harvests. This positive movement toward these goals improves wildlife habitat, increases the amount of timber for sale, provides jobs, contributes to income and revenues, and allows for forest management that sustains sawtimber and pulpwood production.
2. Implementing this project will help create and maintain a range of timber stands of various types and ages to improve tree species diversity as specified in the applicable Forest Plan Management Area prescriptions. Growing conditions for young timber stands made up of shade intolerant tree species such as aspen, paper birch, oak and black cherry and of shade tolerant tree species such as maple, beech and spruce would be improved for the long term. These stands would provide a

- component not well represented in a mostly mature forested area (MA 3.1 & 4.1). Increasing diversity improves wildlife habitat and promotes a healthy, vigorous forest.
3. Recreation opportunities and experiences would be maintained in an environment with roads (MA 3.1). Public access to NF land would be maintained. Existing truck roads, skid trails and log landings used for hiking, skiing, hunting, picking berries, wildlife viewing and camping would be maintained.
 4. For this Decision, I've decided to modify selected Alternative 3 to not include the two stands located within the VWA Wilderness proposal. The Green Mountain National Forest is evaluating the VWA proposal through the Forest Plan revision process. The outcome of this proposal is uncertain at this time. However, I feel it was important for the public to have been aware that two proposed units with this project were within the VWA Wilderness proposal at the time they commented on the EA. We inadvertently did not include that information in the EA. Rather than delay this project with another comment period and open the debate of Wilderness with this project, I've decided to remove those two units from this Decision. Exclusion of these two stands does not preclude future harvesting of these stands. Harvesting could occur following additional analysis and a new decision. or resolution of VWA's proposal. I feel this is not precedent setting for the Forest regarding future projects in the VWA proposal. Other projects will be considered and may move forward based on the need for the project, consideration of public comments and determination of effects.
 5. More oak trees are left on site after harvest with Alternative 3 than with the Proposed Action. These trees will provide a legacy of oaks, which produce mast for wildlife and to maintain future options for forest management.
 6. Deer wintering area conditions would be maintained and improved in MA 4.1. Release of young softwood trees would also occur. Winter browse sources would be improved by the harvesting and resulting resprouting from stumps of harvested trees.
 7. Early successional plants used as food sources for deer in non-winter months (MA 4.1) will grow as a result of the harvests and increased light levels and ground disturbance near skid trails and landings.
 8. Harvesting would result in improved growth on remaining trees and sustained, periodic removal of high quality saw timber, pulpwood, and firewood according to Forest Plan objectives (MA 3.1, 4.1).

While moving the project area toward the desired future condition at a rate greater than the other alternatives, Alternative 3 does so with a minimal amount of adverse impacts, all within acceptable levels, as has been documented throughout Section D, pages 33-98 of the EA.

What I consider most important is:

- a. That impact to MA 3.1 and 4.1 lands are minor. With low to moderate use and winter-only harvesting, impacts to cross-country skiers, snowmobilers and others visiting the area will be minimal. I also believe concerns for skier safety from logging traffic is addressed very well by the order of operations and operating restrictions. Again, with the winter-only harvest and the relatively small scale of harvest operations, I believe there will be little or no adverse impacts to reclusive or

TES wildlife species in the area. The harvesting in MA 3.1 & 4.1 lands will improve wildlife habitat by increasing species diversity and maintaining young age classes that are lacking in the area.

- b. That the overstory removal harvests are small in size, relatively remote, and will not have a cumulative effect on visual resources when added to harvests already planned for the Old Joe Project which will occur near Stand 11, Compartment 98 from this project, thus minimizing any visual concerns (EA p. 68 –69; p. 93, para. 9; Alternative 3). When this project is also considered with other foreseeable actions, all visual quality objectives can be met.
- c. That concerns for Management Indicator Species (MIS) are addressed. As indicated in the analysis (EA, p. 49-54; p. 91-92), there will be no site-specific impacts to MIS while some will benefit. I find it very important that the localized, site-specific concerns are addressed and disclosed. As stated on page 53, par. 4,

In conclusion, the Proposed Action or any of the action alternatives to the Proposed Action will not change the habitat character of the harvest units or the communities they (MIS species) belong to. Therefore, there would be no measurable direct or indirect effects on MIS populations or habitat communities with the implementation of the North 1/2 OSR project.

Therefore, as the analysis supports, there will be no effect to population trends. The analysis goes on to point out (p. 53, par.) that the communities most at risk are those associated with early successional habitat. Public comment has indicated some are concerned this project could have negative impacts on species needing mature forests. Alternative 3 will not contribute toward loss of mature forest.

- d. That the analysis completely addresses concerns for threatened, endangered, and sensitive (TES) species (EA, p. 46-49; p. 90-91; Appendix B). I find that: (1) the quality work done on the Forest over the last three to four years on the TES program that culminated with the Forest Plan amendment decision in September of 2001, (2) our collaboration with the U.S. Fish and Wildlife Service in developing procedures to protect Indiana bat habitat and address concerns for incidental taking, and (3) the analysis presented for the North 1/2 OSR project alleviates all my concerns for TES species, in particular, the Indiana bat. I am also confident that our monitoring efforts for the Indiana bat will continue and will put us in a position to effectively address any future concerns for the species.
- e. That leaving about 50% of the existing overstory oak trees in the four oak stands as described on page 24 of the EA would provide a legacy of oak trees for nesting and den habitat, mast production for wildlife food and a seed source for future oak management options.
- f. That the mitigation developed to address concerns and further minimize adverse impacts is based on monitoring, past experience, and good science. I am confident that all measures will function as designed. I also believe that the monitoring plan

(EA Appendix D, p. 159-160) developed for the North 1/2 OSR project is a positive step toward measuring the effectiveness of our actions.

Therefore, I am convinced that Alternative 3, with modification to not include two harvest units in the VWA Wilderness proposal, is the best combination of actions that can be implemented to work toward Forest Plan goals and objectives while minimizing adverse environmental effects and considering other issues raised.

MITIGATION

Forest Plan standards and guidelines for mitigation of potential adverse effects of management activities will be applied to the selected actions. Standards and guidelines for MA 3.1A are found on Forest Plan pages 4.102-4.106, for MA 4.1 on pages 4.107-4.114, MA 4.2A on pages 4.115-4.116. General standards and guidelines applicable to all Forest Service lands are found on pages 4.15-4.90.

Following are mitigation measures created in response to issues and concerns. Many of these measures are Forest Plan standards and guidelines or enhancements thereof; that the ID team felt should be highlighted here because of public issues and internal concerns. Others were developed to mitigate specific concerns of the public and Forest Service resource specialists, and will be applied in addition to standards and guidelines. Further details on mitigation for the selected activities are found in Appendix D of the North 1/2 OSR project EA. The following mitigation measures will be implemented to protect resources:

Botanical Resources

- ?? Stand 15 in Compartment 42, formally part of the Huntley Brook sale, would have the removal harvest acreage reduced by two acres from 20 acres to 18 acres. The purpose of this change would be to protect patches of Jacob's ladder (*Polemonium van bruntiae*) and its associated habitat, found during surveys of that area. These new patches were either present during the previous timber sale or developed as a result of it. Since we cannot be sure when the plants developed, these two acres would be reserved and protected from disturbance from this sale. Moreover, monitoring plots would be established in the reserved acres to check the post harvest effects on sensitive plant species. This area would make a good comparison location for other monitoring areas, which have shown some evidence that timber harvests on previous sales may have been beneficial for the establishment or maintenance of the Jacob's ladder. No equipment or ground disturbance would occur in this area.
- ?? In stands where butternut trees occur, do not harvest them as part of this project.
- ?? Exclude from any overstory removal activities the small sites where ginseng, large yellow lady's slippers, and sweet joe-pye weed have been found. The Forest Botanist should be involved in sale layout, to ensure that this occurs.
- ?? Monitor the effectiveness of each of the above mitigation measures, after the project is complete.

Recreation

- ?? Annual coordination and communication with winter sports and trail community and adjacent landowners to share information regarding operations

of the sale will occur each fall prior to December 1st, the start of sale operating period.

- ?? The cutting schedule in the timber sale contract would be dictated by an order of operations to mitigate trail impacts. This is to reduce the number of winter trails impacted by winter logging at one time, reduce concurrent use of the truck roads by skiers and snowmobilers and to encourage timely completion of units that are accessed by these trails before other units are opened for harvest. The order is: 1) Stand 10, Compartment 26, 2) Stand 6, Compartment 26. 3) Stand 26, Compartment 69. Warning signs and barriers informing trail users of logging activities would be located as sale activity occurs.
- ?? An alternative trail route for a portion of the Catamount Cross Country Ski Trail has been identified. This route would be used when a portion of the Widows Clearing Trail is used for skidding logs. It has been checked in the field by Forests Service and Catamount Trail Association staff and is acceptable. It would follow established portions of the adjacent Water Tower and Robert Frost Trails.
- ?? Information, directions and a map for alternative cross country skiing and snowshoeing trail routes would also be posted at the Oak Ridge Trail Trailhead when the Oak Ridge Trail is temporarily closed during winter logging in Compartment 50.
- ?? Logging activities would be restricted from weekends and holidays, and after 6:00 p.m. on weekdays, in order to mitigate the effects on trail users. Affected trails, and plowed roads used as winter trails, will be well blazed and signed to notify both the trail users and the loggers, of each other's presence. Those units, which have direct impacts on trail users, would be scheduled early in the sale to attempt to limit impacts to one winter season.
All trails and trailheads affected by logging activity will be returned to their pre-sale condition by July 1 following the cutting and acceptance of the units being completed.

Visual Resources

- ?? For improving visual appearance of the harvest and for concerns about the private land with a camp adjacent to Compartment 46, stand 11, locate wildlife reserve trees far enough back from the property line so they would not fall into private property.
- ?? To maintain trailside vegetation and to frame existing vistas, the Landscape Architect will assist in designating reserve trees at the trailside edges of stands 27 and 30 (Oak Ridge Trail) in Compartment 50, Stand 26 in Compartment 69, (Widow's Clearing Trail), and the roadside edges of stands 29 and 31 in Compartment 58 (FR 101).
- ?? Retain as much vegetation as practical on the west edge of the landing adjacent to Rt. 100 to help screen the landing. The landing used for the harvest of stand 3 in Compartment 150 would use a curved entry to minimize sight of the landing itself.

Heritage Resources

- ?? The Forest Archaeologist and Sale Administrator will work together to ensure that the seven Heritage Resources sites identified within the "area of potential effects" (APE) are marked on the ground with a buffer zone delineated, are

included on the Contractor's map(s), and protected/avoided for the duration of the project.

Soil and Water Resources

- ?? FR 236 would be the logging truck access road to stands 11 and 21 in Compartment 46. Three hundred feet of FR 236 is within 15-40 feet of a stream (inside the filter strip), and surface drainage from the road drains directly into the stream via the ditch line and one dip. The road and ditch line along this section is 90% vegetated and the road is hardened with gravel and cobbles. To minimize sedimentation, we would only allow use of the road during frozen winter conditions, such that soil disturbance would be minimized.
- ?? A log skidder bridge would be needed to cross over stream on the skid road to stand 3, Compartment 150. The bridge site would undergo 401 Water Quality Certification review. This temporary bridge would be removed following use under the terms of the timber sale contract, and the stream banks returned to their original shape, and re-vegetated.
- ?? A small portion of the landing for stand 3, Compartment 150 is within stream filter strips. Edges of the landing would be at least 50 feet from both the Mad River, and a small ephemeral stream to the north. Hay bales and/or snow berms would be used as needed to prevent sediment from getting into the streams. Soils at the landing are somewhat poorly drained, so extra caution will be exercised by the Sale Administrator to assure that the ground is well frozen before use. The landing would be seeded and mulched after the sale to provide vegetative cover and allow native plants to grow in over time.
- ?? Approximately 0.1 mile east of the landing for stand 3, Compartment 150, the skid road is within 30-40 feet of a small ephemeral stream for a distance of 350 feet; and within 10-15 feet for 25 feet, with a soil berm in between. Water bars on this section of skid trail would be drained to the southeast, away from the stream. Extra caution would be taken by the Sale Administrator to only allow use of the skid road when it is frozen. These measures would prevent any sediment from the skid road from getting into the stream.
- ?? About 30% of stands 6 and 10 in Compartment 26 occur on somewhat poorly drained soils (wetter than other stands in the sale). To prevent rutting and excessive soil disturbance, trail condition would be monitored more closely than normal. Corduroy (logs placed in the road to strengthen it) may also be used on short sections of existing skid roads through wet areas. These actions would protect the soil from rutting. All stands in Compartment 50 are on soils with a high erosion hazard. The high hazard is due to the high amount of organic matter in the upper part of the soil. The Sale Administrator would monitor harvest activities in these stands more closely and frequently to prevent erosion, sedimentation and rutting problems.
- ?? In Compartment 65, an existing ford would be used to cross the ephemeral stream on the haul road to Stand 19. The ford is on firm, sandy and gravelly soils, and it has gradual approaches. These factors, plus the winter-only use would be favorable for minimizing sedimentation. The crossing is a poor location to install a culvert because the stream bank slopes are very gentle. Installing a culvert would result in more soil disturbance and possibly more sedimentation than a ford.

- ?? For Compartment 150, stand 3. The section of skid trail to stand 3, inside the stream filterstrip (see EA, page 31, bullet 6) would be seeded following use if soil has been exposed from skidding. This would minimize the risk of erosion and stream sedimentation.
- ?? The landing for stand 3 will be seeded each spring if the stand requires more than one winter season to complete. This will minimize the risk of erosion and stream sedimentation, and soften the visual impact of the landing as seen from Route 100.

Threatened, Endangered, Sensitive Species

- ?? To mitigate the possible loss of potentially suitable roost trees for Indiana bats, the Reasonable and Prudent Measures and Terms and Conditions found in the *Biological Opinion of the Effect of the Land and Resource Forest Management Plan and Other Activities on Threatened and Endangered Species in the Green Mountain National Forest and Incidental Take Statement* issued by the U.S. Fish and Wildlife Service on February 16, 2000 are to be followed. This is in accordance with direction found in the recently approved Decision Notice and Finding of No Significant Impact for the Environmental Assessment for the Proposed Amendment of the Green Mountain National Forest Land and Resource Management Plan for Threatened, Endangered, and Sensitive Species, September 11, 2001 (TES Forest Plan Amendment). New and Forest Plan standards and guidelines resulting from this amendment are to be applied to ensure that adequate numbers of potentially suitable roost trees will be retained in the project area.
- ?? At least five trees per acre, applied on a stand basis, are to be retained within the project area. The “leave” trees may be found among the harvest sites and among the remainder of the unharvested stand areas. They may be scattered over the entire area of the stands, or clumped where desirable, to provide the greatest potential benefit for roosting.
- ?? In order to eliminate or minimize damage to potential roosting habitat for Eastern small-footed bat, the Reasonable and Prudent Measures and Terms and Conditions found in the Biological Opinion (2/00) and the new and Forest Plan standards and guidelines are to be applied as described above for the Indiana bat.

Wildlife Resources

- ?? The east edge of stand 29 in Compartment 58 is bordered by a several acre wetland and pond. To best protect habitat for species that live near the wetland edge, we would reserve live trees within the 300 feet that exhibit characteristics described in the reserve tree section of the forest plan (p. 4.31-4.33) and follow FWS guidelines for Indiana bat reserve trees. This would maintain the forest floor shading, and allow for the accumulation of additional large woody debris on the ground over the long term since most of the current overstory would be reserved.
- ?? Follow Forest Plan standards and guides for retention of mature beech trees that show signs of habitual bear use.
- ?? Those sites that are deemed suitable for nesting in the project area should be surveyed at the appropriate season for nesting goshawks. If an occupied nest is

located, follow procedures in the Forest Plan, developed cooperatively with the U.S. Fish and Wildlife Service calling for a six hundred and sixty foot radius zone of unaltered habitat around the nest site with an additional six hundred and sixty foot buffer area.

OTHER ALTERNATIVES CONSIDERED

No Action Alternative

The No Action Alternative is required by NEPA. Under this alternative, the existing situation would remain unchanged. Minor maintenance and routine activities (such as road grading and trail maintenance) would still continue. Any activities covered by past Decision Notices or Decision Memos would also occur. None of the proposed vegetative management activities would be implemented. This alternative responds to those who desire that no management activities, particularly timber harvesting, take place.

I did not select the No Action Alternative because it does not meet the objectives described in the purpose of and need for action and would not move the project area toward the desired future condition. There would have been no increase in vegetative diversity in an area lacking young oak trees; no improvement in the abundance and quality of wildlife food and cover, particularly in the MA 4.1 deer wintering areas, that would result from the harvest treatments; and no increase in the amount of softwoods (conifers) that would result from release by the harvests. There would be no improvements in tree quality and stocking levels in the MA 2.1A forests; opportunities would be lost to promote the growth of high quality sawtimber while treating areas damaged by insects, disease, ice, and winds. Wood products would not be made available for public consumption.

I understand that the No Action Alternative, by its nature, results in the least amount of adverse environmental effects. However, based on the North 1/2 OSR project analysis, I believe that the outcomes that would result from implementation of Alternative 3 (EA p. II-16, para. 2) can be accomplished with a minimum of adverse effects within acceptable limits and without significant impact, individually or cumulatively, and therefore, does not dictate a need for selecting “no action”.

Proposed Action

I did not select the Proposed Action because it does not respond to public comment regarding retention of older oak trees as well as Alternative 3. The Proposed Action responds to the purpose and need and similar positive gains would result from implementation of it, however it harvests more of the mature oak trees in the project area. There was some public concern over this and I would prefer leaving more oak on these sites as a legacy and source of future seed and wildlife food.

Alternative 2

I did not select Alternative 2 because of all the action alternatives; this alternative does the least to meet the purpose and need, and the objectives of the proposal. It improves less deer wintering habitat, and tree species diversity, and foregoes the needed overstory removals in oak stands which I feel is needed to sustain oaks in the long term.

Alternative 2, with its reduced harvesting, provides a good baseline among the action alternatives for measuring the difference in effects. Although the amount of adverse effects produced by this alternative is less than those resulting from Alternative 3, the analysis

shows that this difference is small. Our standards and guides and the proposed mitigation measures will reduce negatives impacts even further.

FINDINGS REQUIRED BY LAW AND REGULATION

Stated below are my findings in regards to compliance with the appropriate laws and regulations. This includes compliance with the National Forest Management Act (five components), the Endangered Species Act, and other relevant laws.

NATIONAL FOREST MANAGEMENT ACT COMPLIANCE

FOREST PLAN CONSISTENCY 16 U.S.C. 1604(i) (Sec. 6, NFMA)

The actions of Alternative 3 with modifications are consistent with the GMNF's Final Environmental Impact Statement and Record of Decision and related Forest Land and Resource Management Plan (Forest Plan). Alternative 3 will move the project area toward the desired future condition for MAs 3.1, 4.1, and 4.2 (Purpose of and Need For Action section of EA, p. 7-9). This decision is consistent with both the forest wide standards and guidelines (Forest Plan, pages 4.15- 4.90), and the standards and guidelines for MA's 3.1 (p. 4.102- 4.106), 4.1 (p. 4.109-4.114), 4.2 (p. 4.115- 4.116). All of the expected impacts from this project are consistent with, and within the range of, the expected impacts disclosed in the Final Environmental Impact Statement for the Forest Plan.

LANDS SUITABLE FOR HARVEST

16 U.S.C. 1604(k), 36 CFR 219.14, and 36 CFR 219.27(c) (1)

I have determined that the land on which harvesting will be done is suitable for timber production.

1. The land is forest land (as defined in 36 CFR 219.3) which is at least 10% occupied by trees of any size. This has been verified through on-the-ground examination of the stands proposed for harvest. Documentation of these examinations is found in the project file.
2. Technology is available to ensure timber production from the land without irreversible resource damage to watershed conditions. This is documented in the Environmental Effects sections of the EA on silvicultural systems and harvest methods (p. 37 through 39), Soil, Water, and Wetland Resources (p. 69 through 72) and Fisheries (p. 43 through 45).
3. The lands proposed for timber harvest have not been withdrawn from timber production by an Act of Congress, the Secretary of Agriculture, or the Chief of the Forest Service.
4. The land has not been deemed inappropriate for timber production due to assignment to other resource uses or considerations of cost efficiency.

APPROPRIATENESS OF EVEN-AGED TIMBER MANAGEMENT

16 U.S.C. 1604(f) (Sec. 6, NFMA)

Even-aged management has been selected as an appropriate method to meet the vegetation management and wildlife objectives in the North 1/2 OSR Project area. The following reasons were used to determine the appropriateness of even-age management:

1. Forest Plan direction for MA 3.1 states that the primary silvicultural system will be even-aged (Forest Plan p. 4.104).
2. Forest Plan prescriptions for MA 4.1 encourage even-aged techniques to create browse, maintain stocking levels and tree vigor, provide for a mixture of species within stands, ensure adequate management and creation of permanent openings, and promote softwood development (Forest Plan p. 4.107-4.112).
3. Overstory removal harvesting is appropriate to achieve our objectives of improved wildlife habitat diversity, improving growing conditions for hardwood regeneration, increasing the amount of early successional habitat (i.e. grass, sedges and forbs that will grow in skid trails, roads and landings and where soil has been disturbed), and producing high quality sawtimber for species such as northern hardwoods, oak and conifers (Forest Plan p. 4.62-4.67; EA p. 39, para. 6).
4. The selected silvicultural methods for each stand identified in Alternative 3 are consistent with the rationale for using these methods provided for in Appendix A of the Forest Plan (pages A-03 to A-09). A certified Silviculturist has reviewed and prepared each stand prescription.
5. Forest Plan Appendix A, under Selection of Harvest Methods (p. A-08), states that “shelterwoods will be the primary evenaged harvest method used” to regenerate hardwoods, softwoods and oak.

OTHER VEGETATIVE MANIPULATION REQUIREMENTS INCLUDING ASSURANCE OF RESTOCKING- 36 CFR 219.27(b)

Based on my review of the North 1/2 OSR project EA, I find that the selection and location of the proposed activities, the application of standards and guidelines from the Forest Plan, and site specific mitigation measures will ensure the vegetative management activities in this project will comply with the requirements of 36 CFR 219.27(b). According to these requirements, projects involving manipulation of tree cover shall:

1. Be best suited to the multiple use goals established for the area, with potential environmental impacts, being considered in this determination. I find that the EA and analysis demonstrate that Alternative 3 is consistent with the multiple use goals and objectives stated in the Forest Plan. Reference this EA, Forest Service Authority, Policy, and Management Direction (p. 6); Purpose and Need For Action (p. 7-9); outcomes produced by each alternative: see Proposed Action (p. 9-17), No Action Alternative 1 (p. 21), and Alternative 2... (p. 21-22), and Alternative 3... (p. 24-25).
2. Occur on lands where adequate restocking within five years can be assured. All silvicultural prescriptions for treating stands were approved by a certified Silviculturist and meet direction of the Forest Plan. Review of forest stocking records has clearly shown successful restocking by applying the standard silvicultural and site prep methods identified in this analysis. Soil conditions, moisture regimes, and present vegetative stocking levels are the same or very similar to other areas on the Forest where restocking has been successful.

3. Not be chosen primarily because they will give the greatest dollar return or the greatest output of timber, although these factors shall be considered. Alternative 3 was chosen based on a combination of factors including the protection of other resource values, management to achieve Forest Plan objectives, creation and maintenance of a diversity of wildlife habitat, fishery habitat improvement, and commodity output needs, as well as economic considerations. Refer to the section of this document entitled Decision and Rationale for the Decision on page 8. Refer also to the EA, page 33 and pages 94-96 for details on the Economic Analysis.
4. Be chosen after considering potential effects on residual trees and adjacent stands. To the degree that they are related to specific North 1/2 OSR project issues, effects on vegetation are disclosed in the Environmental Consequences section of the EA and SIR (pages 34-40). In particular, the discussion of cumulative effects takes into consideration the actions occurring on, and effects to, stands adjacent to those being manipulated, both on NFS lands and private lands. The general effects of activities on vegetation is disclosed in the Forest Plan Draft Environmental Impact Statement, chapter IV, pages 4.01-4.80.
5. Avoid permanent impairment of site productivity and ensure conservation of soil and water resources. Reference the EA, for Soil, Water, and Wetland Resources pages 69-72; Fisheries pages 43-45; Project Mitigation Measures, page 29; and Forest Plan standards and guidelines.
6. Provide the desired effects on water quantity and quality, wildlife and fish habitat, regeneration of desired species, forage production, recreation uses, aesthetic values, and other resource yields. These considerations are addressed throughout the Environmental Consequences section, pages 34 - 98.
7. Be practical in terms of transportation and harvesting requirements, and total costs of preparation, logging and administration. I am basing this determination on the fact that the selected activities are consistent with Forest Plan direction and are similar to those that have been or are currently being practiced on the Green Mountain National Forest. All harvest activities are close to existing roads and will require no extraordinary investments or expenditures in order to complete harvest operations. Refer also to the EA, pages 94 – 96 for details on the Economic Analysis.

ENDANGERED SPECIES ACT COMPLIANCE

16 U.S.C. 1531-1536, 1538-1540

The actions of Alternative 3 with modifications are in full compliance with the Endangered Species Act. A Biological Evaluation (BE) was completed (Appendix B of the N ½ OSR EA). The conclusions of the threatened endangered, and sensitive species analysis may be found in the EA on pages 45 through 50, and again on pages 76, 84-85 and 90-91. In summary, no Threatened or Endangered plants are listed for the GMNF. None of the TES animal species tracked for the GMNF are known to have documented occurrences within the project area, either currently or historically, and no critical habitat has been identified in the project area (EA p. 115). Therefore, a determination of “no effect” to threatened and endangered species has been made in the BE (p. 147). One federally listed species (Indiana bat) and one Regionally Sensitive species (Eastern small-footed bat) have been identified as having potential or suitable habitat in the project area. As stated in the Biological Evaluation, it has been determined that both these species “possibly occur” in the project area, and that for the Regionally Sensitive species, implementation of the Proposed Action or any of the alternatives will not likely contribute to a trend toward federal listing or a loss of viability to the population or species.

The GMFL NF recently completed a thorough analysis of its TES program (September, 2001). The result was an amendment to the Forest Plan that incorporated new information for not only Indiana bat but for all TES species by way of updated standards and guidelines, resource protection objectives, and monitoring (see EA, p. 5). I believe that this extensive effort, compliance with terms and conditions of the Biological Opinion (BO) issued by the U.S. Fish and Wildlife Service, the developed mitigation (N ½ OSR EA p. 29-32 and discussed throughout the BE, Appendix B as noted), and continued monitoring (EA Appendix D, p. 159) both within the project area and as appropriate across the Forest, allows us to implement the actions of Alternative 3 without fear of jeopardy to any TES species.

OTHER RELEVANT LAWS

I have considered other relevant laws and regulations that this decision may affect. These include, but are not limited to, the Multiple Use-Sustained Yield Act of 1960, the Forest and Rangeland Renewable Resources Planning Act of 1974, the Clean Air Act, the Clean Water Act, and the National Historic Preservation Act. I have fully considered the effects of this decision on the public, as well as the public's issues and concerns brought forward during the comment periods and feel that these issues have been adequately addressed in the North 1/2 OSR project EA, its appendices and in this Decision Notice. I have determined that my decision to implement the North 1/2 OSR project meets all applicable laws, regulations, and policies, as well as Forest Service direction and guidance as outlined in the Forest Service Manuals and Handbooks.

FINDING OF NO SIGNIFICANT IMPACT

I have determined that the selected activities described in Alternative 3 as modified are not a major federal action, individually or cumulatively, and will not significantly affect the quality of the human environment. Therefore, an environmental impact statement is not needed. This determination is based on the context and intensity of the activities:

(a) CONTEXT- 40 CFR 1508.27(a)

The analysis of the proposal is in a localized area with implications only for this area. All irreversible resource commitments and irretrievable losses of resources are limited to the immediate project area and do not have effects beyond the immediate locale. The cumulative effects of past management, combined with the current proposal and reasonably foreseeable future actions, are displayed by the various resource sections throughout the Environmental Consequences section of the EA and the Supplemental Information Report (SIR). As a result of the analysis of those effects, I feel that the context of this decision, both from a biological and social standpoint, is localized. I realize that some wildlife species, for example large mammals and migratory birds, and various MIS, range outside of the project area boundary. Considering this, my decision is consistent with the management direction outlined in the Forest Plan, and with the Forest Plan EIS that analyzed, at a larger scale, the effects of the type of activities that will be implemented through this decision.

(b) INTENSITY- 40 CFR 1508.27(b) (1-10)

Intensity is a measure of the severity of effects and is based on determinations for the following ten factors:

1. Impacts that may be both beneficial and adverse.

Impacts associated with my decision are disclosed in the Environmental Consequences section of the EA and SIR. Both beneficial and adverse effects have been taken into consideration when making this determination of significance. Each impact, beneficial or adverse, was considered individually, and no beneficial impact was considered to offset any adverse effect in determining severity and significance. There are no direct, indirect or cumulative adverse impacts that are significant in their effect upon other resources, as they pertain to the relevant issues analyzed in the EA. Impacts from this decision are not unique

to this project alone. Previous projects having had similar activities and effects were also taken into consideration when measuring severity and significance.

2. The degree to which the proposed action affects public health or safety.

There is no indication based on the environmental analysis and implementation of projects similar to this in the past that there will be serious implications to public health or safety. The proposal makes extensive efforts to minimize shared use of roads by snow travelers during the harvest operations. The mitigation measures on page 29-32 of the EA, and mitigation as disclosed on pages 29-32, will reduce the potential for user conflicts. Also, the project does not involve or have any implications to National Defense or Security.

3. Unique characteristics of the geographic area.

The EA and SIR did not identify any unacceptable impacts to any unique geographic areas. According to the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR Part 1508.27(b)(3)), unique characteristics are defined "such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas."

A cultural resource inventory has been completed for the project area and all known resources will be protected by buffering from any management activities (EA p. 41-42 and page 82). Additionally, the potential for impacting yet undiscovered sites is adequately mitigated in the Forest Plan standards and guidelines and in the standard timber sale contract.

There are no parklands or prime farmlands within the project area.

A few small wetlands exist in the project area. The effects to these wetlands areas are disclosed throughout the Environmental Consequences section of the EA and in Appendix B. No wetlands will be severely impacted or eliminated. Mitigation measures (EA p. 29-32, and discussed on p. 70-72 of the EA and throughout the Biological Evaluation, Appendix B pages 115-150), such as harvesting on frozen or snow covered conditions, will minimize the effects to these wetland areas. Forest Service inspectors will closely monitor operations in these areas. Based on my personal observations and those of timber sale administrators and our soil scientist, many of these areas have been harvested under winter conditions in the past with minimal or no environmental effects. It is my conclusion that there will be no significant environmental effects to wetland areas, in particular, where commercial timber harvest will occur.

All Alternative 3 activities within stream corridors are consistent with the standards and guidelines outlined for the protection of these streams. Impacts of selected activities on project area streams are found in the Environmental Consequences section for Soil & Water Resources (p. 69-72) and Fisheries (43-45). See also Appendix A of the EA, Response to Public Comments.

Ecologically critical areas are those areas that exhibit unique ecological characteristics or, if altered, may affect the viability of threatened or endangered plant or animal species. Botanical and wildlife surveys were conducted throughout the project area and Biological Evaluations (BEs) were completed for both plants and animals (Appendix B of the EA).

No Threatened or Endangered plants are listed for the GMNF. It has been determined that at least some marginally good potential habitat exists for fourteen additional Sensitive plant species (EA p. 90; Appendix B), but this habitat is not unique because it is mostly “basic northern hardwoods”, with some small wetlands (excluded by mitigation, p. 45), and therefore, cannot be considered ecologically critical. None of the TES animal species tracked for the GMNF are known to have documented occurrences within the project area, either currently or historically, and no critical habitat has been identified in the project area (EA, p.115). One federally listed species (Indiana bat) and one Regionally Sensitive species (Eastern small-footed bat) have been identified, as having potential or suitable habitat in the project area but this habitat is also not unique or ecologically critical. No other ecologically critical areas have been identified. I conclude that there will be no significant impacts to ecologically critical areas.

Based upon these considerations, I conclude there will be no significant effects on unique characteristics within the geographic area.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The selected activities of Alternative 3 with modifications will contribute toward reaching the desired future condition and goals and objectives outlined by the Forest Plan. The North 1/2 OSR project EA and SIR are tiered to the Forest Plan Environmental Impact Statement (EIS). Forest-wide effects of actions similar to those of Alternative 3 have been disclosed in that EIS. All actions are of a similar type and intensity to activities that have occurred in the past throughout the Forest and in this area, and have not shown to be scientifically controversial to the extent that the quality of the human environment is significantly impacted.

A small number (10) of comments were received in response to the mailing of the EA for Public Comment, and those responses were split between support and non-support (see Appendix G). The number of public comments or differing opinions does not, in and of itself, make an issue controversial. Controversy as described above is a dispute within the scientific community. I expect this decision will not be acceptable to everyone. However, based on the comments received, and the involvement of Forest Service resource specialists and experts from other agencies, it is my determination that the effects of the management actions in Alternative 3 with modifications are not thought to represent a scientifically controversial impact upon the quality of the human environment.

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The actions included in my decision are similar to many past actions, both in this project area and in other areas across the Forest. The commercial timber sale will involve common harvesting practices and standard contractual requirements. The IDT that conducted the analysis encountered nothing that would indicate a unique or major unknown risk to the human environment. The effects of these actions (Environmental Consequences section; BE, Appendix B) are within the range of effects disclosed at a broader scale in the Forest Plan EIS, are similar to effects of other like actions, and are reasonably predictable. I conclude that there are no unique or unusual characteristics about the area, which have not been previously encountered, that would constitute an unknown risk to the human environment.

6. The degree to which the action may establish a precedent for future actions with significant effects, or represents a decision in principle about a future consideration.

This is not a precedent setting decision. Similar actions have occurred previously in the local area and across the Forest, and as has been stated, the effects of Alternative 3 are within the range of effects of these other similar actions and within the range of effects disclosed in the Forest Plan EIS. All actions are wholly consistent with the Forest Plan, and therefore this is not a decision in principle. This decision does not commit me to actions on lands outside the project area that may have significant effects. I conclude that this action does not establish precedence for future actions with unknown adverse impacts to the environment.

7. Whether the action is related to other actions with individually insignificant but cumulative significant impacts.

The Environmental Consequences section of the EA and SIR (Appendix H) discusses the combined effects of this project with other past, present, and reasonably foreseeable future actions. None of the actions of Alternative 3 are severe enough to create an unacceptable and significant impact when related to other actions. Based on the discussion in the EA and the Forest Plan Final Environmental Impact Statement, I conclude that there are no significant cumulative impacts.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, or may cause loss, or destruction of significant scientific, cultural, or historical resources.

A cultural resource inventory of the area was completed and eight specific sites of concern were identified (EA p. 41-42). Mitigation will be used and actions monitored, including administration of timber sale contract clauses, to ensure that there will be no adverse effects to these areas (EA p. 29-32; p. 40-42). Implementation of these mitigation measures for similar projects has proven to be successful in protecting these types of sites from disturbance (EA p. 42). As a result, no significant impacts will occur to any proposed or listed National Historic Places nor will there be any loss or destruction of scientific, cultural, or historic places.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

The actions of Alternative 3 will not lead to significant impacts to endangered or threatened species or their habitats. The terms and conditions of the Biological Opinion issued by the U.S. Fish and Wildlife Service in regards to the recently completed EA, DN and FONSI for the Proposed Amendment of the Green Mountain National Forest Land and Resource Management Plan for Threatened, Endangered, and Sensitive Species on September 11, 2001, will be applied to the selected actions. Reference the section above entitled Endangered Species Act Compliance, page 14. See also, the EA, Appendix B, and page 45, 46-49.

10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The activities of Alternative 3 with modifications are consistent with, and follow the management direction and standards and guides mandated by, the Forest Plan. The Final EIS and Record of Decision for the Forest Plan indicate the consistency of the Forest Plan with laws and requirements imposed for environmental protection. The EA and this decision document disclose that Alternative 3 is in compliance with Federal and State Endangered Species Acts, National Forest Management Act, heritage resource protection laws, and other resource protection requirements. Any required permits will be obtained before implementation occurs. The actions do not threaten a violation of federal, state, or local environmental protection laws.

APPEAL RIGHTS

This decision is subject to appeal pursuant to 36 CFR 215.7. An appeal may be filed by those who have commented on or expressed interest in this specific project before the close of the Response Public Comment period.

To appeal this decision, a written Notice of Appeal must be postmarked or received within 45 calendar days after the date that the legal notice of this decision is published in the Rutland Herald newspaper, Rutland, VT. The first day of the filing period begins on the day after the legal notice appears in the aforementioned paper of record. When the 45-day filing period would end on a Saturday, Sunday or Federal holiday, the filing time is extended to the end of the next Federal working day. Notice of Appeal must be mailed to:

USDA, Forest Service, Eastern Regional Office
ATTN: Appeals Deciding Officer
310 West Wisconsin Avenue
Milwaukee, Wisconsin 53203

The Notice of Appeal may alternatively be faxed to:

414-297-3127
Attn: Appeals Deciding Officer
USDA Forest Service
Eastern Regional Office

An appeal must: 1) state that the document is an appeal pursuant to 36 CFR 215; 2) state the appellant's name, address, and telephone number; 3) identify the decision being appealed (include the title of this document, its date, and the name and title of the Responsible Official who signed it; 4) identify the specific change(s) in the decision that the appellant seeks or the portion of the decision to which the appellant objects; and 5) state how the Responsible Official's decision fails to consider comments previously provided, either before or during the 30-day comment period and if applicable, how the appellant believes the decision violates law, regulation, or policy.

Detailed records of the EA are available for public review at the Green Mountain National Forest, Middlebury Ranger District, 1007 Rt. 7 South, Middlebury, VT 05753.

If no appeal is received, implementation of this decision may occur on, but not before, five (5) business days from the close of the appeal filing period. If an appeal is received, implementation may not occur for fifteen (15) days following the date of appeal disposition.

For additional information concerning this decision, please contact the Responsible Official, Stephen J. Kimball, District Ranger for the Middlebury and Rochester Ranger Districts, 99 Ranger Road, Rochester, VT. 05767 (802-767-4261 ext. 513), or Chris Casey, Silviculturist and Project Leader, Middlebury Ranger District, 1007 RT 7 South, Middlebury, VT. 05753 (802-388-4362 ext. 115).

STEPHEN J. KIMBALL
District Ranger

Date

**Table DN-1. Summary of Alternative 3
Vegetation Management Activities by Management Area**

Compartment Stand #	Forest Type	MA	Total Stand (acres)	Total Area Harvested	Estimated Volume CCF
Compartment 26					
6	N. Hardwood	3.1	14	14	55
10	N. Hardwood	3.1	13	13	52
Compartment 28					
2	N. Hardwood	4.1	20	0	Not Included
Compartment 42					
15	N. Hardwood	4.1	20	18	72
Compartment 44					
21	N. Hardwood	4.2	21	0	Not Included
Compartment 46					
11	Red Oak	4.1	22	20	40
21	Red Oak	3.1	10	10	34
Compartment 50					
12	Red Oak	3.1	8	8	53
21	Sugar Maple	3.1	15	15	55
27	N. Hardwood	3.1	6	6	23
29	N. Hardwood	3.1	10	10	40
30	N. Hwd & Spruce	3.1	5	5	20
Compartment 65					
19	Red Oak	4.1	16	10	34
20	Red Oak	4.1	6	6	20
Compartment 69					
26	N. Hardwood	3.1	28	28	112
Compartment 58					
29	N. Hardwood	3.1	24	12	50
31	N. Hardwood	3.1	7	7	28
Compartment 98					
11	N. Hardwood	4.1	18	18	72
Compartment 150					
3	N. Hardwood	3.1	19	19	77
			Total Stand Acres 282	Total Harvest acres 219	Total est. CCF 837 Total est. MBF 501

Note: 1 CCF = 100 cubic feet of solid wood. This method of measurement is changed from the previous measurement of thousand board feet (MBF) per Federal regulations. To determine MBF, divide the total number of CCF by 1.67.

APPENDIX G

RESPONSE TO PUBLIC COMMENTS

NORTH HALF OVERSTORY REMOVAL PROJECT

December 2002

A total of 117 copies of the Environmental Assessment for the North ½ Overstory Removal Project were mailed to interested and potentially affected individuals and organizations for a 30-day public comment period. Ten timely responses were received. One late comment letter was received. However, it supported the project and would not have added any new substantial comments or issues. All timely responses received were reviewed to identify concerns, issues, alternatives and overall comments.

Each letter was given a numerical code from 1 through 11. These codes are noted next to the commenter on the list of commenters. Within each letter, those comments that are responded to below have also been numbered (labeled). For example, comment label 3-4 would represent the fourth comment in letter 3. That comment, portions of or in its entirety, would be labeled in that letter as “3-4”. Copies of the respondent’s own letter follow and relative comments are highlighted in bold, and the response follows in italics.

Note that although this Appendix G is attached to the Decision Notice (DN), it is not an Appendix to the DN but to the North Half Overstory Removal Environmental Assessment (EA) itself, given that the comments are focused entirely on the EA. Thus the reason for calling it Appendix G, as this follows a continuum with the existing appendices to the revised EA.

List of Commenters

The following is a list of those individuals and organizations that provided timely comments during the 30-day public comment period, August 29 through September 27, 2002, for the North 1/2 Project. The list is divided into two groups: (1) those who generally support the project, (2) those who generally do not support the project and have raised issues and concerns in that regard.

A total of 10 timely responses were received. Five showed support for the Project although one respondent supported actions that are listed for Alternative 2, No harvesting in oak stands. Five showed non-support of the project.

INDIVIDUALS AND/OR ORGANIZATIONS LETTER EXPRESSING SUPPORT:

Associated Industries of Vermont, William Driscoll- Letter 1
Balsam Meadows, Norm Arseneault – Letter 3
Granville, Town of, Selectboard - Letter 5
Robbo Holleran – Letter 6
Donald Miller –Letter 7
Northeast Regional Forest Foundation - Letter 8 (LATE)

INDIVIDUALS AND/OR ORGANIZATIONS LETTER EXPRESSING NON-SUPPORT:

The Audubon Society, James Shallow- Letter 2
Forest Watch, James M. Northup- Letter 4
Mick Petrie –Letter 9
Vermont Wilderness Association, Tom Butler – Letter 10
The Wilderness Society, Mary Krueger –Letter 11

RESPONSE TO PUBLIC COMMENTS

As noted, public response letters are listed below. Comments have been highlighted and numbered and the response immediately follows.

The numerical labels (e.g. 3-14) at the end of each bold-type comment reference back to the actual comment letters included in this appendix following this Response to Public Comments section.

LETTERS EXPRESSING SUPPORT

LETTER 1

Green Mountain National Forest
ATTN: District Ranger
99 Ranger Road
Rochester, VT 05767

September 26, 2002

Comments on the Environmental Assessment, North Half Overstory Removal Project

Submitted by:
William Driscoll
Vice President, Associated Industries of Vermont
PO Box 630
Montpelier, VT 05601

AIV strongly supports the Proposed Action as outlined in the Environmental Assessment for the North Half Overstory Removal Project. Indeed, AIV believes that this is the minimum action that should be taken to further the sound and responsible management of the Green Mountain National Forest, and commends the Forest Service for its hard work in preparing for this project. All alternatives, even Alternative 3, “Modified Harvesting in Oak Stands”, fall short in addressing needed timber harvesting, deer browse, early successional growth, and other potential benefits from this project.

As indicated in recent GMNF documents citing the *Monitoring and Evaluation Report for 2000*, timber management of the GMNF is already far behind schedule in every category if the long term goals already established for the Forest are to be achieved. Pursuing this project’s goals of providing for a variety of healthy forest stands of different ages, improving deer winter habitat, and producing valuable saw timber and pulpwood would help address these shortfalls.

The Forest Service has clearly made every effort to identify and address any negative impacts from the Proposed Action, and no reasonable objections could now be raised against moving forward; short-term concerns about temporary inconveniences should not prevent the achievement of long-term benefits for all.

As an association representing many sectors of the forest products industry, AIV is keenly aware not only of the importance of forestry to the Vermont economy, but also

of the importance of active forest management in the GMNF to a viable forestry industry in Vermont. In addition, as a founding member organization of the Vermont Traditions Coalition, AIV is also keenly aware of the importance of multiple use management in creating and protecting recreational and sporting opportunities in the GMNF. A thriving forest ecology underlies and supports each of these activities, and can in turn be supported by them. All of these goals will benefit from proceeding with the Proposed Action; any other alternative would fail to realize fully the Forest's potential. 1-1

AIV appreciates this opportunity for input on the North Half Overstory Removal Project. Please do not hesitate to contact me for further discussion or should the opportunity arise for additional comment on this proposal.

Sincerely

William Driscoll
Vice President

Cc: Sandra D. Dragon, President
William R. Sayre, Chair, Forest Policy Task Force

Response to 1-1: *These comments are noted and we appreciate your involvement, support for the Proposed Action and the overall support for active forest management, however we believe that Alternative 3 best meets the purpose and need of the N 1/2 Project and responds best to public issues. Alternative 3 works toward accomplishing Forest Plan goals and objectives for timber production, improvement of deer wintering areas and maintaining recreation and sporting opportunities while keeping environmental effects well within acceptable limits.*

LETTER 3

Steve Kimball, District Ranger
Green Mountain National Forest
99 Ranger Road
Rochester, VT 05767

September 23, 2002

Dear Steve:

I have read the North Half Overstory Removal Environmental Assessment and commend you on moving forward with the silviculture needed to ensure good growth on these regenerated stands. I fully support Alternative 3 as the selected approach.

Harvest of the trees in Alternative 3 will be a small, helpful step toward restoring balance to the age classes of trees on the national forest. As shown on the Age Class bar graph on page 59 of the EA, forest stand ages 0-60 are way under-represented - only about 17% of forest stands are younger than 60 years. Such a distribution does not bode well for biological diversity. Neither does it promote the habitat needs of a vast array of wildlife, bird, insect and plant species, which thrive in seedling, and sapling stands. It is my opinion that these regenerated stands help sustain every species of wildlife, large and small, at some time in their life cycle, either due to the abundance of prey species or the presence of fruit-producing plants not found in older forests which are predominant on the Green Mountain National Forest. More regeneration is needed, and this timber sale is a start.

Your economic analysis on Page 95 clearly shows that this timber sale will make money for local towns and the U.S. Treasury. That sounds to me like a very positive result at a time when our federal treasury is experiencing a return to deficit spending. Timber is a valuable renewable resource, which should not be wasted. Since 62% of the national forest is already off-limits to logging according to the current forest plan, it would be wise to intensively manage the 38%, which needs silvicultural treatment and will return a sizable profit to taxpayers.

Alternative 3 will harvest only 237 acres in scattered locations on two ranger districts. Every single one of the cutting units in Alternative 3 has been logged before with no negative results. Every single cutting unit has been previously thoroughly examined with earlier EA's, which concluded no significant impacts would result. Cumulative impacts will be non-existent and this timber sale will be positive for the environment.
3-1

I support Alternative 3 and hope you will not delay in its implementation.

Norm Arseneault
PO Box 296
Rochester VT 05767

Response to 3-1: *Your support is noted, thank you for your participation.*

LETTER 5

TOWN OF GRANVILLE
TOWN OFFICE
P.O. Box 66
Granville, Vermont 05747
802/767-4403

September 23, 2002

Steve Kimball, District Ranger
Green Mountain National Forest
99 Ranger Road
Rochester, VT 05767

Dear Steve:

We are responding once again to the North Half Overstory Removal EA with wholehearted support for Alternative 3.

This proposed timber sale would cut trees on 38 acres in the Town of Granville. No new roads would be built because this area has been harvested in the past.

We believe that this harvest will result in environmental and economic benefits to the town. You are projecting substantial net revenue, which will be positive in terms of returning 25% of net proceeds back to the towns. As you are aware, the 25% Fund has dried up in recent years as your timber sales have been delayed and blocked. We support resumption of an active timber management program on the Green Mountain National Forest which will provide a greater share of funds to town coffers - always welcome! 5-1

Response to 5-1: *Your comments are noted. We appreciate your involvement and Town Selectboard support for this project and the timber management program.*

We note that all logging will be done in winter. Please keep in close touch regarding use of the West Hill Road, which we jointly manage under cooperative agreement. Also, since this road is part of the VAST snowmobile trail network, we support your stated intent as expressed in the EA to coordinate with our local club, Tri Town Snow Travelers, to manage use on this road during the time it will be plowed. 5-2

Response to 5-2: *Your request is noted and we will coordinate use of this road.*

Thank you for the opportunity to comment and support this project.

Sincerely,

/s/ NormanArseneault
Chairman Selectboard

/s/Rodney Brown
Selectperson

/s/Kristi Tate
Selectperson

LETTER 6

Transcript of remarks of Robbo Holleran, Forester,
211 Green Mountain Turnpike, Chester VT 05143.
dated 9/23/02 in a hand-printed letter to Paul Brewster

Phone: (802) 875-3021 fax: 875-2337

Job Name: North Half Overstory Removals

Paul: Please forward my comments to the appropriate staff.

Timber sale comments: **I would like to support the proposed harvest for several reasons:**

A: It is in accordance with the approved goals in the existing forest plan, and particularly the silvicultural plan for the stands in question. 2 or 3 cut shelterwood harvest presumes the timely removal of the overstory.

B: I also support the multiple use of the forest, with harvests near the growth rate for lands designated for timber, wildlife mgt [sic], or other designation that allows harvesting. In this regard, I would prefer a significant increase in harvesting to balance the age class distribution, provide early successional habitat, and improve conditions for game-species of wildlife. Game management should have preferential treatment in a large majority of the forest, considering the size of this “special interest group,” and the substantial portion that is off-limits to harvesting and habitat management. 6-1

Response to 6-1: We appreciate your support for the project. While the prescription for MA 4.1 emphasizes managing the forest for stable deer habitat, it will have benefit to other wildlife (including game species like grouse, snowshoe hare and gray squirrels) that have similar needs for this type of habitat. We are mandated by the National Forest Management Act (NFMA) to manage for a variety of native and desirable non-native wildlife species. The project would have effects both positive and negative on various species (EA p. 46-61) and we cannot show preferential treatment for game species alone.

C: I would also like to see more “summer logging” for several reasons:

- 1) Scarification and ground disturbance are required in many cases to establish desired regeneration species.**
- 2) It is a very cost effective way to reduce undesirable [sic] understory species.**
- 3) It will help diversify the supply of wood products (timing) with the multiple benefits to the local economy. 6- 2**

Thanks
(signed) Robo Holleran

Response to 6-2: *We agree that allowing timber harvests throughout the year would help sustain wood supplies and jobs. However, seasonal restrictions and operating restrictions are sometimes required on National Forest timber sales for a variety of reasons. For this*

project, we restricted harvesting to winter months to: help keep loggers safer when working in the dense seedling-sapling stands in leaf-off conditions; to help protect soil and water resources near log landings and skid trails, to allow for the best resprouting of any seedlings and saplings that may be damaged during harvest; to avoid months when endangered Indiana bats and some songbirds use the stands; to avoid high recreation use periods; and to mitigate impacts to plants of concern.

LETTER 8

Green Mountain National Forest
ATTN: District Ranger
99 Ranger Road
Rochester, VT 05767

Comments on the Environmental Assessment, North Half Overstory Removal Project

**From: Sean McKeon
Executive Director
The Northeast Regional Forest Foundation
157 Old Guilford Road #2
Brattleboro, Vermont 05301**

The Northeast Regional Forest foundation is a conservation and education organization dedicated to promoting the wise-use of natural resources in a free market economy. Our foundation's foresters have more than 60 combined years of experience as private consulting foresters as well as more than 25 years experience in public policy. We respectfully submit the following comments for your consideration and review.

First, we would like to acknowledge the hard work and dedication of the Forest Service in preparing this project. **The Northeast Regional Forest Foundation supports the Proposed Action as outlined in the Environmental Assessment for the North Half Overstory Removal Project. It is our belief that this action is the minimum required to enhance and restore sound management to the Green Mountain National Forest. The professional foresters associated with our foundation manage more than 60,000 acres of private forestland in New England. They are concerned that the timber management on the GMNF is far behind schedule in almost every category and that the long-term prognosis for the forestry goals is not healthy. To the credit of the Forest Service, we also believe you have made every effort, reasonable and extraordinary, to address negative impacts of the Proposed Action and that objections now are politically, not scientifically, motivated and should not be allowed to hinder the project from moving forward. The Proposed Action will have benefits for everyone.**

Organizations and individuals who work in the forest products industry support our foundation and our experience with those groups highlights the importance of that industry to Vermont. Myriad families in many communities rely on forest products and related industries to make their livings and be productive members of their respective communities. For us, the fundamental issues is [sic] the sustainability of our industry and related, multiple-use industries and lifestyles, such as recreational and sports activities.

It is estimated that as many as 20,000 people earn their livings in the forest products industry here in Vermont, jobs that provide excellent pay and benefits. The concomitant economic activity surrounding those jobs; i.e. fuel purchases, equipment purchases, clothing, insurance, etc. adds tremendous economic benefits to many communities across our state. Further limiting activity on the GMNF will curtail activity and burden an

already troubled economy. Vermont can little afford any negative drain on its economy and the forest products industry has always been the mainstay of our rural economies and their special and valuable culture.

Activity on our national forests is crucial to the overall health of the forest products industry and related activity. Payments to communities in which harvests occur on national forestland is needed in these uncertain times as is the additional tax revenue from timber activity and other income producing activities. Moreover, reduced access to National forestland creates dangerous incentives for private landowners to convert forestland as prices for certain types of timber rise in an artificial market. Conversion of forestland is more attractive when timber prices rise as a direct result of limited access. 8-1

Response to 8-1: We appreciate your support and are also concerned that we are behind schedule in timber harvesting which can produce goods, services and improved wildlife habitat. Your comments are noted and we will continue our efforts to restart the Forest's timber management program so we can continue to contribute to the local and national economy.

The most interesting paradox of this entire debate is that national forests were set up to provide what people then believed private lands could not provide, a steady access to timber products. Today, we are told to close the national forests and let the private forests provide the material. This is a 180-degree change from the original intent of the establishment of this nation's national forests program.

Our national forests are in ill repair owing to a constant bombardment of litigation from anti-timber interests, legislative initiatives and executive orders. It is paramount that where possible, the Forest Service work to reverse this trend. The Administrative Rules Process is one area that we recommend for improvement. In the mean time, however, measures such as this Proposed Action must be implemented as soon as is practicable and without further delay. Our nation's precious resources deserve to be managed so that all may benefit from them. Seeing natural resources wasted and destroyed because of political agendas is in nobody's interest and, in fact, does more harm to the environment and wildlife ecology than active management and recreational activity. 8-2

Response to 8-2: Your comments are noted and we agree that the valuable resources of the forest should be managed. We appreciate your involvement in the process and assure you we are working hard to implement this and other management projects.

The Northeast Regional Forest Foundation thanks you for this opportunity to submit these comments and welcomes any questions or comments you have regarding them.

Sincerely,

Sean R. McKeon

Executive Director

Cc: R. Steve Hardy and Robbo Holleran

SRMcm

LETTER 7

Mr. Stephen Kimball
District Ranger
Green Mt. and Finger Lakes Natl. Forest 99 Ranger Rd
Rochester, VT 05767

21 Sept. 2002

Dear Mr. Kimball:

Thank you for sending me a copy of the EA for the North Half Overstory Removal Project. I have scanned the report and my impression is that it is very well done and, obviously, a lot of careful work went into its preparation. Considering all the regulations and interest groups the FS must consider, it must be a most formidable undertaking, indeed.

In this letter, I would like to briefly comment on only a small part of the report, with which I have some expertise. I have been doing fieldwork in Vt. more or less for over 40 yrs, the majority-but not all, has been in northeastern Vt. Much of the habitat in NE Vt. is quite similar to that of much of the Green Mt. Forest in Vt. and the two regions share many similar species, including both game and non-game. And, more in keeping with my interests, both share similar species of invertebrates, undoubtedly the most important group of animals, with respect to overall community dynamics. Still, invertebrates are the group, which is continuously given very short managerial consideration for reasons that most conservation biologists have lamented for years (e.g., the many volumes of the Xerces Society).

I received my doctorate in Zoology/Ecology in 1970 from the U. Conn. I worked in the Hardwick, Vt. area for three years for the degree requirement. The results of my very intensive and extensive study have been published in major peer-reviewed journals although, strangely, few modern workers on small mammals in Vt. seem to be aware of my work. I did work in NYS with bats back in the 70's, including mist netting, attic surveys, etc. More recently, most of my field work has been with invertebrates, specifically lepidoptera and odonata, although I continue to maintain an active research interest in other taxa, both vertebrates and invertebrates. A number of publications and manuscripts have resulted from these studies and more are in preparation. One of my most recent projects was a contract under TNC to analyze the butterfly and odonate fauna of the Silvio Conte NWR and the adjacent state West Mt. WMA. This MS is in the files of TNC. I am a member of many national and regional scientific organizations, including the Dragonfly Society of America. I attend regional and national meetings on a regular basis. I feel I'm quite qualified to comment on many sections of the EA but am primarily limiting my detailed remarks to the Biological Evaluation for Threatened, Endangered, and Sensitive species section: pp. 120-121 of the ES. However, I also add some general comments regarding other aspects of the Report. I feel I am qualified to do so, given my training, teaching (40 yrs!) and field experience, mostly in Vt.

Mr. Stephen Kimball
District Ranger
Green Mt. and Finger Lakes Natl. Forest

I have been surveying odonata in Lincoln and Bristol townships for the past four consecutive summers. In addition, I have surveyed odonata generally in Vt. for the last five years or so, mostly-but not all- in northeastern Vt. I should like to comment on my view of the possible status of odonata in the Green Mt. National Forest of Vermont and the projected cut areas, based on these experiences. Unfortunately, I have not done field work in the proposed cut areas but I have hiked and driven along dirt roads in or near some of the Green Mt. forest areas that are mentioned in the report. Nevertheless, to reiterate, I feel strongly that my detailed experience with many of the listed odonate species in Vt. allows me to comment on their possible status in the proposed removal project areas. This opinion is based on empirical field data in areas that are both geographically very close to the project areas and in many habitats that are similar to those in the project areas, based on my reading of the general habitat descriptions in the ES. Therefore, I think these remarks are quite relevant for consideration in managing the cut or, at the very least, should be of interest to non-game biologists in the FS of the Green Mt. NF.

I'll be brief. **In examining the list of 12 species of odonata (pp. 120-121), I personally would be very surprised if the following did not occur on one or more of the proposed areas to be cut (I follow the non-taxonomic listing of the ES report for your convenience in referring to my remarks).**

***Aeshna tuberculifera* -1 have taken this species several times in Lincoln Twp and at the base of the Bromley Mt. ski area. It is quite widespread in Vt but extremely easy to overlook.**

***Calopteryx amata*- I regularly encounter this species along streams in the NEK (an acronym essentially for northeastern Vt.). I would be absolutely amazed if it were not in at least one of the proposed cut areas. I have taken it on or along streams in the NEK that vary from a few meters to 10's of meters in width, all in areas of mixed woodlands. It certainly is not uncommon.**

***Gomphus descriptus*--I have taken it in the NEK**

***Gomphus adelphus*-ditto Essentially along streams where *amata* is found.**

***Lanthus vernalis*- I find it extremely curious that this species of the genus is listed but not the northern species *parvulus* which I have taken along Upper Isham Br. in Lincoln Twp. Both species of *Lanthus* are extremely easy to overlook and, in my view, could be very easily missed in a single, short one season survey. They are, to repeat, very hard to detect in their habitat.**

***Lestes eurinus*- I have taken this species regularly in the NEK and in both Chittenden and Addison counties. It might be in the project area since my field data suggests it is very widely found in many different areas in Vt.**

***Somatochlora elongata*-I would be amazed if this species was not in one or**

21 Sept.
Mr. Stephen Kimball
District Ranger
Green Mt. and Finger Lakes Natl. Forest

p.3 of 6

more of the project areas. I have taken it many times, both in Lincoln Twp. and in the NEK, usually at beaver ponds and meadows. Why it is listed as S2, however, completely baffles me. It is arguably, in my experience, one of the most common emeralds in Vt. It is very easy to census, relatively easy to net.

***Somatochlora minor* I have taken this species several times in Essex Co. around sedge meadows with beaver "canals", etc. It does seem rather rare to me, although it can be easily over-looked. In my opinion there are other equally uncommon or rare species of *Somatochlora* species that are probably in one or more of the proposed areas to be cut. We simply know so little about the ecology (distribution and numbers!) of these that, to assume they would not be in the area, would be presumptuous. Almost every year I add another species to my list of emeralds as I do field work in Vt. It takes very intensive and extensive field work over several field seasons, in my opinion, to ascertain the true status of most species of the more uncommon species of *odonata*. One cannot and I emphasize the "cannot" base decisions on the status of *odonata* from one season of field work in any area unless perhaps that has been extremely thorough, involving over 50 days or so of intensive field work in, say, areas the size of your proposed cuts. 7-1**

Response to 7-1: *We believe that the activities proposed in the OSR EA or any of the alternatives will not adversely affect the viability, nor result in a trend towards Federal listing for any Invertebrates listed in the BE because of the timing of the activities that will limit work to the winter months. Your comments regarding the status and distribution of *odonata* within the project area based on your extensive fieldwork in Vermont is important information previously unavailable to our staff. We would like to be able to consult further with you on future projects so that we can utilize your expertise regarding invertebrates in Vermont to better determine the effects of our actions on Threatened, Endangered, and Sensitive species.*

I have not seen Dr. Frank Carle's 1995 Report to FS. I would very much like to receive a copy of that from your office, if at all possible. 7-2

Response to 7-2: *We will send you this report.*

I have, however, seen his more available 1994 report on *Odonata* of Vt. and I find that in need of considerable revision. That is, based on my presumably more extensive field experience in Vt., his 1994 report does not accurately reflect the status of *odonata* in Vt at the present time: it is incomplete and badly dated. This is not to criticize his fine effort in any way. It is just that I have the impression that his reports are based on rather limited fieldwork in Vt.

An excellent beginning but much other work has been done in this State.

21 Sept.
Mr. Stephen Kimball
District Ranger
Green Mt. and Finger Lakes Natl. Forest

p.4 of 6

Conclusion:

My opinion is that the comments with respect to the possible status of the listed species of *odonata* in the EA are most likely based on rather inadequate evidence. However, if one supports the goal of conserving *odonata*, in general, than logging should not impact significantly on wetlands, riparian corridors lakes, streams, rivulets, etc. Those species of odonates that are primarily confined to lotic environments (and this not only includes streams, rivulets, and small rivers but also particularly cold lakes) are among those most at risk. Every effort should be made to mitigate adverse direct and indirect affects of logging on such habitats which the EA apparently supports.7-3

Response to 7-3: *Mitigation measures that restrict activities in wetlands, streams, and riparian corridors as well as seasonal restrictions are in place. We also understand and support your comment that the laws, regulations, and mitigation measures need to be enforced to be effective.*

I realize that there are many laws in place to protect "wetlands" and FS policies to reduce erosion and consequent siltation of streams but these must be enforced and, more importantly, I think, respected and supported both by those doing the cutting and/or managing the cut. Merely having laws on the books and/or other regulations simply does not ipso facto accomplish objectives of conservation biology in whatever context they are engendered. If the intent of these laws and objectives is not recognized, supported and respected by those involved in whatever ecological theater they are intended to operate than little will change. Education is badly needed.

In closing, although I fully realize that much of what I have indicated here is not based on any direct experience in the proposed overstory removal projects, I think my remarks are relevant to the proposals set forth in the Aug. 2002 ES.

I would prefer Alternative 2, No Harvesting in Oak Stands. Although I realize it is an anathema to most forest service doctrine, I do think we need to strive to preserve some old growth forests. There are many conservation biologists (including those among foresters, especially those trained in or aware of more modern concepts of biodiversity) who agree with this opinion. Oak forests certainly are relatively uncommon in the northern northeast and I feel we should strive to protect as many stands as possible from logging.7-4

Response to 7-4: *Your comment is noted and we believe that Alternative 2 would continue the trend that is leading these stands in a direction where the existing oak component will eventually be replaced by northern hardwoods. The first step of the shelterwood cut was done with the objective to regenerate oak in these stands. The OSR or second stage is needed to provide additional sunlight to reach the young oaks to help them compete with the faster growing hardwoods. We acknowledge that oak stands are uncommon on the GMNF and we believe that management within the five oak stands is needed to open these*

stands up to sunlight which will help young age classes of oak trees better survive since they are so lacking on the forest. Establishing stands with young oak trees will help us with our responsibilities of maintaining oak communities on the Forest now and into the future.

21 Sept.

p. 5 of 6

Mr. Stephen Kimball
District Ranger
Green Mt. and Finger Lakes Natl. Forest

Furthermore, I continue to be dismayed that the majority of the arguments, in terms of wildlife (rather than my preferred wild life) focus on maintaining large populations of game species, especially white-tailed deer. The latter obviously is a species of early to mid-seral succession of eastern woodlands and such habitats result from cutting stands of forest that are approaching the 80-yr old dictum. It is therefore, a self fulfilling prophecy to argue for extensive forest logging for wildlife as defined and, of course, politically less painful than other management alternatives for managing our public forests. 7-5

Response to 7-5: Discussion does focus in part on deer because many of the stands in this project occur within Management Are 4.1 which emphasizes active timber management to improve winter habitat for white tailed deer and the guild of wildlife species that also benefit from this habitat. This emphasis came from strong public input and support during the process of writing the Land and Resource Management Plan for the Green Mountain National Forest in 1986 that still guides our activities today. This emphasis to manage for deer is occurring on about a 6% portion of the GMNF. The National Forest Management Act also directs us to provide habitat for native and desirable non-native species and for deer to be considered with other wildlife species. It should also be noted that deer densities on the N ½ of the GMNF are very low, estimated at .9 deer/acre. Vermont State Wildlife Management Unit I, which is comprised of the Middlebury and Rochester Districts, is the only WMU in Vermont where the State does not issue antlerless deer permits. This is an indication that deer populations are indeed low and some remedial effort is needed to comply with the wishes of Vermont sportsmen and women and address the desired future condition of deer wintering areas on GMNF. In addition, some members of the public feel that even more National Forest lands should be managed for game species given regional trends of loss of habitat and loss of public access for hunting on private land and have made our staff aware of their concerns. The fact is most of the GMNF is comprised of other MA's with objectives to provide large unbroken tracts of land that provides opportunities for backcountry and wilderness recreation.

I know it is very difficult, if not impossible to balance many of the conflicting interests that now merge on the decision making of managers. With respect to maintaining jobs among the local population, I don't think it is correct to assume that reduced logging in national forests, inevitably leads to fewer jobs overall in the region. I believe the experience with

the Spotted Owl in the northwest clearly supports this view. Obviously, it results in fewer jobs in the logging industry.

21 Sept.

Mr. Stephen Kimball
District Ranger
Green Mt. and Finger Lakes Natl. Forest

p.6 of 6

Whatever is done, I think it is paramount to allow ecosystems [sic] maintain their structure and functioning as naturally as possible. That is, one in which the impact of man is minimized, not just that resulting from logging but also by those who use

If the former is not done, than the total biodiversity (including its quality-not just the total number) of the region is ultimately going to decline. And the decline of the biodiversity of the world is, I believe, widely acknowledged to be one of the major problems of our planet. Since our National Forests contain such a significant proportion of our public federal lands, they are going to continue to play a major role in maintaining biodiversity (here, I'm simply referring to alpha diversity although I realize that there are many other types or definitions ranging from the cynic's and politician's comment that it is just a buzz word for long-haired environmentalists to concepts of landscape biodiversity, etc.). In my opinion we need much more research about how these apparently conflicting goals of maximizing both the production of wood fiber and biodiversity can be maintained.

There does seem to be some light now being generated on this extremely difficult problem, especially and significantly by researchers with close ties to the Forest Service. That is, I am encouraged that I see more information being generated by the FS that clearly acknowledges that this is a problem (maintenance of biodiversity as well as continuing logging) in need of a solution. Your ES clearly demonstrates this. Just a decade or so ago, I wouldn't even had had the opportunity to comment on an Environmental Assessment for logging on any national forest. If the increased number of recreationists that use our NF's would think more about conserving wood fiber, we probably wouldn't have to have as many such assessments. I personally feel we waste far too much wood fiber in this country. Some of those who argue for maintaining "virgin forests" are probably more culpable when it comes to not conserving fiber than those who are actually harvesting it. We have a long ways to go in terms of conservation of both wood fiber and biodiversity. I never cease to be dismayed by all the cardboard boxes, etc., that I regularly see my neighbors put out for the garbage truck!

Maybe the future will hold a compromise between the views of Pinchot and Muir. Only time and a great deal of citizen concern, knowledge, and involvement will tell! The future of our national forests requires much more than focusing on individual taxa, though important in itself. It really requires and [sic] ethic- a belief about the broader goal of maintaining biodiversity such that the maximum of reproducing and evolving native species are maintained in the forests for hundreds-if not thousands or years to come. I still think we have a long way to go in achieving this goal. Every

citizen must become educated and involved with the issues and planning. Otherwise, ecological anarchy will reign supreme and special interest groups will prevail with little or no regard to the interests and rights of others and, ultimately, to what is best for the biota in general.

7-6

Response to 7-6: *The Land and Resource Management Plan for the GMNF does address your comment by how Management Areas have been designation on the ground. Since the OSR proposal is within Management Areas 3.1, which emphasizes a mosaic of vegetative conditions in an intensively managed environment and Management Area 4.1, which emphasizes suitable, stable habitat for wintering deer, vegetative management activities are allowed. There are also large continuous areas on the GMNF where these types of activities are not evident or not allowed, such as, Primitive Areas, National Recreation Areas and Congressionally designated Wilderness Areas. Your comments regarding impacts of increased recreation, wood fiber conservation, biodiversity, environmental education, and ecological anarchy are noted.*

Thank you for the opportunity to comment and I apologize for not having responded Earlier. Please feel free to contact me if you have comments or questions.
Sincerely,

Donald H. Miller, PhD
Professor Emeritus, Biology (Dept. of Science)
Lyndon State College, Vt. 05851

Note that I prefer to be contacted, if desired, at P.O. Box 578, Lyndonville, Vt. 05851 or at entdon@con.com

PS: I hope, Mr. Kimball, that you will be able to have your office send me a copy of Dr Carle's 1995 report. It would be greatly appreciated. I'd also like to receive a copy of the final Decision Notice. 7-7

Response to 7-7: *The Decision Notice will be sent to you as requested.*

LETTERS EXPRESSING NON_SUPPORT

LETTER 2

AUDUBON VERMONT
255 Sherman Hollow Road
Huntington, VT 05462
Tel: 802-434-3068
Fax: 802-434-4686
E-mail: Vermont@audubon.org
www.audubon.org

Stephen Kimball, District Ranger
Green Mountain National Forest
99 Ranger Road
Rochester VT 05767

27 September 2002

Dear Steve:

Audubon Vermont appreciates the opportunity to comment on the Environmental Assessment: North Half Overstory Removal Project. **We recognize the considerable effort that has gone into preparation of the EA, in particular the treatment of potential impacts on wildlife and recreation. We acknowledge your point, made repeatedly in the responses to public comments, that shelterwood cutting is a two-stage process, and that the first stage has already taken place. Given this situation, it may not be appropriate to question the treatment. The time to do that was in the NEPA process prior to the first cut, or perhaps more appropriately, during the discussion on the Forest Plan, its goals and objectives, the placement of parcels in the various management prescriptions and the desired future conditions of management in those MPs. In this regard, we hope to provide comment on these points for the revision of the Forest Plan currently about to take place. We urge the GMNF staff to take a hard look at whether or not shelterwood treatments are appropriate in the Green Mountain National Forest a forest that is best suited to providing deep woods habitat and benefits only public land can provide. 2-1**

Response to 2-1: *Your comment is noted. Currently all National Forests are mandated by laws such as the National Forest Management Act and Multiple Use Sustained Yield Act to apply multiple use management to provide an array of habitats needed to support all types of wildlife species.*

We support strongly the contention on page 4.03 of the current Forest Plan that the Green Mountain National Forest should be managed to provide benefits that private land does not. **We feel that private land and some state-owned public land adequately provides sufficient grassland, shrubland, and early successional forest. Even though the acreage in these habitats and the populations of species that depend on them have dwindled as the forests of Vermont have recovered and the average age of those forests has**

increased, we do not view the GMNF role as managing forests with the objective of converting them, or even portions of them, to grasslands, shrublands or early successional stands. What the GMNF uniquely provides is large tracts of continuous forest cover. On a landscape or regional scale these unbroken tracts are essential to the persistence of populations of species that decrease or disappear from habitat fragmentation and development. Unbroken tracts provide a number of neotropical migrant birds with their most important source populations. 2-2

Response to 2-2: You state that private lands, some State-owned lands and public lands adequately provide sufficient grassland, shrubland, and early successional habitat and that it is not needed on the GMNF. We disagree because recent scientific studies by the Wildlife Society cited in the N ½ OSR EA, show this is not the case in the Northeast, and the reasons are well documented in those studies. Most of the consulting foresters we contacted recently about this issue, agreed with those findings and stated private landowner's management objectives are different than public land objectives and they prefer not to see total harvests on their lands (even-aged management treatments) which create this needed habitat. One consultant that we contacted in central Vermont has completed early successional work extensively on private lands however; he manages an area that is one-eighth the size of the GMNF. Other examples of small projects are being done in the Merck Forest. We also do not know of any State lands projects that will adequately replace these habitats on the National Forest.

An inquiry to the VT Agency of Natural Resources regarding these comments reveals that there is no current comprehensive Vermont Forest Plan to address these challenging questions. A response from the VT Fish and Wildlife Department states that the department is in the very early stages of analysis and exploring strategies which consider various, overall forest/age-structure goals that would be desirable for Vermont's wildlife species. The Department also stated that they would not want to limit their analysis to private and state-owned lands only but would rather include habitat opportunities that could be provided on GMNF lands and other Federal lands as well. To our knowledge, there are no current timber sale projects on state lands aimed at improving the current condition or reversing the trend of loss of early successional habitats in Vermont.

We do agree with your statement that the acreage of early successional habitats and the populations of species associated with those habitats are declining in Vermont. We believe that the National Forest has an important role in providing these habitat types because we recognize this as a Regional trend and an emerging issue in New England. The GMNF is also obligated by law to provide habitats for native and acceptable non-native species including, grassland, shrubland, and early successional dependent species. These goals are set in the Forest Plan and we must address them. Some members of the public have also stated that they want the GMNF to provide grassland, shrubland, and early successional habitat types for other reasons. Currently two-thirds of the North Half of the GMNF is off limits to any forest management. These lands will continue to mature and provide large tracts of undisturbed forest. As stated in the Forest Plan on page 3.04 " ...the Plan calls for 208,000 acres of remote habitat, at least 100,000 acres of which will be "old Growth" by 2030. These unbroken tracts are currently available and will continue to be available for neotropical migrant source populations in the future.

Numerous recent publications have identified smaller, more fragmented forests as sinks for these neotropical migrants. Such species as wood thrush, black-throated blue warbler and ovenbird would not make it if all of Vermont looked like the Champlain Valley. Even in relatively continuous forest the presence of roads, including logging roads, has provided access for predators, nest parasites, exotic invaders, and desiccation leading to reduced arthropod populations and reduced neotropical migrant reproduction. Further, creation of grassland, shrubland, or early successional stands can be [Audubon Vermont Comments Page 2] accomplished by a bulldozer and a year of regrowth. Replacing mature forest takes a century. Thus, **we do not accept your contention that the GMNF needs to provide more early succession. There is a minimum size for fields, grasslands, and shrublands that will attract the neotropical migrants we associate with those habitats. A grassland that is too small to attract grassland species is simply a hole to be passed around, through, or over by the species living in the surrounding forest. No grasslands, and few shrublands we know of in the north half are large enough to attract species that require these habitats. 2-3**

Response to 2-3: As stated in response to comment 2-2, some members of the public want to see an increase in upland opening and early successional habitat for a variety of reasons. Small upland openings are important to other wildlife species and also for public recreation and enjoyment such as viewing wildlife. Your statement that no grasslands of adequate size to attract species requiring these habitat types are known on the north half of the GMNF is correct for most of the GMNF. Some areas however, such as Tupper Terrace (50 acres), and Mayo Meadow (70 acres) are maintained as grassland openings. Other forest openings such as Rob Ford Meadows (60 acres), Texas Gap Meadows (50 acres), Liberty Hill Meadows (65 acres), Gilmore Mountain opening (25 acres), and many stands between 5 and 25 acres are managed as shrubland habitats such as Fay's meadow (12 acres). No conversion of forest to grassland or shrubland habitats is planned in the North Half Overstory Removal Project.

Some existing grasslands or shrublands do provide edge for the few edge-selecting neotropical migrants like the indigo bunting.

Therefore we support EA alternatives that disturb the continuous forest cover least. The No Action alternative keeps skidders off the logging roads. That is the alternative we prefer. Second choice is Alternative 2, No harvesting in oak stands, primarily because of the broad benefit to all wildlife of the continued presence (possibly for another 200 years) of mast producing oaks. Third choice is Alternative 3, Modified harvesting in oak stands. 2-4

Response to 2-4: Your comment is noted.

We do not object specifically to a management objective of 10 percent of an area in seedling or sapling condition (EA, page 59), but would request that landscape and regional scale considerations be used in making such calculations. 2-5

Response to 2-5: We acknowledge your support of management that will maintain up to 10% of an area in seedling and saplings.

We offer a comment on "Impact on neotropical migratory birds" (page 57): Neotropical migratory birds respond to vegetation structure, not the species that

comprise the natural community. Removing the overstory changes the local forest structure significantly, causing some species to abandon the site, and others to move in. Black-throated blue warbler, a high priority Partners in Flight species in a region that holds a significant global percentage of black-throated blue breeding habitat, is a species that might be affected. While it is true that black-throated blue warblers require dense forest understory for nesting, they do not often occur in sapling stands with or without overstory. Black-throated blue warblers might possibly occur in shelterwood sites prior to overstory removal, but not after removal. Contrary to the statement on page 57 in Direct and Indirect Effects on Neotropical Migratory Birds, black-throated blue warblers will not benefit from overstory removal. Ovenbirds, likewise, never occur in sapling stands. From these species' perspective, rather than encouraging understory growth, the preferred alternative simplifies the complexity of the forest structure. If the overstory is removed, what's left isn't understory, it's early successional growth. 2-6

Response to 2-6: We believe we addressed how some species will move into or abandon the site following the removal of the overstory trees. We acknowledge that structural changes to the stands may impact individuals but we do not expect this project to effect populations of neotropical migratory songbirds. Since they occur in the stands now, we believe that black-throated blue warblers may still occupy these sites following the overstory removal because some overstory trees will remain following treatment and dense seedling conditions exist. We also acknowledge that stating that black-throated blue warbler and ovenbird habitat conditions would improve following the implementation of the project is incorrect. It appears that two other examples of ground nesting birds should have appeared on page 57 because on the next page we indicate that ovenbirds and black-throated blue warblers would lose suitable habitat following the overstory removal and it is likely that ovenbird habitat was not suitable following the first cut of the shelterwood.

We question your answer to public comment #7. The quote from Germaine would appear to contradict your conclusion that the overstory removal would have no effect. 2-7

Response to 2-7: We contend that the regeneration openings already exist and that we are not making new regeneration openings. We acknowledge that neotropical forest interior migrants are less abundant adjacent to small forest openings and that the effects on those species occurred when the shelterwood stage was implemented. The edges of these stands are currently established and new forest openings or expanded edges will not occur. Thus is the basis for our response that this concern does not apply to the North Half Overstory Removal project.

We applaud the Forest Service's active involvement in research on Indiana bats. The strides made in the last two years in understanding their habitat requirements have been exceptional. 2-8

Response to 2-8: Your comment is noted.

In the response to public comments on page I01, we question why Salisbury was not listed as a roost site as it was in the BE in Appendix B, and also on page 43. When this

site is included, the distance from roost trees to the National Forest boundary is 2.8 miles, rather than 6 miles 2-9

Response to 2-9: *The six miles refers to where particular radio-transmitter bats ended up in the spring. The Salisbury site is referenced on page 136. It is 2.8 miles from the National Forest Boundary but is also more than 3 miles from the project area stands. Since the project will be completed during bat hibernation, the locations and distances to those sites does not change this project's effects on Indiana bats.*

In the BE (page 136) you note "Indiana bats are choosing roost sites in woodlots in agricultural areas." While we agree this is the case, we think it has more to do with the potential for solar heat gain of trees partly or completely in the open. I bats don't appear to be using agricultural fields. They [Audubon Vermont Comments Page 3] may actually avoid them. Extensive fragmentation in the Champlain Valley means that any Ibat roosting there is near agricultural fields, like it or not. 2-10

Response to 2-10: *Your comments are noted. We have participated in radio telemetry work and emergence counts at roost trees and with the help of anabat recorders, we have witnessed Indiana bats and other species of bats feeding in open fields, forest openings, and landings adjacent to the wooded roost sites. As has been documented in other research, we agree with the importance of roost sites that maximize solar heating. Until we can better understand why Indiana bats in Vermont have chosen particular roost sites, and we acknowledge we may never fully understand how Indiana bats chose roost sites, we believe the distance from roost sites to open lands and actively managed forests is more than mere coincidence.*

Current knowledge indicates that the GMNF plays a very minor role in the lives of I bats. We expect that GMNF holdings in the Taconics will eventually be shown to have greater significance for I bats and other woodland bats because of the occurrence of shagbark hickory and warmer sites. 2-11

Response to 2-11: *We agree that recent research is identifying important sites for Indiana bat summer roosts in Vermont and New York and that the GMNF's role as providing suitable summer habitat is minor. We would contend the larger role of the GMNF is in continued research, conservation and recovery, and education. Research indicates that the sites chosen in Vermont and New York are similar to sites found within the central part of the Indiana bat's home range.*

The capture of two I bats on or immediately adjacent to the edge of the GMNF (and almost within one of the sites scheduled for overstory removal) suggests that the U.S. Fish and Wildlife Service consultation and the Threatened and Endangered Species Planning were efforts well spent. 2-12

Response to 2-12: *We thank you for this positive comment on our work with the USFWS and the efforts of our TES Team. It should be noted that recent survey site locations along the western edge of the GMNF were selected more for their proximity to areas known for summer roosting habitats and less emphasis has been placed on project driven survey sites. Since some of the overstory removal stands were also near the northwestern edge of the GMNF it enabled us to choose sites close to known roost areas and also survey within the*

project area. We have also tested the survey protocol at sites known to have Indiana bats. By catching Indiana bats at these sites, it proves that the USFWS protocol is effective and Indiana bats can be caught if they are present. It is also more probable that Indiana bats are not present in the survey sites where we have not caught them. Four years of bat surveys on the GMNF has found one roost site occupied by a solitary male Indiana bat in East Middlebury and one female Indiana bat was caught while foraging or traveling near National Forest land in Salisbury. Telemetry work shows that this female Indiana bat does not roost closer than 3 miles from the edge of the National Forest.

The discovery last year of a major extension of the Dorset cave which showed heavy traditional use by bats suggests that this cave, and others in eastern New York (research thus far has focused only on the Ibats from one mine in Mineville, NY) may be the source of bats breeding in the Taconics and the southernmost Champlain Valley.

We applaud your stated intent to review the concept of management indicator species as well as the species selected as indicators. 2-13

Response to 2-13: *Your comments are noted.*

Thank you for the opportunity to comment on the EA: North Half Overstory removal Project.

Sincerely yours,
James Shallow
Executive Director
cc: Warren King

LETTER 4

FOREST WATCH

10 Langdon Street Suite 1
Montpelier, Vermont 05602
PHONE: (802) 223-3216
FAX: (802) 223-1363
www.forestwatch.org

September 27, 2002

RE: Comments on the North Half Overstory Removal Project

Mr. Stephen Kimball
Green Mountain National Forest
99 Ranger Road
Rochester VT 05767

Dear Steve,

I am writing, on behalf of the Board and members of Forest Watch, to provide you with comments on the Environmental Assessment for the North Half Overstory Removal Project. Please consider these comments to be in addition to the comments submitted earlier by Forest Watch on the proposed North Half Overstory Removal Project.

Forest Watch is a regional, non-profit, 501 (c) 3, conservation organization with offices in Montpelier, Vermont. Forest Watch has over 5,000 members from across the nation, though most of them reside in Vermont and other New England states. - Forest Watch's mission is to save and re-create wild forests, protect imperiled species, promote ecological forestry and reform public land management. Since its inception in 1994, Forest Watch has been actively involved in the planning and decision-making processes on the Green Mountain National Forest.

Members of Forest Watch regularly use and enjoy the Green Mountain National Forest including lands in the proposed North Half Overstory Removal, Project, for hunting, fishing, hiking, camping, skiing, paddling, photography, wildlife watching nature study and other recreational, aesthetic and scientific activities. Many of Forest Watch's members regularly visit the Green Mountain National Forest to observe study and enjoy the rare and endangered plants and animals that inhabit the National forest, especially wilderness areas and other relatively wild, unlogged portions of it.

I have organized Forest Watch's' supplemental comments into 1-3 sections:

1. Premature NEPA Analysis
2. Proximity to Wilderness Values
3. Logging in Areas with Proposed Permanent Protections Against Logging
4. Elimination of Restoration Alternative from Detailed Study
5. Consideration of a Delayed Overstory Removal Alternative
6. Compliance With Forest Plan Standards and Guidelines
7. Vegetation Composition Objectives

8. Management Indicator Species/Minimum Viable Populations
9. Indiana bats
10. Northern Goshawks
11. Snags, and Dead and Down Trees
12. Irreversible & Irretrievable Commitments and Cumulative Effects
13. Economic and Social Accounting of Impacts

1. Premature NEPA Analysis

The EA for the North Half Overstory Removal was issued prematurely. The National Environmental Policy Act (NEPA) requires that decisions regarding environmental analyses of projects like this be made after all necessary permits are received and all necessary environmental studies are completed. In this case, the permits needed to cross private land have not been obtained and the environmental impacts of those private land crossings have not been assessed by the agency or disclosed in the EA, as required by NEPA. Issuance of an EA and reaching a decision about this proposal are premature given these deficiencies. 4-1

Response to 4-1: The permits had already been secured and environmental impacts have been analyzed in The EA, pages 34-98 and further in the attached SIR.

2. Proximity to Wilderness Areas

Removal of the overstory in Compartment 44, Stand 21 could affect the ecological and recreational values of the Breadloaf Wilderness, yet the EA fails to acknowledge or evaluate these impacts. Maps in the EA do not show the Wilderness boundaries or indicate in any way the close proximity of the proposed logging to the Wilderness. This is a serious flaw in the NEPA analysis, denying the decision maker adequate information upon which to base a decision. 4-2

Response to 4-2: The Deciding Officer has selected Alternative 3 with modifications that exclude harvest of this stand, therefore, we believe this is no longer an issue. See the Rationale for Decision section in the Decision Notice.

Stand 21 in Compartment 44 adjoins directly, and may cross, the legal boundary of the Breadloaf Wilderness. Careful examination of the stand by Forest Watch staff and volunteers found the stand was directly next to and may go inside the Wilderness boundary. Careful marking of the legal Wilderness boundary should be done and the effects of logging this stand should be evaluated fully before going forward with this project. 4-3

Response to 4-3: We have verified that stand 21 is located outside the Breadloaf Wilderness. This unit is not included in the project. See the Rationale for Decision section in the Decision Notice.

Citizens requested that the agency "consider the impacts of removing the overstory on freedom from noise, scenic beauty and recreation opportunities." The EA replies that these impacts were "addressed in the Environmental Consequences Section." (EA, p.

109). Unfortunately, the EA does not do an adequate job of addressing these impacts as it completely ignores the effects of the logging on the existing and proposed wilderness areas-places on the GMNF that provide the most pristine and scenic beauty, the highest quality backcountry recreation qualities, and the greatest freedom from noise. 4-4

Response to 4-4: The two units that were in close proximity to the existing Breadloaf Wilderness, compartment 44, stand 21 and compartment 28, stand 2, are not included in the selected action by the Deciding Officer. We feel that there is no longer an issue of impacts from removing the overstory on freedom from noise, scenic beauty and recreation opportunities. The closest remaining overstory removal units in the proposal, compartment 26, stands 6 and 10, are located approximately one mile away from the nearest wilderness boundary. Logging activity noises will be minimal, or not heard at all by Wilderness visitors.

The failure to provide citizens and the decision maker with maps and information regarding the effects that logging this stand would have on wilderness values interferes with citizens' abilities to comment on the proposal and makes it impossible for the decision maker to evaluate the alternatives and make an informed choice. Logging of this stand should be eliminated or the EA should be redone prior to going forward with logging this stand. 4-5

Response to 4-5: This stand is not included in the Decision. See the Rationale for Decision section in the Decision Notice. We will provide better maps in future project proposals.

3. Logging in Areas Proposed for Permanent Prohibitions Against Logging

The Vermont Wilderness Association has proposed permanent prohibitions against logging on various areas of the Green Mountain NF. These areas include additions to existing Wilderness areas, new Wilderness areas, and new National Conservation Areas and National Recreation Areas. Some of the proposed overstory removals are located in these areas and, if approved, could affect significantly the wilderness and ecological values proposed for protection. Unfortunately, the EA does not acknowledge or evaluate these impacts. 4-6

Response to 4-6: The two units, Compartment 44, stand 21 and compartment 28, stand 2, that are in the VWA proposal for Wilderness expansion have not been included in the action by the deciding Officer. See the Rationale for Decision section in the Decision Notice. Harvesting in stand 26, Compartment 69 will not preclude designation of the proposed Moosalamoo RNA. For information on the effects of harvesting in the stand that is within the proposed NRA, see the Supplemental Information Report in Appendix H. There are no sale units located in any of the proposed National Conservation Areas.

Among the areas in proposed Wilderness additions are Compartment 28, Stand 2 and Compartment 44, Stand 2 1. Other stands are located in the proposed Moosalamoo National Recreation Area.

The Forest Service was provided in November of 2001 with detailed maps and other information about the areas proposed by the Vermont Wilderness Association---

Forest Watch is a member---for protection from logging and the public benefits of adopting those protections. Nonetheless, the agency has failed to incorporate that information into its EA and decision making process. 4-7

Response to 4-7: *See response to 4-6 above.*

We request that the impacts of the proposed logging on the ecological, recreational and economic values of wilderness and other wild, unlogged forests be acknowledged and evaluated in the EA prior to approving this logging. Failure to disclose and evaluate this critical information in the EA denies the decision maker adequate information upon which to base a sound decision. 4-8

Response to 4-8: *See above response to 4-6.*

In the event that the agency believes it has sufficient information to move forward with overstory removals in some of the listed stands, we request that it not do so in any of the stands within areas proposed for protection by the Vermont Wilderness Association.4-9

Response to 4-9: *See response to 4-6.*

4. Elimination of Restoration Alternative from Detailed Study

A restoration alternative was recommended to the agency for detailed study and evaluation in the EA. This alternative was dismissed by the Forest Service and was not studied or evaluated in detail. A restoration alternative is a reasonable one to consider given the issues relating to management of the Green Mountain National Forest and to this project. Failure to develop and study a reasonable, colorable alternative such as this is a violation of the National Environmental Policy Act.

The agency uses an ill-founded rationale for not considering a restoration alternative. On page 27 of the EA, the agency says it was not feasible to study a restoration alternative because "it is highly debatable and subjective as to what point in time would be considered a 'pre-settlement' condition." This is false, but even if it was true, it is an insufficient reason to not consider a restoration alternative.

The first documented contact between Europeans and indigenous people in Vermont is widely thought to have occurred in the early 1600s.¹ Regardless of the exact date, there is widespread agreement among scientists as to the composition and structure of Vermont's forests prior to European settlement:. There is an abundance of information about these pre-settlement forests for the agency to use when building and assessing restoration alternatives. Please let us know if you would like us to provide you with any information on this subject.

¹Klyza, Christopher and Stephen C. Trombulak. 1999. "The Story of Vermont---A Natural and Cultural History." University Press of New England: Hanover.

The Forest Service's refusal to consider the restoration alternative in detail results in an overly narrow range of alternatives in the EA and a lack of adequate information upon which the decision maker can make a sound choice. Currently, the EA includes the Proposed Action alternative and two very slight variations on that alternative, as well as the no-action alternative. This is not the "reasonable range" of alternatives required by NEPA.

Forest Watch requests that you revise the EA by adding the restoration alternative to those studied in detail, and that you reevaluate the alternatives prior to making a final decision. This will ensure that the decision maker has adequate information as basis for making a sound decision about this issue---something the decision maker does not have now. 4-10

Response to 4-10: Our response as in the recent Old Joe project, is that a restoration alternative would not meet the Purpose of and Need for Action of the N 1/2 OSR Project (see EA, p. 27). The intent of a proposal such as this is to complete the shelterwood cuts by removing the overstory in these stands. This would move the project area closer to the Desired Future Condition (DFC) for the management areas affected, as called for by the Forest Plan. A restoration alternative was considered but it was determined that it would not move the area toward the DFC, and was thereby dropped from detailed consideration. We believe the range of alternatives is adequate for the size and scale of this project. Each alternative is reasonable and addresses public issues and Forest Service concerns.

5. Consideration of a Delayed Overstory Removal Alternative

The Forest Service failed, without adequate justification, to study a reasonable alternative proposed by the public---delayed overstory removal. Among the reasons given by the agency is the need for overstory trees to be "...of adequate health and vigor to live for at least another 40 years.² On the same page of the EA, it says that the remaining trees must "...have sufficiently small crowns to allow new regeneration to grow up around them."

On-the-ground reconnaissance by Forest Watch staff and volunteers found precisely those conditions in the stands that they visited. The overstory trees appear very healthy and the crowns are small, allowing ample sunlight to reach the seedlings and saplings below.

Moreover, the agency implies that the Forest Plan limits the use of delayed shelterwood cuts to stands that are highly visible and where protection of visual quality is a concern. This is not true. The Forest Plan allows delayed shelterwood cuts to be used wherever the agency deems them to be appropriate.4-11

²North Half Overstory EA, page 28.

Response to 4-11: *We disagree that delayed shelterwood cuts should have been considered. We defer to the professional judgment and experience of Forest Service staff in evaluating field conditions and developing silvicultural prescriptions. Furthermore, the Forest Plan states “that simply not removing a standard shelterwood overstory, is not proper application of the delayed shelterwood prescription (p.A.04).” We feel the No-Action and Action alternatives developed provide a reasonable array of alternatives for the decision maker to consider given the conditions of the stands and treatment options available.*

The EA provides the decision maker with false and misleading information when it says, "Leaving additional trees per acre in the Northern hardwood stands would not provide benefits to the young stands or other resources." Leaving the overstory provides additional benefits to: Indiana bats looking for roost trees and areas approaching "optimum" foraging conditions (50% to 70% canopy closure according to page 137 of the EA); snag-dependent creatures; raptors; visual quality; and recreational use, among others. 4-12

Response to 4-12: *Our recent survey work indicates that Indiana bats may be present near the stands in Compartments 46, 50, and 65 during the summer and mitigation measures are in place to reserve an adequate amount of potential roost trees (p.138). Our summer bat research also shows that live and dead shagbark hickories and large dead American elms are preferred roost trees. Presence of either of these tree species is extremely rare on the GMNF. Most OSR stands also begin at a lower canopy closure than what Romme indicates is optimal for Indiana bats. All of the alternatives, including the No Action Alternative will still leave the stands (with the exception of four oak stands) in a condition of partial canopy closure that is less than what Romme’s study indicates is optimal for summer roosting bats. Allowing all the overstory trees to remain and become snags could be beneficial to snag dependent species, however there is no indication that snags are lacking on the GMNF.*

Similarly, raptors will have no greater or lesser benefits from any of the alternatives. Sites visits have not found active or historic raptor nests within the OSR stands and we believe that foraging potential exists within any alternative because of the semi-open character of the stands.

Please consider that timber harvesting is restricted on about 60% of the forest and those forests will age and provide this habitat element.

In addition, the Plan calls for about 208,300 acres of remote habitat, at least 100,000 acres of which will be old growth in 2030 (Plan pg. 3.04). Also, according to Addison County Regional Planning Commission staff, about 25% of existing forest land in Addison County is already federally designated Wilderness and this land will continue to provide ample amounts of dead trees and snags to bats and other wildlife.

An alternative proposing delayed shelterwood cuts should have been considered and evaluated in this EA. Failing to do so denies citizens and the decision maker of [sic] essential information upon which to base a sound decision. 4-13

Response to 4-13: *See previous response 4-11.*

6. Compliance with Forest Plan Standards and Guidelines

Forest Plan Standards and Guidelines will be violated by the proposed project. One example is the proposal to locate a log landing (Compartment 150, Stand 3) within an area the Forest Plan defines as a filter strip needed to protect water quality. The EA also indicates that location of the log landing here will violate Forest Plan standard relating to protection of visual quality.

We request that the Forest Service adhere to all the standards and guidelines in the Forest [sic] In order to do so, the agency should leave the overstory in Compartment 150, Stand 3 or move the log landing.4-14

Response to 4-14: *This project complies with all Plan S&Gs. The landing location for stand 3 was selected because it was an existing landing, and based on field reconnaissance, no other suitable landing site exists. Though a portion of this landing is within the filter strip (as stated in the EA, page 31, bullet 5) it complies with the Forest Plan because the S&G on page 4.2, item 4c states, “Should there not be sufficient area to leave an adequate [filter] strip, other measures will be used such as sediment traps and settling basins.” To minimize the chance of sediment entering nearby streams the “other measures” to be implemented at this landing would be: the landing would only be used in the winter under frozen ground conditions; the landing would be seeded and mulched following use; and hay bales would be used to prevent sediment from leaving the landing (if needed). If it takes more than one winter to harvest the stand, and soil is exposed, we would seed and mulch the landing each spring (see SIR, Appendix H). These “other measures” bring use of the landing into compliance with the Plan. Also see response to comment 11-18 for protection of visual quality.*

We note the Forest Plan requires that log landings and other areas be revegetated with native species. This is particularly important in areas disturbed by logging and road building near Wildernesses. Unless the GMNF has obtained a native seed mix, something it lacked a short time ago, it will not be able to adhere to this provision of the Forest Plan. **If a native seed mix is still lacking, we request that the GMNF postpone projects that would disturb the soil and require reseeded in compliance with the Forest Plan until after such a seed mix is obtained. 4-15**

Response to 4-15: *The Forest Plan standards and guidelines for integrated pest management (page 4.88) and for using ground-disturbing equipment (pages 4.22 and 4.23) indicate that we should favor native species in restoring disturbed areas, but allow flexibility in the exact species content of the seed mix used. The Plan recommends grasses for soil stabilization of temporary skid roads and trails, and a combination of grasses and legumes that benefit wildlife for reseeded landings. While we have not yet specified the seed mix we will use, we will not use any mix that includes any of the species of non-native invasive plants that are now part of the state quarantine (see Attachment 1 of the SIR in Appendix H). In keeping with the Forest Plan, we will seek a mix with the highest percent native species that is also able meet the objectives of soil stabilization and providing wildlife food.*

7. Vegetation Composition Objectives

The North Half Overstory Removal Project contains many statements that early successional vegetation is lacking and more is needed. These statements are not supported by data provided in or cited in the EA.

Opportunity Areas within which the North Half Overstory Removal Project would occur, nor does it provide the specific composition objectives established by the Forest Service for those Opportunity Areas or the rationale for choosing those objectives. Any decisions you make regarding the need for the North Half Overstory Removal Project should be informed by this information. Forest Watch requests that this information be presented in a revised EA. 4-16

Response to 4-16: We feel our citations of the recent Wildlife Societies studies and publications regarding this topic and our tables shown on EA pages 34-35, and references to our recent Monitoring and Evaluation Report 2001, and discussion on page 9 of the EA clearly support that this habitat is needed. In addition, our incorporation by reference of the Forest Plan includes Plan age class distribution goals and specific species composition objectives.

At a recent meeting with Forest Watch members and Deciding Officer Steve Kimball regarding the appeal of the Old Joe Project, the concern over use of Opportunity Areas for planning was raised. Ranger Kimball informed Forest Watch that Opportunity Areas are no longer used by GMNF for planning.

8. Management Indicator Species/Minimum Viable Populations

The North Half Overstory Removal Project alleges that the Forest Service has collected adequate data on Management Indicator Species (MIS) populations and is in a position to make judgments about the viability of those populations and the effects of management activities on those populations.⁴ The EA does not reference the source(s) of the data to support this allegation, and Forest Watch is not aware that any exists. We request that you provide the data to us.4-17

Response to 4-17: The Forest Service is in a position to make a professional judgment that implementing the OSR project will not alter the amount of available habitat that each MIS species represents. Implementing the OSR project also will not contribute to the loss of viability of any MIS population because the OSR project is not changing the condition of the habitat communities identified in Table 8 (p.50 of the EA) and therefore will not lead to the loss of suitable habitat for MIS species. Appendix E describes population and community trends for MIS species and references the sources of the material.

⁴"Looking at forest-wide trends of MIS as a result of management actions and, more importantly, the habitat community they represent, also provides the resource manager with one means to help determine the status of the Forest's vertebrate community as a whole as well as the status of various wildlife species that each MIS is a proxy for." North Half Overstory Removal Project, p. 3-25

The North Half Overstory Removal Project correctly describes the need to collect MIS population data in order for the agency to determine how implementation of the GMNF LRMP is affecting biodiversity,⁵ in particular the maintenance of viable populations of vertebrate species.

Federal regulations (36 CFR 219.19) impose a clear duty on the USFS to "maintain minimum viable populations" of Indiana bats and other "native and desired non-native vertebrate species." The regulations state that for planning purposes a viable population shall be regarded as one which has the estimated numbers and distribution of reproductive individuals to ensure its continued existence is well distributed in the planning area.

The North Half Overstory Removal Project fails to describe the numbers and distribution of reproductive individuals needed to insure the continued existence of TES and MIS in the project area and on the GMNF.4-18

Response to 4-18: *Evaluations in Appendix B have determined the effects of the OSR project on TES species and Appendix E describes population and habitat community trends for MIS species. Because all of the MIS except peregrine falcon are abundant, we feel any single project is not likely to alter populations at the Forest, State, or Regional level and are not concerned about the effects of this project on continued existence of TES and MIS in the project area. It is also difficult to insure existence of species extirpated from the project area or for species not known to occur as outlined in Appendix B.*

What it does say is, "it has not been possible to state with any degree of certainty, what the population trends are for the majority of the MIS studied or for their community associates." (EA, page 105). This indicates a lack of required information and a lack of knowledge about MIS and an inability on the part of the agency to ensure that minimum viable populations of vertebrate species are being maintained in spite of its actions. This deficiency indicates the decision maker once again lacks adequate information upon which to base a sound decision. 4-19

Response to 4-19: *The decision maker has been provided with current status of MIS populations, habitat community trends associated with each MIS species, the consequences of implementing the project on MIS species, and the habitat community and population trends in Appendix E. The decision maker feels there is enough information to make a sound decision.*

⁵“Population trends of these 14 vertebrates (GMNF MIS) are assessed at a variety of scales: Forest-wide, State-wide and region-wide (northern New England). The intent of the MIS program is to compare assessment at these different scales to determine how LRMP implementation affects biodiversity within the Forest, State and northern New England region." North Half Overstory Removal Project, p. 3-26.

The duty to maintain viable populations is easily met for deer, fox, raccoons and other species with very general and relatively common habitat requirements. This duty is much more difficult to meet for Indiana bats, pine martens, lynx, goshawks and other species with very specific and unusual habitat requirements. Moreover, the duty cannot be met without collecting actual data on the number and distribution of the population in the planning area---something that the GMNF has failed to do.

Common sense tells us that the federal regulation requiring management for and maintenance of minimum viable populations was written primarily for the protection of relatively rare vertebrates like Indiana bats and Northern goshawks, and that the agency should have systematically collected and evaluated such data during the 15 years since the GMNF Plan was adopted.

Dr. Dave Capen at the University of Vermont evaluated GMNF's selection of MIS and reported to the Forest Service that several MIS are of little or no value as indicators of habitat conditions of [sic] effects of management on those conditions. This fundamental weakness in the GMNF's MIS monitoring and evaluation system should have been disclosed in the EA and must be considered and acknowledged in your final decision. Failure to disclose this significant information displays a bias on the part of the agency and denies the decision maker the information needed to make a sound decision.

A draft report done in 2002, regarding evaluation of MIS species on the GMNF is mentioned on page 104 of the EA. This report was not listed in the bibliography and, given its status as a draft, its utility is questionable. A comparison of the findings in this report with the earlier evaluation of MIS by Dr. Capen should be done and disclosed in the EA in order to adequately inform citizens and the decision maker.

The USFS has a duty to collect and consider actual population data to ensure viable populations are being maintained. Without such data, the agency has no scientific or evidentiary basis for concluding that the general protection guidelines contained in the Land and Resource Management Plan (LRMP) are sufficient to maintain species viability. Rigorous, systematic monitoring of actual populations has not been done, as required by law, so the agency cannot verify that the current LRMP will maintain viability of TES or other species. The recent court decision made by Judge Parker in the Southwest supports our Contention⁶. 4-20

⁶Forest Guardians, et al., v. United States Forest Service, No. CV 00-714 JP/KPM-ACE, US District Court for the District of New Mexico.

Response to 4-20: *We agree that it is difficult to maintain viable populations of species like Indiana bat, pine marten, Canada lynx, or other uncommon species particularly when data that we have collected indicates absence of individuals. Data collected for woodland bats has not found enough individuals to determine that viable populations of Indiana bats are within any recently surveyed project area on the GMNF. Canada lynx has not been detected on the GMNF and the closest documented population is in eastern Maine. Information on goshawks and other raptors has been collected and the habitat requirements of goshawks are different than those within the OSR project area. The MIS section of the OSR EA looked at how the proposed action and its alternatives would affect MIS species or change habitats for these species and associated species. Because all of the MIS except peregrine falcon are abundant, any single project is not likely to alter populations at the Forest, State, or Regional level.*

The reality is that the legal standard cannot be met without collecting actual population data and that the biologists can not know if these species are doing fine without such data. Banking on a law suit not being filed or on the deference of the courts does not change the reality of this situation---without hard, reliable data the agency simply does not know if the GMNF Plan or the proposed TES amendment are adequate to maintain the viability of MIS, TES, RFSS and other uncommon species populations.

The sufficiency of the agency's past monitoring for wildlife, and the availability and quality of data upon which to assess population viability should be fully disclosed and discussed in the North Half Overstory Removal Project and your Decision Notice.

4-21

Response to 4-21: *Since ranges of MIS, TES, RFSS, and other species extend beyond the extent of the GMNF boundary, population trends within the Forest cannot be made with certainty even with collected population data. With this said, the staff of the GMNF and its partners and contributors have collected population data for a number of species. Recent efforts have concentrated on uncommon, rare, and TES species.*

9. Indiana bats

The Endangered Species Act imposes two duties on federal agencies: (1) protect endangered species, and (2) promote the recovery of endangered species. The first duty is met by employing winter logging on the North Half Overstory Removal Project, thus ensuring no Indiana bats will be roosting in the trees when they are cut. Forest Watch believes that all logging on the national forest should be done during the winter months for this and other reasons.

The second duty is met only by the no-action alternative, but not by any of the timber cutting alternatives. The standards and guidelines adopted recently by the Forest Service regarding Indiana bats do little to nothing to promote the recovery of Indiana bats as required by the ESA. Both the Proposed Alternative and Preferred Alternative would remove the shelterwood overstory trees important to Indiana bats for roosting and

foraging, and all of the timber-cutting alternatives would fail to leave trees of sufficient size, age, species and distribution to ensure an adequate supply of roost trees is provided in the future.

The EA appears to state some very illogical and unscientific conclusions about the data gathered by the Indiana bat monitoring work. We request that the agency ask credible scientists to consider the data and to render written findings and recommendations based on those data. These findings and recommendations should be considered by the decision maker prior to making a final choice. We recommend that the agency consult with Steve Trombulak, an expert on bats teaching at Middlebury College, to review and interpret the data for the agency.

Please incorporate into these comments, the comments Forest Watch filed in response to the TES Amendment EA and the comments submitted in Forest Watch's appeal of the Forest Service's decision to amend the GMNF LRMP for TES protection.4-22

Response to 4-22: We disagree that only the no-action alternative will promote the recovery of Indiana bats. Recent survey work and data collection is not detecting Indiana bats on the forest except in two locations on the extreme western edge of the northern half of the GMNF.

For the second year in a row, the GMNF has contracted bat surveys with Environmental Solutions & Innovations, LLC. This company has done extensive work with woodland bats throughout the eastern half of the United States. The contractors have extensive peer reviewed publications, most notably Indiana bat work in Arkansas, Indiana, Kentucky, Ohio, Vermont, and Virginia. James Kiser, Eric Britzke, and Al Hicks, credible bat scientists, were involved in survey work in Vermont. J.Kiser's final report for the 2002 work on the GMNF was presented to the Northeast Bat Working Group meeting in Burlington Vermont in early November, 2002. This report is in the project files. We feel that the data collected by these competent and credible bat experts stands on its own merits and further interpretation is unnecessary. These reports have been sent to Steve Trombulak following an informal meeting on 11-12-02. Any assumptions within the EA are based on the data that was collected and professional judgment by staff biologists is disclosed within the document.

Comments sent in on other EA's or Decision Documents not specifically found within this letter will not be responded to here because those comments were addressed in the Decision to Amend the GMNF LRMP for TES conservation and in the recent Decision Notice for the Old Joe timber sale project.

10. Northern Goshawks

The Forest Service has a legal duty to maintain minimum viable populations of Northern Goshawks, a relatively scarce vertebrate species present in Vermont. In order to ensure it is meeting that duty, the agency needs to collect and evaluate actual population data for Northern goshawks so that it may understand the current status of goshawk populations and the effects of national forest management on them. 4-23

Response to 4-23: The agency has collected data on Northern goshawk nesting within the GMNF. Goshawks are not common on the GMNF or in Vermont, but the status of the

species has allowed it to be removed from the RFSS list in Vermont. The population has been expanding in recent years and the risk to the population in Vermont is reduced from what it was ten years ago. Goshawks have been documented foraging in upland openings, firewood cutting areas and shelterwood cuts on the GMNF. Four historic nest sites found on the Middlebury were found to occur next to roads and each within 300 feet of permanently maintained upland opening. They also have been documented to travel a considerable distance from nest sites to feed in forest openings. Goshawks have not been found nesting in conditions similar to those found in the OSR stands and removing the overstory trees will not diminish foraging potential. Nesting goshawks make themselves known when humans encroach the nesting territory. Multiple site visits by GMNF staff, over a period of years and during different seasons to the OSR stands has not resulted in the discovery of any nesting goshawks there. Since there is a possibility goshawks could migrate into or near the OSR stands in the future, mitigation measures to protect areas around nest sites can be implemented if goshawks are discovered. We have added a mitigation measure to respond to this concern also, see the SIR in Appendix H.

The EA does not provide any data or information about the presence or viability of Northern Goshawk populations on the GMNF. In the absence of such data, we request that the Forest Service apply the precautionary principle, assume goshawks are scarce and at risk, and apply mitigating measures to the proposal reflecting that assumption.4-24

Response to 4-24: *Your comment is noted and mitigation measures will be applied when and if they are necessary. See also response to 4-24.*

Managers of national forests in the Western United States are concerned about the viability of Northern goshawk populations; several national forests significantly restrict timber management to ensure logging does not harm goshawk populations. A literature review by Kathryn Meyer⁷, says:

Numerous studies concur that goshawk populations, reoccupancy rates, and reproductive success have been harmed by logging (Crocker-Bedford 1987, Crocker-Bedford and Chaney 1988, Crocker-Bedford 1990, Boyce et al 1993, Mannan and Smith 1994, Crocker-Bedford 1995, Reynolds and Joy 1998, Taylor 1998, Ingraldi 1998, Williams 1997; cited in Suckling 1999).

By creating forest edges and small habitat blocks., numerous studies support the contention that logging operations harm goshawks (Mannan and Smith 1993, Austin 1993, Widen 1989, Hargis et al. 1991: as cited in Broberg 1995). Researchers have found that logging practices creating large areas of reduced forest canopy cover (<35-40%) are especially detrimental to goshawk populations (Bright-Smith and Mannan 1994, Beier and Drennan, 1997). In Northern Europe, where forest management has reduced the amount of mature forest and increased fragmentation, goshawks populations declined 50-60% between 1950 and 1980 (Widen 1997, as cited in Daw et al. 1998).

Meyer's literature review also indicates that goshawks are much less abundant in the East than in the West and fledgling success rates are much lower here.

In North America, most Western goshawk populations at mid-latitudes have between 3.6 to 10.7 pairs/100km squared (Squires and Reynolds 1997), while Eastern populations are thought to occur today at much lower densities. For example, Goshawk populations in Pennsylvania were found to exist at densities of 1.17 pairs/100km squared - between 11 percent and 33 percent of the Western goshawk population densities (Kimmel and Yahner 1994, as cited in Squires and Reynolds 1997).

The number of young per successful clutch and pair is variable with most populations of goshawks in North America displaying an average of 2.0 to 2.8 fledglings per successful nest. This number may also be lower in the east than in the west. A study carried out in New York and New Jersey by Speiser (1992) indicated the average number of fledglings per successful nest was only 1.4 (as cited in Squires and Reynolds 1997). This number is lower than the threshold of 1.7 young fledged per active nest needed to maintain a stable population over time (Erdman et al. 1998).

⁷ Meyer, Kathryn. 2001. "Northern Goshawk: A Partial Review of the Literature." Research paper prepared for Forest Watch, 10 Langdon Street, Montpelier, VT 05602.

The relative scarcity of goshawks in the East, populations that are known (according to Breeding Bird Surveys) in the Adirondacks, and the knowledge that logging activities can harm goshawks, provides good reason for you to apply mitigating measures as strict, or stricter, than those applied in western national forests. Forest Watch requests that you give greater consideration to the protection and restoration of goshawks and that you apply strong mitigating measures to ensure their protection on the national forest.4-25

Response to 4-25: *Your comment is noted; see the above responses regarding goshawks.*

11. Snags, and Dead and Down Trees

The EA implies that there is no difference in the amount or quality of snags and dead and down trees found in forests that have been recently regenerated using evenaged management, and forests that are old-growth. This is false and entirely inconsistent with the scientific literature on forests. Moreover, this is misleading to citizens and the decision maker and denies the decision maker important information upon which to base a sound decision. 4-26

Response to 4-26: *Your comment implies that snags and down woody material is lacking within the OSR stands. To address this concern, we have looked at some of the OSR stands, a recent aspen clearcut, and two areas in Vermont where harvesting or forest management has not occurred to compare numbers of snags and down woody material. We specifically looked at conditions in Vermont considering northern hardwood forest types and Vermont climates. We looked at what the current condition of these habitat components are to project the impact of this project on wildlife using those habitat features. We found the number of snags per acre is similar within the areas we looked at and very little large diameter woody debris (greater than 24 inches in diameter) was found at this time. We did not make any determinations of quality in this sampling and only compared numbers or quantity of material to address what impacts the project might have on wildlife using snags, dead trees, and down material. What may have not been completely disclosed is that within the reserve areas, all trees eventually become snags and down woody material. In the managed stands, only some trees become snags or down woody material. Snags and down woody material is present across the GMNF and is not at risk of decline.*

The size, quality and amount of snags and dead and down trees affect the ecological integrity of a forest and the type and quality of habitats it is able to provide to a host of plants and animals, big and small. The agency has no credible basis for equating the conditions in young, regenerating forests with those in old-growth forests, and implying that these two very different types of forests play the same role in conserving and restoring biodiversity. 4-27

Response to 4-27: *We compared numbers of snags and down woody material in these areas at this time. The section of the EA (p. 61-63) did not say that regenerating forests are the same as old growth forest. The document also did not imply that these two different conditions play the same role in restoring biodiversity. We also know that a mixture of forest types, communities, and age classes is needed to ensure that all species are protected*

including the one-third that live in mature communities. Pages 61-63 of the OSR EA address the public comment that snags and down woody material is lacking. Results indicate that snags and down woody material is present now and will be after the project is implemented.

Please let us know if you would like information about the quality and amount of snags and dead and down trees in young, regenerating forests versus old-growth forests. The literature-and the differences-are substantial.

12. Irreversible and Irretrievable Commitments of Resources/Cumulative Effects

NEPA requires the agency to consider the irreversible and irretrievable impacts of its proposed actions, but it has not done this according to the EA. On page 109 of the EA, the agency says that "the question regarding what irreplaceable ecosystem values are lost when logging occurs is not within the purpose and need of this analysis." This is simply not true. The question is very much within the analysis and it should be considered and evaluated by the decision maker, especially with respect to the site specific impacts of the proposal.

The EA fails to fully consider and evaluate the cumulative impacts of the proposal and to evaluate its effects on reasonably foreseeable future actions. The EA is incorrect in stating that the "...only foreseeable actions within the area" is the Old Joe Timber Sale. A far more significant action is reasonably foreseeable in this area-- expansion of the existing wilderness areas and designation of National Recreation Area and National Conservation Areas.

It is a reasonably foreseeable possibility that the areas proposed for logging will be designated as Wilderness areas, National Conservation Areas, or National Recreation Areas. The agency knows this because of the detailed information it has received from the Vermont Wilderness Association. Nonetheless, the agency has failed to consider this reasonably foreseeable action and to evaluate the effects of its proposal against it.

Once again, this is a violation of NEPA and it fails to give the decision maker information essential to making a sound decision.4-28

Response to 4-28: Two stands within the VWA proposal area have been removed from the project (also see responses 4-2 through 4-6 regarding NRA and NCA's). Cumulative impacts have been disclosed in the EA and have been added to in the SIR.

13. Economic and Social Accounting of Impacts

The accounting of the economic and social impacts of the alternatives is incomplete and inadequate. Although information is provided in the North Half Overstory Removal Project, much of it is inaccurate or irrelevant to the issues, alternatives and decision.

For example, the timber volumes estimated for each of the alternatives appear to be incorrect in Table I0 on page 95. Calculation of these values using data provided

elsewhere in the EA indicate the volumes listed in the table are wrong. This means all the economic numbers in the table that derive from the timber volumes are wrong. The end result is that citizens and the decision maker lack adequate information upon which to evaluate alternatives and make a sound decision. 4-29

Response to 4-29: We believe the exact amount of volume and revenues that could be generated are best estimated because timber market conditions will ultimately decide the final revenues generated. The errors in volume you mention are very small in amount and while they generate some small errors in the analysis, they won't change the overall, relative comparison between alternatives, which is the goal of this analysis. We feel the public and deciding official can compare these alternatives and ultimately decide. Figuring the exact costs and revenues is not the purpose of the analysis and doing so, as the one commenter suggests, would add only a huge burden of cost, time and complexity to the document without adding value to the analysis.

One fundamental flaw in the analysis is the failure by the agency to consider, as required by law and agency direction, the full range of economic and social benefits and costs that would result if logging did not occur. We request that the USFS provide a full and fair accounting of the social and economic benefits and costs of all alternatives.

The Forest Conservation Council and Friends of the Earth filed written comments on the need for improved socioeconomic impact analyses in a June 28, 2002 letter to you. I have received a copy of those comments and have read them carefully; they communicate the need for and importance of social and economic analysis as part of the Forest Service project decision making process. I agree with the comments submitted by FCC and FOE, and ask that they be considered as part of Forest Watch's comments.

The Forest Service failed to consider all benefits and costs of the proposed action in the North Half Overstory Removal Project. In the EA, the Forest Service recognized its duty to consider the economic impacts of the proposed action, but it performed a cursory and incomplete analysis. The North Half Overstory Removal Project addresses only the economic values relating to timber production and only some of those; it does not consider all of the economic values as required by law.

The Forest Service must consider all benefits and costs, not just timber-related benefits and costs, when assessing the proposed action⁸.

⁸MUSY: 16 U.S.C. §§ 528,529,531; RPA & NFMA: 16 U.S.C. §§ 1600(3), 1600(7),1601(d)(1), 1602(2), 1604(g)(3),1606(a)- (d); 36 C.F.R. §§ 219.1,219.4(a)(1), 219.4(b)(1)(ii), 219.12,219.13,219.14; NEPA: 42 U.S.C. §§ 4332(A), (B), (C); 40 C.F.R. §§ 1501.2(a), 1501.2(b), 1502.6,1502.16,1502.24,1507.2(a), 1507.2(b), 1508.7,1508.8,1508.27; Forest Service's Economic and Social Analysis Handbook 1909.17.1 1.1; 1909.17.14.1; 1909.17.14.11; 1909.17.14.6; 1909.17.23; Forest Service's Timber Sale Preparation Handbook 2409.18.13.1; 2409.180322; and the Forest Service Manual 1970.1(1) - (3); 1970.2; 1970.3(1), (5); 1971.5; 2403.4; 2403.5.

The requirements to consider all benefits and costs are found in the Multiple-Use and Sustained Yield Act, the Forest and Rangeland Renewable Resources Planning Act, the National Forest Management Act, the National Environmental Policy Act, and Forest Service regulations and rules.

The EA does not consider the economic impact that logging will have on non-timber values. The Forest Service does not consider these externalized costs in the EA.⁹ These include the direct, indirect, and cumulative economic costs associated with:

- 1) lost recreational opportunities and decreased tourism;
- 2) degraded commercial and recreational fisheries within the boundaries of the Green Mountain National Forest and downstream and offshore;
- 3) degraded habitat for important game species and loss of hunting opportunities both within and outside of the Green Mountain National Forest;
- 4) increased pollution of water for cities, industries, businesses, and individual households downstream from the Green Mountain National Forest and increased costs of water filtration;
- 5) increased flooding and disruption of the normal flows in rivers and streams.
- 6) loss of non-timber forest products such as wild mushrooms, herbs, and medicinal plants;
- 7) exacerbation of global warming through release of greenhouse gasses;
- 8) diminished quality of life of neighboring communities;
- 9) loss of biological resources that either have value now or have as yet unknown but potentially large economic and social value;
- 10) loss of biological and genetic resources that can improve the long-term productivity of all forest land;
- 11) diminished pest-control services provided by species that prey on agriculture and forest pests;
- 12) diminished pollination services provided by species that pollinate important forest and agricultural crops.
- 13) lost jobs and income associated with timber production on private lands that is displaced by Green Mountain National Forest timber sales;
- 14) lost jobs and income associated with the production of alternative and recycled products that is displaced by subsidized Green Mountain National Forest timber sales;
- 15) death, injury, and property damage associated with logging on the Green Mountain National Forest, and;
- 16) increased risk of wildfires caused by adverse changes in microclimate, increased human access, and slash generated by timber sales.

Logging in the GMNF generates these externalized costs. The Forest Service has extensive literature and sources of data that it can rely upon to quantify the magnitude of these externalized costs at the forest and project level. Failure to incorporate externalized costs into the EA for the Proposed Action violates numerous statutes, regulations, and rules governing Forest Service management. 4-30

Response to 4-30: These are the same comments that have been raised for a recent, similar timber sale EA, the Old Joe Project. We disagree with your interpretation of what the laws say regarding the level of economic analysis required at this small scale of project

implementation. Please see Old Joe Decision Notice, page G-42 through G-46, wherein the rationale for the level of economic analysis completed for the Old Joe and therefore, the rationale for level of economic analysis for N ½ OSR Project, a similar timber sale is explained. What you are requesting is a level of analysis done at the Forest Plan level. A full economic analysis was completed in accordance to regulation during formulation of the GMNF Land and Resource Management Plan. Details may be found in its DEIS, Final EIS, and Record of Decision. It included a full assessment of the GMNF timber program.

This comment includes a long list of “direct, indirect, and cumulative economic costs”, and it appears that the commenter is asking for additional information regarding the externalized costs. The EA discloses the environmental effects related to most of the items in the list; some are well beyond the scope of this site-specific analysis. The commenter would have additional disclosure present these externalized costs in a quantitative, monetary analysis; however, as stated in the EA and other responses, NEPA does not require this method of disclosing environmental or economic impacts. Doing so would not provide any key information that could lead to a different decision by the Deciding Official. It would significantly add to the cost, time and complexity of analysis for this size of project.

The Forest Service must consider the values of non-timber resources, as well as the costs, as it is required to do by the governing statutes, regulations, and rules. The Forest

Service must include the economic value of unlogged forests.¹⁰ These economic benefits are associated with:

- 1) recreational opportunities and tourism;**
- 2) commercial and recreational fisheries within the boundaries of the Green Mountain National Forest and downstream and offshore;**
- 3) habitat for important game species and hunting both within and outside of the Green Mountain National Forest;**
- 4) water for cities, industries, businesses, and individual households downstream from the Green Mountain National Forest;**
- 5) the regulation of water flowing through rivers and streams, including flood control;**
- 6) non-timber forest products such as wild mushrooms, herbs, and medicinal**
- 7) plants; mitigation of global climate change through absorption and storage of vast amounts of carbon;**
- 8) enhancing the quality of life of neighboring communities;**
- 9) harboring biological resources that either have value now or have as yet unknown but potentially large economic and social value;**
- 10) harboring biological and genetic resources that can improve the long-term productivity of all forest land;**
- 11) pest-control services provided by species that prey on agriculture and forest pests, and;**
- 12) pollination services provided by species that pollinate important forest and agricultural crops.**

⁹ The Forest Service is aware of these costs and methods exist to measure them. See Declarations of Ed Whitelaw, Thomas Power, Randal O'Toole, Karyn Moskowitz, Jeff Debonis, and John Talberth, incorporated here by reference and on file with the Regional Forester.

These are important economic benefits generated in the GMNF. The Forest Service has extensive literature and sources of data that it can rely upon to quantify the magnitude of these economic benefits at the GMNF level. Failure to incorporate into the EA information about the social and economic implications of the proposed action violates numerous statutes, regulations, and rules governing Forest Service management. The requirements to consider all benefits and costs are found in the Multiple-Use and Sustained Yield Act, the Forest and Rangeland Renewable Resources Planning Act, the National Forest Management Act, the National Environmental Policy Act, and Forest Service regulations and rules. ¹¹

Moreover, the GMNF LRMP requires the Forest Service to determine if the financial benefits of a proposed timber sale exceed the financial costs. The GMNF LRMP prohibits the implementation of most timber sales that generate costs in excess of benefits. The GMNF LRMP gives a short list of exceptions for allowing below-cost timber sales.¹²

The only way for the Forest Service to satisfy this very specific standard in the GMNF LRMP is to compare the total financial costs associated with the proposed timber sale with the total financial benefits expected from the timber sale. NEPA requires the same comparison to be done for each alternative considered.

The Forest Service acknowledges that the North Half Overstory Removal Project does not account for all of the financial costs and benefits of timber production. This means the agency has no way to determine, as required by the GMNF LRMP, if the proposed timber sale will generate financial revenues greater than financial costs. Approving the North Half Overstory Removal Project without performing the required financial benefit- cost analysis would be arbitrary and capricious, and a violation of the GMNF LRMP. Forest Watch requests that you perform the required full accounting of financial benefits and costs, and disclose the results to the public before approving the proposed sale. 4-31

Conclusion

Contact me if you have any questions about these comments or if you would like to discuss them.

Sincerely,

James M. Northup
Executive Director

¹⁰ The Forest Service has information about the economic value of unlogged forests. See Declarations of Ed Whitelaw, Thomas Power, Randal O'Toole, Karyn Moskowitz, Jeff Debonis, John Talberth, Robert Costanza, Rex Cullum, Laura Erickson, Al Espinosa, Larry Evans, Brock Evans, Timothy McDevitt, Ron Mitchell, Jerry Murphy, Ronel Paddock, Mary Vogel, and Thomas Vuyovich, and incorporated here by reference and on file with the Regional Forester.

¹¹ See citations at Footnote 19 [sic], supra.

¹² GMNF LRMP, pp. 4.594.60.

¹³ North Half Overstory Removal Project, pp. 94 to 96.

Response to 4-31: *Again, please see response to 4-31, wherein the rationale for the level of economic analysis completed for the N ½ OSR Project is explained. The Multiple-Use Sustained-Yield Act (MUSYA), 16 U.S.C. 528, simply states that the national forests shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes. In regards to the definition of “multiple use” found in 16 U.S.C. 531, it also states that consideration [shall be] given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output.” MUSYA does not require the agency’s resource management decisions to be determined by economic efficiency. MUSYA’s mandate to give “due consideration” to the “relative values” of “various resources” gives considerable discretion to the Deciding Official with regard to the type, amount, and degree of analysis needed to support its management actions. Furthermore, consideration of resources is fully evident throughout the discussion of environmental consequences in Sections A-F, pages 34-98 of the EA.*

An economic analysis of the N ½ OSR Project was completed and may be found in the EA, pages 94-98. The deciding official (Ranger Kimball) helped determine which parameters to use. The costs and revenues of this analysis, along with achievable public benefits and the value of non-priced benefits (also see response 11-2,), were considered in developing the Alternative 3, with modifications.

LETTER 9

September 27, 2002 USDA Forest Service

ATTN: District Ranger 99 Ranger Road
Rochester, VT 05767

This letter is in response to the North Half Overstory Removal Project.

The Forest Service has failed to adequately address the cumulative impact of 19 separate actions covering the entire north half of the GMNF. Ten separate previous timber sales are represented by this proposed action, dating back as much as 18 years. The cumulative impact of all these actions is, of course, profoundly greater than each timber sale as it occurred over the decades, and needs to be addressed. This sale is proposed at the same time as the old Joe sale, another large sale with stands miles apart, and also occurring in the north half. There seems to be a new trend in proposing as single sales what should really be considered as a series of separate sales. Old Joe and North Half should be viewed as at least twelve timber sales. The cumulative impact study needs to reflect this. 9-1

Response to 9-1: *We developed the proposal because of the similar nature of the stands and their harvest history in order to conduct a more comprehensive analysis. The cumulative effects analysis is being supplemented to provide more information and detail (see SIR, Appendix H).*

These actions will create additional opportunities for illegal off-road access. If the Agency is unable or unwilling to commit the resources to prevent illegal motorized use of National Forest lands, at least plan to gate proposed skid roads. 9-2

Response to 9-2: *The overstory removal on the proposed sale units will utilize the same roads that were used for the initial harvest operation. Some short reroutes of skid trails to avoid impacts and meet S&G's may be made. There will be no net increase in these types of trails therefore, there will be no additional opportunities for illegal off-road vehicle access. We do not plan on further gating all skid roads. As sale units are completed, barricades, such as earthen "tank traps" and large boulders, will be placed to discourage illegal use on skid roads through the sale areas. This issue has been addressed in the Environmental Assessment on page 66.*

Rather than just considering a range of nearly identical timber sales, and the "no action alternative- which is never chosen, the Agency should consider a range of meaningful alternatives. One action would be to close and re-vegetate all skid roads in the project area. 9-3

Response to 9-3: *We believe the range of alternatives is sufficient and meet the purpose and need. Additional alternatives that do not address the purpose and need or produce meaningful outputs in terms of good and services or habitat created would not be feasible.*

The Agency has provided inaccurate maps in the North Half EA. Important roads, such as the Lincoln-Ripton Road and many others have been whited out on the maps

making the location of proposed sale units difficult. In addition to being misleading, the maps are nearly illegible, with forest road and stand numbers a tiny blur. If the Agency would like to appear as though it is interested in a response from the public, finding the sale units by using the provided maps should be made possible. 9-4

Response to 9-4: We will improve the maps in the future. Members of Forest Watch did ask for more information and maps, and were provided with detailed information. The maps provided in the Scoping letter and EA were not intended to be used by the general public for detailed navigating throughout forest, however we did provide additional information upon request.

A basal area of 25 feet +/- (as in stand #28002) provides more than adequate light for understory trees. This is clearly evidenced by thick growth of berry canes in the stand. Young trees will not benefit from having "skidders, forwarders, feller-bunchers, and treaded equipment such as bulldozers" driving on them. 9-5

Response to 9-5: As stated in the purpose and need we believe these young trees would benefit from more sunlight and less competition for nutrients from overstory trees. Yes, as we stated, some will be damaged from logging equipment or by felling of larger trees and in the short term may not look attractive. Our experience however, over decades, has shown that using the shelterwood system of regeneration is very successful in growing new stands of timber. Because of the large number of seedlings/saplings per acre, and the fact that damaged young trees will resprout if damaged during winter months, we feel this will not negatively affect stand development in the long term. There are hundreds of stands that have been harvested and regenerated successfully in this manner. In addition, once the mature trees have completed their role in establishing the new stand, harvesting some of these trees while they still have economic value is one of the goals and objectives in MA 4.1.

Continued need for quality seed trees in stands. Again see #28002 which has raspberry, striped maple, some red maple, and a lot of beech. The existing overstory trees, including hard maple and yellow birch, will provide seed for shade tolerant hardwoods that this site is idea for growing (compare the surrounding forest to see what this site may look like when it is allowed to recover). 9-6

Response to 9-6: Your Comment is noted. As stated in The EA, we do not intend to remove all of the larger trees from these stands. They will provide seed and seed can blow in from adjacent stands as well.

Many of the proposed logging projects are too close to recreational resources (e.g., 28002 is adjacent to Emily Proctor Trail, 69026 is on Widow's Clearing Trail, 50029 is on Oak Ridge Trail, 44021 is on the Clark Brook Trail). 9-7

Response to 9-7: Two of the sale units are not included in the Selected Alternative: compartment 44, stand 21 and compartment 28, stand 2, are no longer an issue of close proximity to recreational trails. See the cover letter and the Rationale for Decision section in the Decision Notice. Mitigation measures to address the disruption to the Widows Clearing Trail and Oak Ridge trail have been discussed in the Environmental Assessment, pages 64 and 65. It should also be noted that three of the trails you list are trails that

utilize logging roads and are not merely recreational resources but roads and trails that provide multiple benefits for a range of uses. Our transportation system has many uses. Our discussions, planning and coordination with trail groups and partners such as The Green Mountain Club and Catamount Trail Association indicates these groups recognize and accept intermittent use of these roads and trails for other public uses is necessary.

Several of the proposed actions are within the recent Wilderness proposal. 28002 and 44021 are in the proposed Breadloaf additions, and 69026 is in the proposed Moosalamoo NRA. Since this proposal has the support of Vermont's entire conservation community, is before the Congressional delegation, and has been introduced publicly as part of the Agency's planning process, it would be appropriate to withdraw actions in those specific areas. 9- 8

Response to 9-8: Compartment 44, stand 21 and compartment 28, stand 2 are not included in the selected alternative. Compartment 69, stand 26, within the proposed Moosalamoo NRA, is not being dropped because harvesting the overstory will not preclude the designation of an NRA (see SIR). Since the guidance for NRA's is less rigid and timber harvest is consistent with NRA designation, the inclusion of a small sale unit would not affect future designation as an NRA.

Additionally, stand # 44021 is at the boundary of the existing Breadloaf Wilderness, as well as being adjacent to a popular hiking trail that provides access to this recreational resource. The maps provided with the EA failed to indicate that this sale unit is only feet away from the Wilderness boundary. 9-9

Response to 9-9: Compartment 44, stand 21 is not included in the Selected Alternative, therefore no longer an issue. See the Rationale for the Decision section in the Decision Notice.

46021 is also on a steep, east-facing slope with the Clark Brook as a boundary. This raises concerns of both increased sedimentation of the brook, and slow regeneration on this slope at nearly 2000 feet in elevation. How much time does the Agency anticipate will be required before the Northern hardwood stand, to which this slope is suited, will recover? 9-10

Response to 9-10: Concern over this stand is moot because harvest is not included in the Selected Alternative. Past and more recent monitoring shows that stands such as this can be logged without contributing to sedimentation. We had no complaints or problems noted regarding sedimentation with the first harvest. The stand of Northern hardwoods and red spruce has already adequately regenerated itself from the first harvest and that is why it was considered for final harvest of the overstory to release the young growth.

44021 is also a mile from FR 55. Creating large openings a mile from existing roads fragments the forest. The remaining access road provides access for invasive species, contributes to predation on songbirds, and encourages illegal ATV access. 9-11

Response to 9-11: *Compartment 44, stand 21 is not included in the Selected Alternative; therefore this is no longer an issue. See the Rationale for the Decision section in the Decision Notice.*

Estimated cost to implement this sale is reported as ranging from \$30,000 to \$42,700. Does this estimate reflect the full costs from the development of the project, site-specific monitoring for MIS, scoping, preparation of the EA, NEPA consultation, full consideration of alternatives, managing the bidding, writing the contract, and actual administration of the sale? The initial scoping was nearly 3 1/2 years ago, so this project is four or more years old. What is the cost for agency staff time already committed to this proposal? The final EA should provide an actual breakdown of real costs to the Agency of developing this sale. 9-12

Response to 9-12: *Since the costs of the analysis are born by the Forest regardless of the alternative developed or selected, we did not itemize them and did not try to estimate the full cost. The deciding official helped determine the items to display that would help him understand the relative cost of implementing this project, but not to project costs down to the dollar nor to estimate the cost of developing this project.*

As stated, cost estimates were made from per unit costs for doing certain tasks from the last year we sold timber and tracked these costs in TISPIRS.

Detailed Agency staff costs per project are not tracked and indeed would be difficult given the period of time that has passed, the changes in accounting systems used and given the amount of other similar projects that our staff work on concurrently.

After providing the real costs, the Agency should report what, if any, funds are returned to the Treasury. Does this sale provide a net public benefit with all profits going back to the public at large? 9-13

Response to 9-13: *We are unable to determine exactly what funds would be returned to the Treasury because at this time we cannot say exactly how much the sale will sell for. Since all revenues generated from timber sale activity either are returned to the Treasury, to Towns (in the 25% Fund) or are allocated to funds like the Knudsen-Vandenburg Fund for specific sale area betterment projects involving reforestation, wildlife, fisheries or recreation, we feel there would be many benefits for the public at large.*

While public comment has been solicited, and no decision officially announced, skid roads and boundaries have been flagged. This additional commitment of resources presumes an outcome. This makes public input only an impediment to planned agency actions. Don't mark your sales and then pretend you really want to know what we think. It appears duplicitous. 9-14

Response to 9-14: *It is common for us and other National Forests to flag proposed access routes, skid trails, property and harvest boundaries, etc. at this point. This enables specialists to find the sites and conduct their fieldwork. Indeed, flagging can help the public understand where these units are. We have not marked timber in any of the units proposed for harvest.*

The EA indicates that, except for old Joe, no other sales are planned for the area. If this is the case, why are boundaries remarked in stands that were selectively cut on the west side of the skid road in Clark Brook? 9-15

Response to 9-15: We have not marked boundaries in this area for this project. There are two possibilities regarding the boundary you mention. It was either a boundary that was remarked during the last sale in that area, Clark Brook III Re-offer, which closed in the summer of 1999 or it could be a boundary on nearby private property.

While the Agency is planning additional timber removal, it would appear that some parts of the previous sale remain incomplete. Many low-quality trees that were marked with orange paint indicating a cut tree remain in the stands, while, presumably, the large-diameter saw-timber trees were removed. Has the contractor met all the requirements of the previous sale? If not, how has the Agency sought to remedy the situation? 9-16

Response to 9-16: The terms of the contract were met and the sale is closed as stated above.

The Agency displays a clear bias in the section on Indiana bats by using a loose interpretation of scientific studies to justify actions, and by cynical, sarcastic comments about creating large openings on western slopes of GMNF (the Agency failed to propose removing the mountains as well as the trees to recreate valley farmland conditions). 9-17

Response to 9-17: The Agency used professional judgment and research to develop the section of the EA pertaining to Indiana bats.

How many bats were tracked in the Spring study? Of these, how many returned to the hibernaculum because of unseasonably cold weather. While the Agency is quick to draw conclusions about habitat requirements, the fact remains that most of the population of the bats was not located. Finding single bats roosting in the Champlain in extremely cold conditions does not tell us that the forest should be turned into farm fields. To say so is improper and shows prejudice. 9-18

Response to 9-18: During the spring telemetry work, 19 bats flew away from the Barton Hill Mine, 16 were followed to roost trees, and none of the bats in this study returned to the mine. The 16 individual bats followed in this study are a representative sample. Where these individuals migrated to shows a pattern for a larger population. Other aspects such as available aircraft, flight scheduling, availability of equipment and personnel, and funding were factored into the decision of how many bats would be tracked in the spring of 2002. We will continue research on where Indiana bats are roosting in Vermont. Assumptions made in the EA were based on the past two years of research which found we are catching Indiana bats in the Champlain Valley and near the northwestern edge of the GMNF and we continue to not find Indiana bats in other areas of the GMNF and the Green Mountains.

Does this study truly show that bats travel 10 miles from hibernaculum when previous studies of species found 200 mile trips? Doesn't the study actually show that some bats travel as little as ten to twenty-five miles before finding a roost tree? 9-19

Response to 9-19: *Yes. It is known that hibernacula for Indiana bats have specific temperature requirements for hibernation. There are also specific summer roost habitat parameters required for site utilization by Indiana bats or other woodland bats. If there is a large distance between the two, it has been shown that Indiana bats will migrate a considerable distance. If good roosting habitat is available a short distance away from the hibernacula then, as our recent survey work indicates, Indiana bats are utilizing those areas.*

What we've learned is that we still don't know where most of these bats go in the summer. 9-20

Response to 9-20: *We know which sites are active hibernacula because caves and mines in Vermont and New York are surveyed during hibernation. We found that radio telemetry can be used with a high degree of success to follow migrating Indiana bats. We found that some roost trees used by tagged Indiana bats, were also used by many other bats, suggesting that these roost trees contain maternity colonies. We know that the USFWS survey protocol has been validated because Indiana bats were caught using the protocol. One site has several documented roost trees where young of the year Indiana bats were captured during the summer. We know that two Indiana bats were tracked to roost sites in Salisbury and Orwell Vermont in 2001. One individual was located in Panton Vermont in 2001 but a roost site was not located. Summer surveys also found Indiana bats in East Middlebury, Salisbury, and Orwell, Vermont in 2001. We know that sixteen individual Indiana bats were followed to Hinesburg, Ferrisburg, New Haven, Weybridge, Cornwall, Shoreham, and Orwell, Vermont and also to Crown Point and Ticonderoga, New York in 2002. There was one signal found in the air but never verified on the ground in Monkton, Vermont.*

Follow-up summer surveys found Indiana bats in Addison, Ferrisburg, and Salisbury, Vermont and Crown Point, New York in 2002. And finally, recent surveys have not captured Indiana bats in Danby, Dorset, Weston, Peru, Ripton, Stockbridge, and Granville, Vermont. We believe that the surveys are showing us a pattern of suitable and unsuitable habitat and the pattern is indicating that most of the GMNF is lacking physical or environmental factors identified with suitable habitat

Thank you for the opportunity to comment.

Mick Petrie

Country Commons 2D

Vergennes, VT 05491

LETTER 10

VERMONT WILDERNESS ASSOCIATION
P.O. Box 15
Montpelier, VT 05601-0015
www.vermontwilderness.org

September 27, 2002

RE: Comments on the North Half Overstory Removal Project

Mr. Stephen Kimball
Green Mountain National Forest
99 Ranger Road
Rochester, VT 05767

Dear Steve,

I am writing on behalf of the Vermont Wilderness Association (VWA), a coalition of 16 conservation organizations committed to conserving and restoring wilderness in Vermont, to provide you with comments on the North Half Overstory Removal Project. As you know, the VWA is pro-wilderness-not anti-logging. The groups within the VWA hold a broad spectrum of opinion on what constitutes an appropriate level of timber production on the Green Mountain National Forest and, as the VWA, we would not normally comment on individual proposed timber sales.

However, concerns have been raised about the impacts of the North Half Overstory Removal Project on the Breadloaf Wilderness Area and other areas the VWA has proposed for new Congressional designations.

For example, it seems likely that removal of the overstory in Compartment 44, Stand 21, would adversely affect the ecological and recreational values of the Breadloaf Wilderness Area, yet the Environmental Assessment fails to acknowledge or evaluate these impacts. Maps in the EA do not show the wilderness area boundaries or indicate the close proximity of the proposed logging to the existing wilderness. This is a serious flaw in the NEPA analysis, denying citizens and the decision maker adequate information upon which to base a decision.

Careful examination of Stand 21 in Compartment 44 by members of the Vermont Wilderness Association suggests that the stand is directly next to, and may even go inside the wilderness area boundary. The legal wilderness boundary should be clearly delineated on the ground and the effects of logging this stand should be disclosed and evaluated fully before going forward with this project.

The Vermont Wilderness Association has proposed- permanent prohibitions against logging on various areas of the Green Mountain National Forest. These areas include

additions to existing Wilderness Areas, new Wilderness Areas, and new National Conservation Areas and National Recreation Areas. Some of the proposed overstory removals are located in these areas and, if approved, could significantly affect the wilderness and ecological values of these special place[s] we seek to protect for future generations of Vermonters to enjoy. Unfortunately, the EA does not acknowledge or evaluate these impacts.

Among the areas in proposed Wilderness additions are Compartment 28, Stand 2 and Compartment 44, Stand 2 1. Other stands are located in the proposed Moosalamoo National Recreation Area.

The Forest Service was provided in November of 2001 with detailed maps and other information about the areas proposed for new Wilderness Areas, National Recreation Areas, and National Conservation Areas by the Vermont Wilderness Association. Congressional designation of these areas is a reasonably foreseeable action that, according to NEPA, should be considered as part of the EA. Nonetheless, the agency has failed to incorporate that information into its EA and decision making process.

I would request that the impacts of the proposed logging on the ecological, recreational and economic values of wilderness and other wild, unlogged forests be acknowledged and evaluated in the EA prior to approving this logging. Failure to disclose and evaluate this critical information in the EA denies the decision maker adequate information upon which to base a sound decision.

In the event that the agency believes it has sufficient information to move forward with overstory removals in some of the listed stands, we request that it not do so in any of the stands within areas proposed for protection by the Vermont Wilderness Association. 10-1

Response to 10-1: *These are the same comments raised in other letters from members of VWA. See letter 4, response to comments 4-2 through 4-6.*

Sincerely,

Tom Butler, Director of Education and Advocacy
Wildlands Project

LETTER 11

THE WILDERNESS SOCIETY
Northeast Regional Office

4S Bromfield Street, Suite I 101,
Boston, MA 02108 617-350-8866
fax: 617-426-3213 www.wilderness.org

Steve Kimball
Green Mountain National Forest
Middlebury and Rochester Districts
ATTN: District Ranger
99 Ranger Road
Rochester, VT 05767

September 26, 2002 Dear Steve:

Thank you for the opportunity to comment on the Environmental Assessment for the North Half Overstory Removal project. We are always interested in the management of the Green Mountain National Forest (GMNF) and the projects proposed to implement the Forest Plan.

We have a number of questions and concerns with the project that we feel must be addressed. We believe the NEPA analysis conducted has insufficiently analyzed and disclosed cumulative effects, proposes a violation of the Forest Plan and contains numerous errors that leave the decision maker without adequate information on which to base an informed decision.

Stand Errors and Economic Assessment

A review of Tables 1, 2 and 3 and the project narrative descriptions reveal a number of errors. Table I lists 19 total acres that will be harvested in Compartment 58, yet the description on page 12 describes 31 acres of harvest. The actual Total Stand Acres in Table 3 are 282, not 255 as reported (found by adding the column). The Total Harvest Acres equal 264, not 237. The narrative also describes a reduction of 6 acres of harvest in Compartment 65, Stand 19, which is not shown in Table 3. Total estimated CCF for Alternative 3 is 1,014, not 988 and total estimated MBF is 607, not 592 as reported. These errors cast doubt on the actual details of the project proposal and alternatives. The errors are then compounded when one reviews Table 10, Economic Benefit its and Costs. The numbers reported in the Total Estimated Volume row do not even match the numbers reported in Tables 1, 2 and 3 let alone reflect the correct totals. (The Proposed Action is listed as 739 MBF instead of 700, Alternative 2? - listed as Alternative B - is shown as 514 MBF instead of 487 and Alternative 3? - listed as Alternative C - is shown as 625 MBF instead of 607.) Since costs are built from the estimated volume, most of the figures in the Table are incorrect. The errors in the Table and the incorrect names for the Alternatives lead us to question whether this is the actual economic analysis for this project or whether it is really the analysis for another project entirely. 11-1

Response to 11-1: *We apologize for mistakes in the document regarding these items.*

- 1.) *The narrative description of the Proposed Action on page 12 of the EA, showing our proposal to harvest 31 acres is the same amount as was incorrectly listed in the original scoping letter. However, we believe the table in the scoping document on page 8 and table 1 on page 17 in the EA both indicate our true intent to propose harvest on only 19 acres.*
- 2.) *The 255-acre figure in Table 3 is a typographical error. The total stand acres for Alternative 3 should be the same as that shown for the Proposed Action. The narrative clearly indicates we would be harvesting the same stands in the Proposed Action and the same acres except at different intensities. We feel our intent is clear.*
- 3.) *The 237-acre figure is a typographical error. The figure should actually be 254 acres which reflects the description of Alternative 3 where two acres are removed from Compartment 42, stand 15 for plant protection and 6 acres are removed from Compartment 65, stand 19 for monitoring of the stand development and providing a possible area for study of prescribed fire effects and harvesting.*
- 4.) *We agree that table 3 does not show that the 6 acres would be reserved from harvest but the narrative and specialist discussion of the environmental consequences indicate our intentions to do so.*
- 5.) *We agree that are differences in estimated timber volumes shown. These mistakes are a result of using new formulas for converting timber volume MBF's to CCF's and CCF's back to MBF's to get volume estimates. However, given that these were only volume estimates and the differences are so small, amounting to less than 5 percent of the total volumes estimated, we feel the information presented is adequate for the Decision and that these small differences do not negate the estimates nor their use in the economic analysis where volumes, revenues and benefits were calculated and estimated. Further, as stated in the EA, the analysis was to give the District Ranger a general idea of how the proposal and alternatives differed. It was not to derive the exact amount of timber offered or the exact amount of money paid for timber or paid to the towns in the form of 25% Fund payments. Nor would decision be made on the basis of these figures.*

The decision maker is left with no economic information on which to evaluate his decision. We realize that the decision maker has the authority to decide the parameters of the economic assessment, but are concerned that the decision maker doesn't believe an analysis of non-priced benefits is necessary to his decision. This is especially troubling when the analysis shows 'local employment is largely centered on retail and service sectors' (EA, pg. 96), employment sectors more likely to benefit from a consideration of non-priced factors. 11-2

Response to 11-2: *We believe we have adequate understanding of the analysis of non – priced benefits as described in the Forest Plan and what benefits would result from implementation of the project. The project would result in these selected non-priced benefits that are listed in the Plan.*

Wildlife- Limited creation of temporary openings and early sucesional habitat

Improvement of regeneration of mast producing species

Preservation and regeneration of uncommon species

Recreation- Provide pedestrian access

Provide opportunities for berry picking

Create temporary vistas
Provide parking areas
Timber- Replace mature, low quality stands with vigorous, young growth
Provide fuel wood
Salvage dying material

Connected Actions

It appears a past decision under NEPA may not have been 'ripe' for a decision. The decision to allow TSI work in Compartment 46 Stands 11 and 21 was premature if it was dependent on future funding and a future decision to remove the overstory in the stands. Will TSI work proceed regardless of the decision on this project? Is funding in hand to complete this North Half Overstory Removal Project, especially in light of national fire-f fighting expenditures and their effect on unobligated funds? 11 –3

Response to 11-3: *The TSI work is separate and not dependant on this project. This work is covered by a previous NEPA Decision. Congress supports the Forest program and has provided the funding necessary to implement our program of work.*

In addition, the relocations of any existing roads, skid trails and landings in order to avoid wet soils, steep grades and ledge (EA, pg. 12) need to be disclosed now for both the public's and the decision maker's benefit. 11 –4

Response to 11-4: *We do not anticipate any road relocation now, based on our fieldwork. There is a slight chance one or two minor skid trail relocations (estimate each at less than 100 feet in length) may be identified during harvesting. The purpose of these relocations would be to provide for easier skidder access or to avoid wet portions of skid trails. These relocations would be reviewed and approved before implementation. The possibility has been considered and analyzed by specialists as part of effects analysis.*

Emphasis on Oak Regeneration

It appears in the EA that the presence of oak along the western slope of the Green Mountains is due to past disturbance in prior centuries. The disturbance allowed the oak to compete and establish itself within the overall northern hardwood environment. Left to itself would oak remain a distinct stand type an the forest? 11-5

Response to 11-5: *As stated in the Background Section, page 5, Purpose and Need Section, page 7-8, and the Affected Environment section on page 34-37, oak stands and forests are not naturally replenishing themselves. Over time, these stands will become less distinct as other species of hardwoods replace oak stems.*

Are efforts to perpetuate oak on the forest really efforts to perpetuate an historic disturbance regime that no longer exists? It seems that a lot of time, money and effort are being extended to create something that would not exist on its own Oak provides a food source, but so do other trees. Beyond its rarity (because it can't compete naturally in large numbers on the forest) and leaving aside the Forest Plan emphasis on oak, what are the ecological reasons for expending this amount of time, energy and money on oak? 11-6

Response to 11-6: *We cannot put the Forest Plan aside, rather we feel we should try hard to implement its goals and objectives, which includes active management of oak stands and oak forests to contribute to the full mix of goods, services and maintenance of ecological conditions the public expects from these Management Areas. The reason for the harvest is well explained in the Purpose and Need Section.*

Secondly, if regeneration is so difficult and deer often eat the seedlings themselves, why harvest the mature oak just as they reach acorn-producing age? Why not wait until they have stopped producing acorns? 11-7

Response to 11-7: *The Purpose and Need section explain why this project is needed. Oak trees can produce acorns at about 25 years of age, and good crops at about age 50. There is no age that oaks trees stop producing acorns. The oak trees proposed for harvest meet maturity guide requirements endorsed by the public in the Forest Plan.*

In the oak stands proposed the understory seems to be doing fine, as the remaining trees are mostly thin crowned and well spaced across the stand. Alternative 2 (No Oak) seems better suited to more natural long-term regeneration. 11-8

Response to 11-8: *As stated in the Purpose and Need section, the oak stands are not naturally regenerating themselves and they will not without disturbance and management of shade and other factors. While hardwood regeneration from the past harvest in these stand is adequate overall, oak seedlings and saplings that resulted from the initial shelterwood harvests are patchy and some are now dying in these stands due to shade, overcrowding and because the overstory removal is belated. The proposed harvest will help improve overall survival of these young trees by reducing shade and competition, as opposed to Alternative 2 where no harvesting would occur.*

Temporary Permits to Cross Private Property

We believe these permits must be obtained prior to environmental analysis and the project decision. The Forest Service has an obligation when crossing private land to conduct federal activities to ensure that historic resources and threatened and endangered species are not harmed in crossing said land. The results of these surveys and investigations need to be disclosed and available to the decision maker prior to his decision. Secondly, as portions of the proposal and alternatives are predicated on having permission in hand, whether permission will be granted needs to be disclosed prior to the decision being made. It makes no sense for the decision maker to make a decision, which then cannot be implemented as analyzed if permission is denied. The decision under NEPA is not ripe for consideration without the question of the permits resolved. 11-9

Response to 11-9: *The permits had already been secured.*

In addition, the effects of the project on neighbors, particularly those who would be granting access across their property have not been described or disclosed. This needs to be included for an informed decision to be made. 11-10

Response to 11-10: *This is noted; see the Supplemental Information Report (SIR). These access routes have been recently used to facilitate previous sales by the landowners and GMNF, and were well known by the specialists that visited them for the previous sale. Although not explicitly mentioned, the effects of using private roads for harvesting were considered when assessing the impact of harvesting on the soil and water resources (see EA, pages 81, 88, and 94) and when discussing terms with the landowners. The impacts to soil and water would be minor. These roads are stable, show no signs of severe erosion or stream sedimentation, and have been used repeatedly in the past. Water control structures (water bars or culverts) would be in place prior to use, to control erosion. Our staff has met and discussed the terms of the use with the landowners and they are aware of the effects and impacts of such use, as they allowed it for the initial timber harvest and support use again. In addition, notice of this proposal and intent to use the same road and access system from the initial shelterwood harvests was sent to all adjacent landowners during scoping.*

Compartment and Stands in the Vermont Wilderness Association's (VWA) Proposal

The Wilderness Society has been an active member of the VWA for the last four years. The VWA has developed a proposal for new Wilderness areas and extensions, as well as National Recreation and Conservation Areas (NRA and NCA respectively) on the Green Mountain National Forest. We realize that this proposal was developed between the initial scoping stage of the proposed project back in May of 1999 and the release of this EA. However, the Forest Service has received multiple copies of the VWA proposal, met with Congressional delegation staff and discussed the proposal with staff in the Washington office of the USDA Forest Service, in addition to completing an internal Forest Service review of the proposal last spring.

A review of the maps and descriptions within the EA indicates there are three proposed compartments located within the VWA proposal boundaries. These lands have been identified by the VWA as special, wild places in Vermont that deserve additional protection. The stands and compartments are:

- 1. Compartment 44, stand 21 located within the Breadloaf Wilderness proposed extensions. (See below for additional discussion on this stand.)**
- 2. Compartment 28, stand 2 also located within the Breadloaf Wilderness proposed extensions.**
- 3. Compartment 69, stand 26 located within the proposed Moosalamoo NRA**

The cumulative effects analysis for these stands should have addressed this issue as the Forest Service knows of the proposal, has undertaken review of the proposal, and resolution and possible implementation of this proposal is a 'reasonably foreseeable future action' connected to the project area. We ask that the EA be reanalyzed to include cumulative effects analysis of this issue or that these stands be dropped from the North Half Overstory Removal Project. 11-11

Response to 11-11: *This has been addressed also, by not including the stands within the proposed Breadloaf expansion. For effects analysis on the stand within the proposed Moosalamoo NRA, see the SIR.*

Maps and the Location of Compartment 44 Stand 21

We are concerned with the quality of the maps in the EA. They do not show management area (MA) boundaries, topography or R05 / VQO data. The Forest Service has had GIS capabilities for a number of years now. We hope that future project maps will be of better quality and provide more useful information. 11-12.

Response to 11-12: *Your comment is noted; we will do a better job on maps in the future.*

That said, a careful comparison of the project maps to the applicable USGS Quad map indicates that Compartment 44 Stand 21 is actually located within the Breadloaf Wilderness (not in the proposed extensions as listed above). We of course know that you realize this is not allowed. We would like to see a comparison of the legal description of the Wilderness area and the proposed location of this unit. 11-13

Response to 11-13: *We have verified that the unit is not within the Breadloaf wilderness. This unit is not included in the Selected Alternative.*

In addition, the EA lacks any description of the project area focusing on geography and the steepness of the slopes proposed for harvest. The reader is left to deduce this information from the maps and the proposed mitigation measures for soils. We feel this kind of information needs to be plainly stated in the EA. Further, a description of the effects of the project without mitigation needs to be disclosed under NEPA. The effects that proposed mitigation would reduce or eliminate would then make more sense.11-14

Response to 11-14: *Geography and steepness of slope were not issues identified during scoping, so they were not addressed in detail in the EA. Geographic features such as elevations, landforms, slope steepness, locations of streams and roads are best viewed on a topographic map. Topographic maps are available from a number of sources (on the internet, at outdoor recreation stores, and at the Forest Service). If requested by the reader, the Forest Service provided topographic maps with the areas proposed for harvest.*

General descriptions of geography and slope steepness follow. Elevations in the project area range from approximately 1,000-2,500 feet. The landforms are dominated by mountain side slopes separated by narrow valleys and ridge tops. Numerous streams dissect the area. Roads provide access to the entire project area. Based on field reconnaissance by the Soil Scientist, slopes in the harvest units range from 5-45%, with most slopes between 20-40% (see table entitled, "Soil Types by Compartment and Stand" in the project file).

A description of the effects of the project without mitigation was not presented in the EA because we would not implement the project without mitigation. Severe erosion, rutting, sedimentation, loss of large woody debris recruitment and stream-side shade, and water

quality and aquatic macroinvertebrate community degradation would occur without mitigation.

Compartment 150 Stand 3

We believe this stand should be dropped from the project. The first step of the shelterwood cut was completed in 1984. At 18 years of age, even the understory has entered another age class. Overstory removal benefits are reduced at this stage. 11-15

Response to 11-15: *We do not agree. A certified Silviculturist has inspected the stand and prescribed the harvest as being helpful for the development of the stand as well as meeting the purpose and need for the project.*

Secondly, harvest of the stand as proposed contains a violation of Forest Plan standards. The Forest Plan states "landings will be located outside of riparian areas" (Forest Plan, pg. 4.23, 9.) Yet the EA describes the landing as within the stream filter strips for both the Mad River and a small ephemeral stream to the north (EA, pg. 31). In addition, the soils at the landing are poorly drained, compounding the problem. The skid road is also too close to an ephemeral stream for at least 375 feet requiring extensive mitigation. 11-16

Response to 11-16: *Your concerns regarding the landing are addressed in response to comment 4-17. The existing skid trail you cite is in the filterstrip as you describe (also see EA, page 31, bullet 6). We decided not to build a new skid trail outside the filterstrip because there was not another suitable location, due to poorly drained soils nearby. Plan S&Gs allow for exceptions to the filterstrip guidelines if ... "other measures [to protect streams] will be used such as sediment traps and settling basins..." [Plan, page 4.2, item 4c]. As stated in the EA mitigation measures, page 31, bullet 6, water bars would be drained away from the stream (preventing sediment from entering the stream), and the skid trail would only be used when frozen. Additionally, we would seed the skid trail following use (see SIR, Appendix H). These measures are important for protecting the soils and water resources, and are within Plan S&Gs. We do not consider these measures "extraordinary" because they are standard erosion control techniques.*

Third, there is a known cultural resource at the site located near the landing, creating even more of a challenge to use of this landing or possible relocation. 11-17

Response to 11-17: *We are aware of the location and extent of this historic-period archaeological site. It consists of the remains of a 19th century house and barn, located on opposite sides of the historic farm road (more recently used as a skid road), upslope from the landing. Based on our examination of the site(s), landing location and skid route, we are confident that the mitigation measures specifying identification, marking and avoidance of these sites will successfully prevent any adverse impacts.*

Finally, there are visual concerns due to the location along Route 100. Onsite views must meet the Retention VQO. The EA discloses that the landing will be visible from Route 100. The mitigation proposed will be insufficient to fully hide the landing and meet the Retention VQO. In addition, the effects on traffic safety when log trucks would merge in with the traffic on Route 100 have not been analyzed or disclosed.

This unit was first harvested in 1984, before the Forest Plan was written. It is obvious that many of the features of the site that allowed logging then would not pass muster now. 11-18

Response to 11-18: *The log landing located off of Route 100 is proposed for use associated with timber harvest on Comp.150, stand 3. This log landing was used in a prior timber sale and will be reopened for this unit. During logging operations it may be possible to see equipment being driven in and out of landing. Standards associated with timber harvest describe that the area should meet the Retention Visual Quality Objective upon completion of project. The Glossary in Appendix N of the Forest Plan defines: “Retention – human activities are not evident to the casual forest visitor.” As noted in a mitigation measure under the Visual Effects, existing vegetation between the landing and Route 100 would be retained to screen the landing. The landing would also use a curved entry to minimize sight of the landing itself. In addition, if soil is exposed, seed and mulch of the landing would occur each spring until use of the landing is complete and final seeding is done. These items would create an area that fits into the landscape and meets visual standards.*

In regards to analysis of traffic safety, this was not raised as an issue by the public during scoping and so was not analyzed specifically. Heavily laden trucks use Vermont highways like Route 100 everyday and citizens and other visitors are used to this kind of traffic. The amount of truck use generated from the harvest of one stand would not create any unusual risk or hazard.

Extra Stand. Compartment 44 Stand 11

This stand is mentioned a number of times in relation to cumulative effects and the Old Joe timber sale. Yet it doesn't appear in either project proposal. The North Half EA makes mention of 20 stands in the proposal on page one (instead of 19). Is this a twentieth stand? 11-19

Response to 11-19: *There are only 19 stands analyzed in this proposal.*

Native Seed Mix

Landings are proposed for seeding after the sale to allow native plants to grow in over time (EA, pg. 31). Yet the Forest disclosed in the Old Joe Timber Sale EA that it has no fully native seed mix. What will be done to keep exotics and non-native plants out of the project area? 11-20

Response to 11-20: *The National Forests now have a mandatory equipment-cleaning clause that is part of any timber sale contract. The intent of this clause is to prevent the introduction of non-native invasive species (NNIS) seeds or propagules by logging equipment. The timber sale administrator will monitor equipment cleaning for the duration of the sale. In addition, preliminary results of a study of timber sale skid roads used in the last ten years indicate that no NNIS have become established along these corridors. Finally, logging will occur in the winter months only, thereby minimizing soil disturbance and opportunities for NNIS to become established in the future. Also see response to comment 4-16.*

No Other Projects For Five Years

We are surprised to note that no other actions are anticipated on public land in the next 5 years (EA, pg. 61) and that this was used as the basis for analyzing cumulative effects. 11-21

Response to 11-21: *This is because at the time of this analysis there were no detailed plans for additional timber sale projects except for those mentioned in the analysis. We felt at that time it was important not to speculate on future plans. However, we agree that other known activities, as well as reasonably foreseeable future ones needed to be included in the analysis, and they have been added as a supplement to the EA (see SIR, Appendix H).*

Inadequate MIS Data

As the chart on page 52 indicates, population trends for nine of the fourteen MIS species are unknown or uncertain for the Green Mountain National Forest. Please list which are unknown and which are uncertain and why they fall into each category. Combined with some of the other blank spots in the data across New England and Vermont we are particularly concerned about the lack of on-forest MIS data and analysis. Without population and population trend data, it is very difficult to show a link between habitat manipulation and increases in population. As most of the projects proposed to implement the Forest Plan (including this one) involve some claim of positive effect to wildlife, this lack of data is disturbing. As the chart makes clear, increases in population do not always correspond to increases in habitat, making timely MIS data collection and analysis all the more important in determining which aspects of management are the most effective in benefiting wildlife. 11-22

Response to 11-22: *This was discussed, see responses 4-18 through 4-22.*

Goshawks

We notice that there is no discussion or survey results for goshawk in either the wildlife section of the EA or the BE. Please describe any efforts to determine if goshawk occupy the area and / or are likely to be affected by the proposed project. 11-23

Response to 11-23: *This is already discussed, see response 4-12 through 4-26.*

Winter Only Harvest:

The EA discloses that 'winter only' harvest would be used to implement the sale. Please describe the criteria that constitute 'winter only'? Is harvest limited to the period only, between December 22 and March 2. What are the temperature and frozen ground conditions that must be, met? What are the snow depth conditions that must be met? Must both frozen ground and a certain snow depth be present for harvest to be allowed, or is snow / frozen ground an "either/or" situation? How does the time of year interact with the frozen ground / snow criteria? Would harvest be allowed outside of the winter months if frozen ground conditions were met? snow depth conditions were met?...both frozen ground and snow depth conditions were met? The historic resources section lists snow cover as a possible mitigating factor, yet

the rest of the EA describes frozen ground conditions only. Have all resource specialists used the same 'winter only' criteria defined by the answers to the questions above to analyze effects? This is especially important in analyzing effects to heritage and botanical resources.

The answers to the questions and discussion of our concerns above are necessary to determine the baseline conditions in and around the project area as well as the anticipated effects of the project. We believe that the disclosure of this information is critical to the decision maker and -the public in determining whether the project should go forward as proposed. We ask that the analysis, changes and corrections detailed above be made and a second EA for comment- be issued. 11-24

Thank you for the opportunity to comment on this project. Should you have any questions regarding our comments or information requests, please contact Heather Dowey or me in our office at 617-350-8866. We look forward to your decision.

Sincerely,

Mary Krueger
Northeast Regional Associate- The Wilderness Society

Response to 11-24: *We have used the terms “winter logging” and “frozen ground conditions” interchangeably, sometimes creating confusion. The desired condition is to eliminate or minimize soil compaction, soil displacement (for example, rutting), and erosion. Frozen ground conditions must exist on landings and skid trails. Off of skid trails, the soils usually do not freeze hard, so sufficient snow depth is needed (usually at least one foot of snow) to meet the desired condition. The Sale Administrator typically determines when the desired conditions are met based on on-site observations of air temperature, snow depth, type of snow (light/heavy), expected duration of ground freezing, and whether the ground froze before the snow fell. When harvesting begins the Administrator periodically checks to see that the desired condition is met. These checks occur every few days to every two weeks, depending on the amount of harvest activity and the risk of losing the desired condition. If the weather warms and it appears the soils will compact or erode, harvest activities are halted until cooler weather prevails. Our soil and monitoring efforts support these steps are effective in achieving the desired results.*

Logging in winter provides protection for plants, specifically those on the RFSS list that have potential habitat in the rich woods sites, but were not found in the project area. The desired condition is to avoid damage to soils, as explained in the previous paragraph. This is accomplished by having frozen ground on the skid trails, and sufficient snow depth off the trails, both of which are monitored by the Sale Administrator. Mitigation for other plants on the RFSS list that are known from the project area - butternut, ginseng, yellow lady's slippers, and sweet Joe-pye weed - involves avoidance. Mitigation for Jacob's ladder and for other plants on the RFSS list that have potential habitat in wetlands involves excluding wetlands from all sale activities.

Because “winter logging” suggests a time period, and “frozen ground” conditions rarely apply to the Green Mountain soils away from hardened skid roads, it is the “over-snow” condition that is best suited for protecting subsurface archaeological sites in New England.

“Over-snow logging” has been demonstrated (Philipek 1985) to protect sites that consist of buried (“subsurface”) scatters of artifacts, because machinery operated atop the snow neither churns up the soil nor compacts it. Sites best suited for this mitigation/protection measure are usually prehistoric since historic period sites tend to include structural remains of buildings, associated cellar holes, and other surface features that could be affected by the movement of machinery across the surface of the ground (and thus are best protected by simply avoidance). Because all the sites identified in this project are historic sites, we are avoiding them rather than using the “over-snow” method. In the future we’ll be more specific in using the term appropriately for the target condition.

APPENDIX H to the N ½ OSR Environmental Assessment

File Code: 1950

Date: December 17, 2002

Route To:

Subject: Supplemental Information Report: Environmental Assessment, North Half Overstory Removal Project

To: North Half Overstory Removal Project File

Background

This Supplemental Information Report (SIR) was prepared in response to public comments on the Environmental Assessment (EA) for the North Half Overstory Removal Project, which were received from August 29th through September 27th, 2002. On October 10, 2002, the Interdisciplinary Team of resource specialists for this project met to discuss the public comments. At the meeting, it was noted that some of the comments called for additional environmental effects analysis, and that this would best be documented as a supplement to the existing EA. This SIR was prepared to document these additional effects.

The remainder of public comments received that did not call for additional effects analysis are addressed in Appendix G of the Environmental Assessment for this project. The effects analysis described in this SIR is organized by subject matter.

Effects of Proposed Action and Alternatives on Stand 26, Compartment 69

Note: this stand is within an area proposed by the Vermont Wilderness Association (VWA) as a candidate for a National Recreation Area (NRA). The effects information below is in response to concerns raised that timber harvesting would negatively impact the area's potential as an NRA.

Direction on the development of National Recreation Areas is much less formal and prescribed than the direction for the inventory and evaluation of potential Wilderness areas. Once meeting some very general requirements, each NRA is then designated by very specific legislation that describes the details of how each individual area will be managed. Since the legislation is specific only to that NRA, each area can be very different from others. There is nothing in the overall direction that would dictate "no timber harvest" in all NRA's and there are examples around the country where timber harvest is deemed acceptable.

Since each designation is done separately, it is probable that the language for any new NRA's will not be exactly the same as the language contained in the 1984 Vermont Wilderness Act that created the White Rocks NRA (WRNRA). In fact, it may be very different depending on the public input and goals that would be established for any new areas.

In conclusion, the inclusion of one 28-acre unit for timber harvesting (Stand 69 within Compartment 26) would most likely not negatively impact this area's potential future designation as an NRA.

Effects of the Proposed Action and Alternatives on private lands and landowners

Note: concern was expressed that the EA did not address the effects of the proposed activities, including all alternatives, on private lands and private landowners, particularly those who would be granting access to the Forest Service to cross their lands. Described below (by resource area) is information about effects on private lands and landowners.

Threatened and Endangered Species:

Plants: This project would not impact TES plant species on private lands. There is no federally threatened or endangered plant species documented for the GMNF, and there is no evidence that that any occur on adjacent private lands.

Animals: Using landings on private land or using skid trails on private land to complete the proposed North Half OSR activities or their alternatives will have **no adverse effects** on the following T&E species:

Bald Eagle or their critical habitat.
Gray Wolf or their critical habitat.
Eastern Cougar or their critical habitat.
Indiana Bat or their critical habitat.
Canada Lynx or their critical habitat.

Bald eagle, gray wolf, eastern cougar, and Canada lynx are not known to occur or have critical habitat within these skid trails or landings on private lands. One female Indiana bat was captured in one of the landings proposed for the Compartment 65, Stand 20 of the Overstory Removal Project during the non-hibernation season. However, because the activities associated with the North Half Overstory Removal project will occur in the winter only (when the bats are hibernating), these activities will insure no adverse effects to Indiana bats.

Heritage: In those cases where the Forest proposes to cross private lands as part of this project, we will be using existing travel routes. No heritage resource sites have been identified adjacent to these routes. In any case, the actual use of these travelways would have no adverse effect on any Heritage Resources if they were present because the vehicles will not have a direct physical affect outside of the travelway of the road, nor is road construction proposed as part of the project.

Soil and Water: These access routes have been recently used to facilitate previous sales by the landowners and GMNF, and were well known by the specialists that visited them for the previous sale. Although not explicitly mentioned, the effects of using private roads for harvesting were considered when assessing the impact of harvesting on the soil and water resources (see EA, pages 81, 88, and 94) and when discussing terms with the landowners. The impacts to soil and water would be minor. These roads are stable, show no signs of severe erosion or stream sedimentation, and have been used repeatedly in the past. Water control structures (water bars or culverts) would be in place prior to use, to control erosion.

Fisheries: Using private roads for harvesting to complete proposed North Half OSR activities or their alternatives will have no adverse effects on fisheries resources. These roads are stable and have been used repeatedly in the past. There are no signs that stream sedimentation or habitat degradation is occurring from these roads (see soil section above for additional information).

Landowners: All the landowners who live adjacent to the project areas were notified of the proposal. Any concerns raised were addressed in the EA as an issue, in Appendix A, or through follow-up phone calls. In addition, those landowners whom the Forest Service needed to obtain the necessary permits from to cross over their lands, have been contacted, are aware of the proposed activities, and have agreed to allow for the temporary crossings of their land.

Cumulative Effects

Note: the concern was raised that the cumulative effects sections in the EA only considered one current project (the Old Joe Timber Sale). Below is updated, more detailed cumulative effects information that includes other projects that we are aware of.

Recreation: All the proposed projects included in the most recent Schedule of Proposed Actions, dated 10/18/2002, were considered in combination with the North Half Overstory Removal project, for cumulative effects on recreation activities. Other foreseeable projects were also evaluated. Some young timber stands are under contract for Timber Stand Improvement (TSI) or site preparation have undergone prior NEPA analysis as part of past timber sales or included in the FY 00 TSI Project, Decision dated 8/15/2000.

More specifically, four proposed projects, the Appalachian Trail Relocation at Thundering Falls, Catamount Trail at Lincoln Gap, the Bloodroot Gap Trail Relocation, and the Corporation Brook Woods Road would not have cumulative effects in combination with the North Half Overstory Removal Project because none of these projects would result in closing trails. The TSI and site preparation work would not have cumulative effects to recreation because that work is not done during the winter logging period when the N ½ OSR stand would be harvested, it involves stands spread out over the landscape, few stands are operated at one time and trails would not be impacted.

Visuals: There are no adverse cumulative effects to the visual resources when considering the North Half Overstory Removal Project in combination with the projects listed in the October 2002 Schedule of Proposed Actions, or other projects including the Site Preparation and Timber Stand Improvement Projects ongoing or planned. The TSI projects are not large, would involve only thinning of young stands or working in regenerated areas already impacted by harvest and analyzed for visual effects. In addition to the TSI projects, the other projects described in the Schedule of Proposed Actions are also scattered throughout the north half of the Forest, so the visual impacts would be dispersed and minor.

Threatened and Endangered Species (Plants): There are no federally threatened or endangered plant species documented for the GMNF or adjacent lands.

Regional Forester’s Sensitive Species (Plants): The geographic scope for the analysis of effects for plants on the RFSS list varies from species to species and is defined separately for each species for which any effects may occur. The time frame for the scope of the analysis includes other ongoing activities, described below, and also encompasses the first cut in the shelterwood system of regeneration in these stands.

Other proposed projects that have documented occurrences or potential habitat of the same plants on the RFSS list as occur here, or will occur in the geographic vicinity of this project and at approximately the same time include: the Old Joe timber sale in the Chittenden Brook/Bingo Brook area, Catamount Trail extension in Lincoln, White River fish habitat restoration in Granville, sale of the “Low Cost” dwelling in Rochester, and Special Use Permits that will be issued for using FS roads to log on private land in the Chittenden and Ripton areas. While there are no known occurrences of plants on the RFSS list in the Old Joe project area, there is marginally good potential habitat for some of the same species there as in the North Half Overstory Removal, and this habitat may be impacted to some extent by individual and group tree selection harvests, and more substantially in the few small clear cuts. The only two plants on the RFSS list that are known to occur in any of the other project areas are butternut and summer sedge. In each place where either of these species occurs, mitigation is planned that will protect both the individual plants and their habitats. Although none of these proposed projects is expected to have more than a slight indirect impact on the Sensitive plants that occur there or have potential habitat there, this information is presented as the context for cumulative analysis for the plants or plant groups discussed below.

Butternut: Butternut trees are not rare in Vermont; thus, the geographic scope of analysis will be limited to the National Forest. Since mitigation requires that no butternut trees will be harvested as a part of this project, and habitat changes in all but the “no action” alternative will be minor and temporary (or may result in a slight improvement for seedlings and saplings, since they require light), and since the overall butternut decline is due to disease, not tree harvest or habitat destruction, as discussed in the Biological Evaluation (Appendix B of the EA), no cumulative effects to this species are expected as a result of this proposed projects or its alternatives, regardless of what other actions occur elsewhere.

Yellow lady’s slippers, ginseng, and sweet-scented Joe-pye weed: Each of these three species is ranked as either demonstrably globally secure (G5), or apparently globally secure (G4), though perhaps locally rare.. None are listed as threatened or endangered either in the U. S. or in Vermont.

Yellow lady’s slippers are uncommon in Vermont, but not rare. A number of populations have greater than 750 stems (Deller, unpublished thesis). Since the potential loss of one plant would be insignificant to the species at the state level, the geographic scope for the analysis of cumulative effects for this species will be defined more narrowly as the National Forest land within the state. There are at least three other small populations of yellow lady’s slippers on the Forest, all in the same geographic region. Given that the one individual within the project area is not mature enough to be reproductive, it is not contributing genetic material to any other population on the GMNF. Since this one plant was discovered only after the initial harvest in this stand, we have no way of knowing whether or not there has been any change to it as a result of the initial harvest; in fact, we

do not know whether it became established prior to or after the initial harvest. Thus, we are unable to take into account the effects of the initial harvest in predicting the cumulative effects of harvest on this plant. However, given the small “population” size, immaturity, and relative isolation of this one individual plant, if it is destroyed because of ineffective mitigation, or its habitat is more substantially impacted than expected, there will not likely be any cumulative effect on this species on GMNF.

Sweet-scented Joe-pye weed is rare in Vermont, and on the Forest it is known only from this geographic area. Thus, if mitigation measures were to fail, and this one population was destroyed, there could be an effect on viability either in Vermont or on the Forest; the geographic scale for this analysis could be defined at either level. However, this species has been present at this site since before the original cut, and monitoring data for the population shows an increase from two to 12 plants since then, suggesting that use of the skid road adjacent to this population did not result in any harm to this species, and there are not likely to be any cumulative effects as a result of both the original and the proposed harvests.

Ginseng is uncommon to rare in Vermont, is known from nine sites on the Forest, and probably occurs at other undiscovered sites. Given the small size (three plants) of the population in the project area, if mitigation measures were to fail and this one population was destroyed, the effects would be most notable at the level of the Forest rather than the state; thus, the geographic scale for this analysis will be defined as the GMNF. Since this tiny population was discovered only after the initial harvest in this stand, we have no way of knowing whether or not there has been any change to it as a result of the initial harvest; in fact, we do not know whether it became established prior to or after the initial harvest. Thus, we are unable to take into account the effects of the initial harvest in predicting the cumulative effects of harvest on these plants. We do, however, have monitoring data for a geographically close population of ginseng (elsewhere on Bryant Mountain, but not within the proposed project area) both before and after harvest that shows no loss of individuals. This apparent resilience suggests that the proposed project, which is expected to create only minor and temporary changes to habitat, is likely to have a minimal effect on this species. Given the small size of this ginseng population, if it were to be destroyed because of ineffective mitigation, or its habitat is more substantially impacted than expected, there would not likely be any cumulative effect on this species on GMNF.

Jacob’s ladder: Since mitigation will occur to avoid the wetland where this species occurs, and its habitat is not expected to change, the proposed action and its alternatives are not likely to result in cumulative effects for these species, regardless of actions elsewhere.

Plants associated with wetlands that have potential habitat in the project area: Since mitigation will occur to avoid these wetlands, and their habitat is not expected to change, the proposed action and its alternatives are not likely to result in cumulative effects for these species, regardless of actions elsewhere.

Plants associated with some variant of northern hardwoods that have potential habitat in the project area: Northern hardwood forests are widespread in the state. The specific variants that provide habitat for these rare plants are less widespread, but not uncommon, and are found in more microsites than might be expected (for a more detailed discussion of this topic, see the EA for the TES amendment for the GMNF). The geographic scope of

analysis for these species is, therefore, defined at the level of the National Forest. Since the proposed project and its alternatives (except the “no action” alternative) involve removal of overstory in stands where there are already dense saplings providing shade for these forest species, changes in habitat are expected to be minor and temporary. In addition, since other current and proposed actions are not expected to have much effect on the availability of this type of habitat, the proposed project is not likely to result in cumulative effects for these species, regardless of actions elsewhere.

Wildlife: All of the proposed projects included in the most recent Schedule of Proposed Actions, dated 10-18-02, planned and ongoing TSI or site preparation projects were evaluated for cumulative effects on wildlife in combination with the North Half Overstory Removal Project. No cumulative negative effects to Threatened, Endangered, or Sensitive Species are expected from project 4, the Catamount Trail Relocation, project 5, the White River habitat restoration project, project 13, the Corporation Brook woods road project, project 15, the Bingo dispersed camping project, project 16, the Facility Disposal, project 17, the Old Joe Timber Sale, project 20, the Bloodroot Gap trail relocation, or current or planned TSI projects. Project 5, the White River habitat restoration project may improve foraging conditions for Indiana bats and other woodland bats because hatches of insects would have increased potential habitat where woody debris structures are placed within or adjacent to the White River. The cumulative effects to MIS species of these additional projects will remain the same as was written in the North Half OSR EA. MIS species utilizing mature habitats will benefit from the activities occurring on the Forest because projects are small and limited or no disturbance is occurring, and the forest continues to become more mature. MIS species that require young forests, non-forest habitats or are disturbance dependent will continue to be affected by the same factors that are beneficial to mature forest species.

Anticipating that trail use on the relocation sites will remain at the current level of activity, these additional projects pose no additional cumulative effects to reclusive species because of these species ability to avoid contact with humans. Since goshawks can immigrate into these project areas after project implementation, the same mitigation measures would be followed that are listed in Appendix C, p. C-4-5 of the Revised Old Joe Environmental Assessment. If an occupied nest is located a 660-foot radius of unaltered habitat around the nest site will be established and an additional 660 buffer area will be identified.

Cumulative effects to Neotropical Migratory and Area Sensitive Birds would be the same as described on p. 58-60 of the North Half OSR EA. See cumulative effects for Deer Wintering Areas on p. 60-61 of the OSR EA and see p. 63 of the North Half OSR EA for Snags and Course Woody Debris cumulative effects.

Heritage: Effects on heritage sites are very localized; that is, it takes a physical action in the immediate vicinity to create a disturbance (an adverse effect). Indirect effects may sometimes occur from, for example, downslope erosion in direct proximity of a site, or the introduction of new transportation networks that facilitate public access to site areas.

There would be no cumulative direct effects from the other anticipated projects in this area (the proposed Old Joe Timber Sale), nor any projects listed in current Schedule of Proposed Actions (October 1-December 31,2002), or ongoing or planned TSI and site preparation projects in conjunction with the North Half Overstory Removal Project because Forest Plan Standards and Guidelines provide for the protection of individual sites at the

project level. Nor would there be cumulative indirect effects to any Heritage Resources because these projects or possible changes in management designations would not introduce the conditions contributing to indirect effects.

Therefore, based on past, present and anticipated actions, there should be no cumulative affect to any Heritage sites.

Soil and Water: Proposed projects on the north half of the Forest listed in the Green Mountain National Forest Schedule of Proposed Actions, dated 10/01/2002, and other foreseeable projects as listed above were evaluated, in combination with the North Half Overstory Removal Project for cumulative effects on the soil and water resources. Several projects are specifically designed to improve the condition of the soil and water resources by reducing erosion and sedimentation associated with roads or trails, by removing trails from floodplains, or by improving water quality and riparian area habitat components. These projects are: #5 – White River Restoration (Lower Granville), #13 – Corporation Brook Woods Road Project, #15 - Bingo Concentrated Use Project, and #20 – Bloodroot Gap Trail Relocation. These projects will have a net positive effect on the soils and water resources.

One project, #16 – the Low-cost Dwelling Facility Disposal (sale of a FS-owned house and associated small land parcel) is expected to have no effect on the soil and water resources, because we anticipate little change in the land use after the house and property is sold.

Five projects are expected to have minor adverse effects on the soil and water resources. Two of these projects - #6 – Churchill Access Road Special Use Permit, and #7 – Chittenden Access Road Easements, will provide access to privately owned lands via existing National Forest roads. The access will be used to harvest trees. The impacts of road use are expected to be low because erosion and sediment control will be required. The impact of harvesting trees is expected to have minor effects on the soil and water resources. Most harvesting on private lands is done according to AMPs (Acceptable Management Practices), therein minimizing erosion and sedimentation. The resource effects of one project, #17 – the Old Joe Sale, were disclosed in the document entitled, “Revised Environmental Assessment for the Old Joe Project, May 2002”, completed by the USDA-Forest Service. This tree harvesting and fish habitat improvement project will have minimal soil and water effects because Forest Plan S&Gs will be implemented, along with several special mitigation measures designed to protect the resources. The fish habitat improvement part of this project will actually improve stream condition through the addition of large woody debris, a natural stream component currently missing.

In the future we anticipate a timber and vegetation management project in the Town of Goshen, in the Dutton Brook area, along with restoration of some of the Bingo Brook dispersed campsites. Though there is not much detail about these proposals as this time, it is anticipated that they would occur along with the TSI and site preparation projects discussed above and other watershed improvement projects. Given this information and considering the distance between projects, timing, season of implementation, lack of soil disturbance with TSI and site preparation in combination with other actions, there are no changes to the soil & water cumulative effect analysis. This is because the cumulative impacts of these additional projects would still be minor.

The last two projects, #4 – Catamount Trail, and #19 Appalachian Trail Relocations Project consist of new trail construction (and some relocation of existing trail for project #19). Erosion and sedimentation are expected to be minimal on both projects because they are trail projects (as opposed to road projects which have higher impacts), and S&Gs and special mitigation measures designed to protect the resources will be followed.

The cumulative effects on the soil and water resources of implementing the North Half Overstory Removal Project, TSI and Site preparation projects, plus all projects listed in the 10/01/2002 Schedule of Proposed Actions, is minor. This is because individual project effects range from beneficial to minor adverse effects. Additionally, similar combinations of projects have been implemented over the last decade without large cumulative effects. As stated in the EA (see p.72) the activities having the greatest impacts to watersheds on the north half of the Forest are activities that occur on private land, including road construction and maintenance, home construction, land clearing, agriculture, and other activities that result in loss of riparian areas. Recent monitoring shows past and present harvesting has had (overall) minor impacts to soil and water. Timber stand improvements or site preparation do not involve soil disturbance and would also have little to no impacts.

Fisheries: All proposed projects included in the 10/18/02 Schedule of Proposed Actions in combination with the North Half Overstory Removal Project and were evaluated for cumulative effects on fisheries resources. No cumulative negative effects to fisheries resources are expected from Project 16, the Facility Disposal project because we anticipate minimal change in the land use after the house and property is sold.

Several projects are specifically designed to improve the condition of fisheries resources by reducing stream sedimentation and habitat embeddedness (fine sediment/sand/silt that settles in spaces between rocks on the stream bottom) often associated with erosion from roads and trails, and improve fish spawning and rearing habitat by removing trails from floodplains, or by improving water quality, stream and riparian habitat components. These projects are: project 5, the White River Habitat Restoration, project 13, Corporation Woods Road, project 15, Bingo Concentrated Use Project, and project 20, Blood Gap Trail Relocation. These projects will have a positive effect on fisheries resources.

Several projects are expected to have only minor adverse effects on fisheries resources. Project 6 and Project 7 will provide access to private land via existing FS roads. The resource impacts associated with this activity will be minor because state regulations such as AMP's affecting private lands will minimize stream sedimentation and stream habitat embeddedness. Additionally, the fisheries resource effects of project 17, Old Joe Sale, were disclosed in the Revised Environmental Assessment in May 2002. Tree harvesting will have minimal fisheries effects because Forest Plan S&G's will be implemented, along with special mitigation measures designed to protect the resource. As stated above, the fish/stream habitat improvement part of this project will improve stream conditions for aquatic biota through the addition of trees and woody debris.

In the future we anticipate vegetation management and possibly stream habitat improvements in the Dutton Brook Area, Goshen, VT. Given this information and considering the location, timing, season of implementation, lack of stream disturbance with TSI and site preparation in combination with other actions discussed above, there are no

changes to fisheries cumulative effect analysis. This is because cumulative effects of these additional projects would still be minor.

The cumulative effect on fisheries resources of implementing the North Half Overstory Removal Project, projects listed in the Schedule of Proposed Actions and other projects described above is minor. This is because some projects have benefits to fisheries resources and others would have resource protection provided by Forest Plan S&G's and mitigation measures.

Silviculture And Oak Management: As with the above resources, the additional foreseeable projects of the SPA were reviewed and evaluated in conjunction with the North Half Overstory Removal Project for cumulative effects on the practice of silviculture and oak management.

In addition, preliminary planning for the Dutton Brook II proposal located in the town of Goshen, is planned to undergo NEPA analysis in the spring or summer of 2003. We are still shaping this proposal. It is not complete enough at this time for public scoping. Implementation of Timber Stand Improvement and site preparation work already under contract, and NEPA analysis for the FY 2003 TSI project are also foreseeable actions and they were considered.

With implementation of the SPA projects, current and future planned TSI, site preparation projects and the anticipated Dutton Brook II proposal; there would be no additional cumulative effects on the practice of silviculture and oak management for the N ½ project. This is because silviculture, including oak management would still occur on lands included in the N ½ OSR project.

Because the N ½ OSR project would not include two stands that fall within the VWA proposal for Wilderness, there would be less cumulative effects on vegetation resources, sights, sounds and effects from logging on the existing Breadloaf Wilderness or use of the Forest transportation system. This is also because there are no other timber sales located or planned adjacent to Breadloaf Wilderness at this time.

Timber stand improvement projects already through NEPA analysis and under contract are occurring in Compartment 46 stands 11,19 and 21. These projects involve pre-commercial thinning of young hardwood and softwood trees and have been evaluated by the FY 00 TSI Project. Additional site preparation and TSI contracts under contract will occur but will not have cumulative effects because they will occur at different times of the year than the N ½ OSR harvests, and they will not involve logging equipment or ground disturbance. We have looked at the N ½ project along with these additional foreseeable actions and find no cumulative effects on the practice of silviculture and oak management.

A table and map that lists stands that will be considered for NFMA/ NEPA analysis for a FY 2003 Timber Stand Improvement project is included in the project file. This list has not gone through initial specialist review, NFMA analysis or public scoping at this time but is a potential list of stands that could be involved.

This future TSI work would not have any cumulative effects on the Proposed Action and its alternatives. The work does not involve logging or logging equipment and would have little effect on area resources.

Mitigation Measures

Note: the following mitigation measures were added to address public comment/concerns.

Soil, Water and Visual Resources: Two mitigation measures have been added to provide optimum protection for the soil, water and visual resources in Compartment 150, stand 3. First, the section of skid trail inside the stream filterstrip (see EA, page 31, bullet 6) would be seeded following use if soil is exposed. This would minimize the risk of erosion and stream sedimentation. Second, the landing for stand 3 will be seeded each spring if the stand requires more than one winter season to complete. This will minimize the risk of erosion and stream sedimentation, and soften the visual impact of the landing as seen from Route 100.

Goshawk: Those sites that are deemed suitable for nesting in the project area would be surveyed at the appropriate season for nesting goshawks. If an occupied nest is located, follow procedures in the Forest Plan, developed cooperatively with the U.S. Fish and Wildlife Service calling for a six hundred and sixty foot radius zone of unaltered habitat around the nest site with an additional six hundred and sixty foot buffer area.

Determination

The effects analysis contained in this Supplemental Information Report provides more detail and clarification, but it is not critical to the analysis supporting the North Half Overstory Removal EA. It does not change the circumstances relating to the environmental impacts, including the Finding of No Significant Impact determination described in the Decision Notice for the North Half Overstory Removal EA.

STEPHEN J. KIMBALL
District Ranger

Date: _____

Attachment 1

Vermont Department of Agriculture, Food & Markets Quarantine #3 - Noxious Weeds

Section I: Statement of Concerns

Whereas, the Vermont Department of Agriculture, Food & Markets having found that certain noxious weeds out compete and displace plants in natural ecosystems and managed lands; and

Whereas, competition and displacement of plants by certain noxious weeds has significant environmental, agricultural and economic impacts; and

Whereas, it has been determined to be in the best interest of the State of Vermont to regulate the importation, movement, sale, possession, cultivation and / or distribution of certain noxious weeds:

Therefore, the State of Vermont is hereby establishing this noxious weed quarantine regulation by the authority of 6 V.S.A., Chapter 84, Pest Survey, Detection and Management.

Section II: Definitions

“Class A Noxious Weed” means any noxious weed on the Federal Noxious Weed List (7 C.F.R. 360.200), or any noxious weed that is not native to the State, not currently known to occur in the State, and poses a serious threat to the State.

“Class B Noxious Weed” means any noxious weed that is not native to the state, is of limited distribution statewide, and poses a serious threat to the State, or any other designated noxious weed being managed to reduce its occurrence and impact in the State.

“Commissioner” means the Commissioner of Agriculture, Food & Markets, or his or her designee.

“Noxious Weed” means any plant in any stage of development, including parasitic plants whose presence whether direct or indirect, is detrimental to the environment, crops or other desirable plants, livestock, land, or other property, or is injurious to the public health.

“Plant and Plant Products” means trees, shrubs, and vines; forage, fiber, and cereal plants; cuttings, grafts, scions, buds and lumber; fruit, vegetables, roots, bulbs, seeds and wood; and all other plants, parts of plants, and plant products.

“Possession” means to grow, manage or cultivate through planting, pruning, watering, fertilization, weeding, propagation, or any other means that promotes the growth of the noxious weed. This does not include the incidental occurrence of a noxious weed on wild or managed land.

Section III: Designation as a Noxious Weed

(A) The following conditions shall be met for a plant or plant product to be designated as a Class A or B Noxious Weed:

- (1) As determined by a pest risk assessment, a quarantined noxious weed must pose an actual or anticipated threat to a substantial agricultural, forestry or environmental interest and / or the general public.
- (2) Establishment of a quarantine for a specified noxious weed is likely to contribute to the objective of preventing introduction or for limiting the spread and / or severity of the noxious weeds impact to the agricultural, forestry or environmental interest.
- (3) No substitute or alternative mitigating action will accomplish the same pest prevention purpose.
- (4) The economic and/or environmental benefits of quarantining a specified noxious weed outweigh the economic and/or environmental benefits associated with the noxious weed.

(B) The following biological factors shall be used to evaluate whether or not a plant or plant product has satisfied the conditions for designation as a Class A or Class B Noxious Weed.

- (1) Native origin of the plant;
- (2) Known distribution;
- (3) Mechanism and potential for spread to and within Vermont;
- (4) Past, current and potential environmental, economic and human health impacts;
- (5) Feasibility of control and spread prevention;
- (6) Regional and national perspective;
- (7) Designation as a federal noxious weed; and / or
- (8) Other pertinent factors.

(C) Designation as a Class A or Class B Noxious Weed shall occur through the Administrative Rule procedure as outlined in 3 V.S.A., Chapter 25.

Section IV: Designated Noxious Weeds

(A) Class A Noxious Weeds.

- (1) All weeds listed in 7 C.F.R. 360.200 as amended, which is hereby incorporated by reference including subsequent amendments and editions.
- (2) *Ailanthus altissima* (tree-of-heaven)
- (3) *Cabomba caroliniana* (fanwort)
- (4) *Egeria densa* (Brazilian elodea)
- (5) *Hydrilla verticillata* (hydrilla)
- (6) *Hygrophila polysperma* (Roxb.) T. Anderson (E. Indian hygrophila)
- (7) *Myriophyllum aquaticum* (Vell.) Verdc. (Parrot feather)

- | | |
|--|---------------------------|
| (8) <i>Myriophyllum heterophyllum</i> | (variable-leaved milfoil) |
| (9) <i>Salvinia auriculata</i> | (giant salvinia) |
| (10) <i>Salvinia biloba</i> | (giant salvinia) |
| (11) <i>Salvinia herzogii</i> | (giant salvinia) |
| (12) <i>Salvinia molesta</i> | (giant salvinia) |
| (13) <i>Vincetoxicum hirundinaria</i> Medikus. | (pale swallow-wort) |

(B) Class B Noxious Weeds.

- | | |
|--|-------------------------|
| (1) <i>Aegopodium podagraria</i> L. | (goutweed) |
| (2) <i>Alliaria petiolata</i> (<i>A. officinalis</i>) | (garlic mustard) |
| (3) <i>Butomus umbellatus</i> | (flowering rush) |
| (4) <i>Celastrus orbiculatus</i> Thunb. | (Oriental bittersweet) |
| (5) <i>Fallopia japonica</i> (<i>Polygonum cuspidatum</i>) | (Japanese knotweed) |
| (6) <i>Hydrocharis morsus-ranae</i> L. | (frogbit) |
| (7) <i>Iris pseudoacorus</i> L. | (yellow flag iris) |
| (8) <i>Lonicera x bella</i> | (Bell honeysuckle) |
| (9) <i>Lonicera japonica</i> | (Japanese honeysuckle) |
| (10) <i>Lonicera maackii</i> | (Amur honeysuckle) |
| (11) <i>Lonicera morrowii</i> | (Morrow honeysuckle) |
| (12) <i>Lonicera tatarica</i> | (Tartarian honeysuckle) |
| (13) <i>Lythrum salicaria</i> | (purple loosestrife) |
| (14) <i>Myriophyllum spicatum</i> | (Eurasian watermilfoil) |
| (15) <i>Nymphoides peltata</i> (Gmel.) Ktze. | (yellow floating heart) |
| (16) <i>Phragmites australis</i> | (common reed) |
| (17) <i>Potamogeton crispus</i> L. | (curly leaf pondweed) |
| (18) <i>Rhamnus cathartica</i> | (common buckthorn) |
| (19) <i>Rhamnus frangula</i> | (glossy buckthorn) |
| (20) <i>Trapa natans</i> L. | (water chestnut) |
| (21) <i>Vincetoxicum nigrum</i> L. | (black swallow-wort) |

Section V: Prohibitions

(A) The movement, sale, possession, cultivation, and / or distribution of Class A Noxious Weeds designated in Section IV of this quarantine regulation is prohibited.

(B) The movement, sale, and / or distribution of Class B Noxious Weeds designated in Section IV of this quarantine regulation is prohibited.

(C) Violation of any of the prohibitions listed in Section V of this regulation may result in:

- (1) The issuance of cease and desist orders; and / or,
- (2) Temporary or permanent injunctions; and / or,
- (3) Administrative penalties not to exceed \$1,000 per violations, as specified in 6 V.S.A., Chapter 84, Sections 1037 and 1038.

Section VI: Exemptions

(A) Scientific and educational exemptions may be granted by the Commissioner to allow for the movement, possession and field experimentation of noxious weeds for scientific and

educational purposes under such conditions as may be prescribed by the commissioner. When granting exemptions, the commissioner shall take into consideration both the value of the scientific or education purpose and the risk to Vermont's environment, economy and citizens.

(B) Transportation of any Class A or B Noxious weed on any road or highway of the state is exempt if any of the following is true:

(1) It is for disposal as part of a management control activity; or

(2) It is for the purpose of identifying a species or reporting the presence of a species, and the Class A or B Noxious weed is in a sealed container; or

(C) Preserved specimens in the form of herbaria or other preservation means are not subject to this regulation.