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Green Mountain National Forest

Appendix H Responses to Public Comments

To Accompany the Final Environmental Impact Statement

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APPENDIX H RESPONSES TO PUBLIC COMMENTS

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Introduction

On April 1, 2005, the Forest Service announced in the Federal Register that the Green Mountain National Forest (GMNF) Draft Environmental Impact Statement (Draft EIS) and Proposed Revised Forest Plan (Proposed Plan) were available for public review. Following this release, a formal three month comment period provided interested publics a chance to review and provide feedback on the draft documents. Public response was overwhelming with over 10,000 letters and emails received. Approximately 85 percent were form letters with identical or nearly identical content. Review of the public comments showed areas of disagreement on some parts of the draft documents; however, many people expressed general support for managing and protecting the GMNF to continue providing ecological, social, and economic values for present and future generations.

To organize and analyze each public response received, a “content analysis” process was conducted. Content analysis included logging the public respondents and letter numbers into a database, filing two copies of every letter, reading the letters, and coding individual requested actions and noted concerns contained within the letters. Each public concern was entered verbatim into the database, and given an identifying number that links the specific comment back to the original comment letter. Every effort was made to keep each comment within sufficient context so that it is a stand-alone statement. Forest Service analysts looked for not only each action or change requested by the public, but also the reason(s) behind each request in order to capture the full concern of each comment. Therefore, paragraphs within a response letter may be divided into several comments because multiple concerns were presented, or alternatively, several paragraphs that form one coherent statement may be coded into one comment.

The coded comments were then grouped and summarized into public concern statements and subconcern statements. Because each public concern statement is a summary, it can represent one or many comments, depending on the actual comments submitted. Concern statements range from extremely broad generalities to extremely specific points because they reflect the content of verbatim public comments. The public concerns were responded to in this document, the Final EIS Response to Comments Appendix. These public concern statements are not intended to replace actual comments but rather guide reviewers to comments on specific topics in which they are interested. They also make it possible to systematically respond to large numbers of comments because similar comments have been grouped together. The full content analysis report is in the Final EIS planning record at the GMNF Supervisor’s Office in Rutland, Vermont.

The comments received provided valuable input towards development of the Final EIS and 2006 Forest Plan. It is important to recognize that the consideration of public comments is not a vote-counting process in which the outcome is determined by the majority opinion. All comments have been treated equally. They are not weighted by organizational affiliation or status of respondents, and it does not matter if an idea was expressed by thousands of people or a single person. Emphasis is placed on the content of a comment rather than who wrote it or the number of people who agree with it. Relative depth of feeling and interest among the public can serve to provide a general context for decision-making. It is the appropriateness, specificity, and factual accuracy of comment content that serves to provide the basis for modifications to planning documents and decisions. Further, because respondents are self-selected, they do not constitute a random or representative public sample. The National Environmental Policy Act (NEPA) encourages all interested parties to submit comment as often as they wish regardless of age, citizenship, or eligibility to vote. Respondents may therefore include businesses, people from other countries, children, and people who submit multiple responses. Therefore, caution should be used when interpreting comparative terms in the summary document. Every substantive comment and suggestion has value, whether expressed by one respondent or many.

All input is read and evaluated and the analysis team attempts to capture all relevant public concerns in the analysis process.

The Forest Service classified comments received as either substantive or non-substantive during the content analysis process. Only those comments considered substantive have responses in this appendix. The nature and extent of each response depends on the type of concern identified. Based on the Council of Environmental Quality's regulations implementing NEPA, substantive comments are ones that:

- Question, with a reasonable basis, the accuracy of the information in the environmental impact statement;
- Question, with a reasonable basis, the adequacy of environmental analysis as presented;
- Presents reasonable alternatives other than those presented in the Draft EIS that meet the purpose and need of the proposed action and address significant issues; or
- Cause changes or revisions in the proposal.

Non-substantive comments are ones that:

- Are outside the scope of the proposed action, or are irrelevant to the decision being made;
- Raise a concern already decided by law, regulation or policy;
- Raise an issue best addressed through other decision processes;
- Are just opinions, general comments, or position statements; or
- Are simple factual correction or editorial comments.

Appendix H is organized by topic and summarizes the public comments submitted on the Draft EIS and Proposed Revised Forest Plan. The summarized public comments are captured as "Public Concern" (PC) statements and are numbered as such. Subconcern (SC) statements are utilized to capture a myriad of distinct rationales, specific locations, or particular details that support the common PC conclusion. Subconcern statements are numbered according to the PC they support and distinguished by alphabetical coding. This appendix contains the Forest Service's response to substantive public comments represented by each PC and SC statement.

The Response to Comment Appendix references a number of documents. The Draft Environmental Impact Statement (DEIS) is referenced when the information was provided in that document and has not changed in the Final EIS. The Final Environmental Impact Statement (FEIS) is referenced when there has been a change in the information provided between the DEIS and the FEIS. The draft revised Forest Plan published in 2005 is referred to as the Proposed Revised Forest Plan, and the revised Forest Plan, now being published, is referred to as the Revised Forest Plan or the 2006 Forest Plan. References made to 36 CFR 219, National Forest Management Act (NFMA) implementing regulations are to the 1982 NFMA regulations unless noted otherwise.

Decision-Making Processes and Methods (10000)

PC 10000-1:	**The Forest Service should manage the GMNF for the good of the entire country with only minimal consideration given to local economic impacts.**
	Response: The Forest Service is required to manage NFS lands to provide for multiple use and sustained yield of goods and services from the National Forest System in a way that maximizes long-term net public benefits in an environmentally sound manner (CFR 219.1). The Forest Service has considered the input from local, regional, and national publics in the development of alternatives and in determining a Selected Alternative that provides the greatest net benefit for the public (see FEIS section 3.21, and FEIS Appendices A and B). The definition of Net Public Benefit is in the Glossary of the DEIS (p. 7-20) and CFR 219.3.
PC 10000-2:	**The Forest Service should consistently base management decisions on objective standards to maintain integrity and build credibility.**
	Response: See responses to PC 62000-42 and its subconcerns.
PC 10000-3:	**The Forest Service should revise recommendations or provide additional information than what the Draft EIS or Proposed Plan include to comply with the intent and provisions of the National Environmental Policy Act of 1969.**
SC 10000-3a	TO COMPLY WITH THE EXPRESS WISHES OF THE MAJORITY OF VERMONT CITIZENS
	Response: The proposed Forest Plan and DEIS were developed following the implementing regulations of the National Environmental Policy Act found in 40 CFR, Parts 1500-1508. Public involvement is a major component under these regulations as well as the 1982 implementing regulations for developing Forest Plans pursuant to the National Forest Management Act (36 CFR Part 219). Public involvement and input have been key elements of the Forest Plan revision process since it began in 1996. The issues identified through the planning and public involvement process helped define the range of alternatives developed for detailed analysis. The alternatives address the issues with different management approaches. The issues also defined the scope of the analysis documented in the DEIS. The Forest Service has met with and considered comments from numerous individuals and organizations expressing a broad range of viewpoints. The Forest Service has listened to many concerns and interests about how the Forest was managed in the past and how it should be managed in the future. The Forest Service has engaged people with differing values and philosophies, including our partners, on the compromises and balancing necessary to manage a finite resource in the face of expanding demands. The DEIS provides a detailed explanation of the public involvement process and how the input received was used for the Forest Plan revision process (Sections 1.1.5 and 1.1.6, and Appendix A).
SC 10000-3b	BECAUSE ALTERNATIVE A AS THE NO ACTION ALTERNATIVE SHOULD PROVIDE FOR A BASELINE OF EFFECTS BY BANNING ORV USE
	Response: The suggestion to comply with NEPA by continuing the summer ORV ban policy under the no action alternative reflects a misunderstanding of the 1987 Forest Plan ORV direction. The No Action Alternative (Alternative A) serves as the baseline for comparison of the other alternatives. For the

	purposes of this analysis, no action is considered "no change" from the current management direction provided by the 1987 Forest Plan and reflects the current level of goods and services provided by the Forest (DEIS p. 2-7). Although there currently are no designated trails for summer ORV use on the GMNF, the 1987 Forest Plan does allow for potential ORV use on designated roads and trails within Diverse Forest Use, Diverse Backcountry and Recreational Rivers Management Areas (DEIS Table 3.10-11). This direction is reflected in the description of the existing Forest Plan management direction and existing condition for Recreation Opportunities and Forest Settings in the DEIS (Section 3.10.1, pp. 3-196 and 3-200). In Alternative A, there is a potential for summer ORV trail development on 49 percent of the Forest (DEIS Table 3.10-12).
PC 10000-4:	**The Forest Service should manage the GMNF to provide a secure refuge for wildlife and people because of increased demands on wild places.**
	Response: The Forest Service recognizes that the GMNF has a unique opportunity to provide important habitat for wildlife and a wide range of forest-based recreation for people. In describing the role of the GMNF, the Forest Service acknowledges that public land in the northeastern United States will be subject to increasing pressure to serve the many and varied needs of people in the region. Public lands, including the GMNF, will become increasingly scarce and precious in the future. The role of the GMNF specifically includes management to "enhance wildlife and plant habitat conditions" (revised Forest Plan p. 9). Further, the GMNF's large, contiguous blocks of land provide unique opportunities for backcountry and wilderness recreation (revised Forest Plan p. 9). The revised Forest Plan includes goals, objectives, standards, and guidelines that emphasize enhancement, maintenance, and restoration of terrestrial and aquatic habitats to support viable and sustainable populations of native and desirable non-native plants and animals (revised Forest Plan Chapter 2).
PC 10000-5:	**The Forest Service should manage the GMNF free of Congressional mandates that inhibit emergency access and delay response times to local situations.**
	Response: This commenter supports Forest Service management of the GMNF rather than congressional restriction of management options in areas such as wilderness. The Forest Service appreciates the commenter's support and would like to further observe that the Forest Service works with congressional direction to manage these areas according to the intended condition. The Forest Service manages areas such as National Recreation Areas and Wilderness Management Areas with Forest Service policies that interpret congressional direction. As wilderness areas are landscapes where natural processes are allowed to dominate, vegetation management by humans is inappropriate, and natural catastrophic events such as ice storms will make their mark on the landscape. The Green Mountain National Forest is managed for multiple uses in many ways; a balance of natural process-dominated areas and management-dominated areas is part of the multiple-use ethic. See also response to wilderness comments, PCs 62000-27 and Wilderness Management Area standards and guidelines, PC 62000-22b. Forest Service policy (FSM 2326) allows the Forest Supervisor to approve the use of motorized equipment or mechanical transport in wilderness areas under certain emergency conditions. These conditions include situations involving urgency beyond that available by primitive means, involving fire suppression,

	health and safety, or law enforcement involving serious crime. The Forest Service follows applicable laws, regulations, and policies in managing the GMNF (see FEIS section 3.1.5).
PC 10000-6:	**The Forest Service should resist pressure from the current administration in Washington to radically change its management practices and policies.**
	Response: The Forest Plan revision process has been largely driven by public involvement and Forest Service staff review of the implementation of the 1987 Forest Plan (DEIS p. 1-5). One of the three primary reasons to revise the Forest Plan (DEIS p. 1-4) is to incorporate any national guidance for strategic plans and programs that was not part of the 1987 Plan. The Forest Service, as an agency under the Department of Agriculture, must comply with all applicable laws, regulations, and policies. For a complete list of laws, regulations, and policies see Appendix E of the proposed Forest Plan.

Decision-making philosophy (11000)

PC 11000-1:	**The Forest Service should preserve the legacy of undeveloped land for future generations.**
SC 11000-1a	BECAUSE THERE IS LITTLE OF VERMONT LEFT UNDESTROYED
SC 11000-1b	TO SET AN EXAMPLE FOR MANAGEMENT ACROSS THE COUNTRY
	Response: The Green Mountain National Forest is comprised of more than 400,000 acres of predominantly undeveloped land. Some development such as campgrounds, roads, trails and non-recreation special uses may be permitted in some management areas after site-specific environmental analysis and public involvement. Timber harvesting and other vegetation management activities may also be permitted in some management areas after site-specific environmental analysis and public involvement. The Multiple-Use Sustained-Yield Act of 1960 states that, "It is the policy of the Congress that the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes." This means that the National Forests will be managed to provide for the use of all the various renewable surface resources in a combination that best meets the needs of the American people (DEIS p. 1-3). The Selected Alternative and revised Forest Plan provide a balance between competing concerns while managing for biological diversity, off-road vehicles, timber harvest, and non-motorized recreation. (See FEIS sections 3.1.4 and 3.1.5.)
PC 11000-2:	**The Forest Service should apply the 2005 planning rules to the Revised Forest Plan and its implementation wherever practical.**
	Response: The Forest Plan is being revised under the 1982 planning rule. In 2002 the Regional Forester chose to have Region 9 national forests continue to use the 1982 planning rule as permitted in the transition language for the proposed 2000 planning rule (DEIS p. 1-3). The revised Forest Plan will be implemented using the 2005 planning rule. An environmental management system (EMS) must be established for each unit of the National Forest System. The scope of an EMS will include, at the minimum, the land management planning process. Plan development, amendments, and plan revisions conducted under the 2005 rule must be completed in accordance with the EMS. All national forests will transition to use of the 2005 planning rule by January 2008.
PC 11000-3:	**The Forest Service should utilize progressive management to protect**

	forest resources and long-term forest health with an outlook toward the future health of our State as well as our planet.
	Response: Management to protect forest resources and long-term forest health are key aspects of the revised Forest Plan. The Forest Service mission is "to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations." In order to meet this broad mission, some areas are identified for protection and preservation. Some areas are identified for active management, both to produce goods for present generations and to ensure productivity, wildlife habitat, and forest health for future generations. All management is geared toward providing for future generations' use, enjoyment and needs (revised Forest Plan p. 9). The revised Forest Plan has increased allocations from the 1987 Forest Plan to more protective emphases, including Ecological Special Areas, Remote Backcountry Forest, and Wilderness Study Areas (see section 3.11 of the FEIS). Several new management areas, including Remote Wildlife Habitat, Green Mountain Escarpment, and Alpine/Subalpine Special Area have been added in recognition of the need for new or different management strategies to achieve desired future conditions in those landscapes.
PC 11000-4:	**The Forest Service should acknowledge that ecological forestry guidelines would promote management in line with the known natural disturbance regimes and patterns on the Forest.**
	Response: See response to SC 32600-5b.
PC 11000-5:	**The Forest Service should only minimally consider public comment, and should not be influenced by political pressures.**
SC 11000-5a	BECAUSE MOST OF THE GENERAL PUBLIC HAVE NO SCIENTIFIC OR NATURAL RESOURCE BACKGROUND
	Response: The Forest Service agrees that plan revision should not be overly influenced by any particular group or individual, and the Forest Service strives for land management policy that maximizes net public benefit. (See response to PC 10001.) The revised Forest Plan and FEIS were developed following the implementing regulations of the National Environmental Policy Act (NEPA) found in 40 CFR, Parts 1500-1508. Public involvement is a major component under these regulations (Part 1506.6) as well as the 1982 implementing regulations for developing forest plans pursuant to the National Forest Management Act (36 CFR Part 219). NEPA Part 1506.6 states that "agencies shall make diligent efforts to involve the public in preparing and implementing their NEPA procedures…" (See also FEIS section 3.1.5 for Laws, Regulations, and Policies.) Forest Service staff developed scientifically based management strategies while addressing the issues and concerns raised by the public during the planning process. Providing a way to involve Green Mountain National Forest users is essential in producing a revised Forest Plan that can be endorsed by the public, resource professionals, and employees. Support for the revised Forest Plan is fostered by a widely held belief that people's concerns are heard and addressed in the planning process. Those involved in the planning process, and users of the Green Mountain National Forest, regardless of their educational or cultural backgrounds, should all feel an ownership in the revised Forest Plan and actively support its implementation. (See response to SC 10000-3a.)
PC 11000-6:	**The Forest Service should make decisions regarding access to public lands after careful study of facts and data.**

SC 11000-6a	TO FOSTER SHARED-USE IN THE GREEN MOUNTAINS
SC 11000-6b	TO AVOID CATEGORIZING USER GROUPS BASED ON INVALID AND UNFAIR OPINIONS
	Response: The Forest Service developed Forest-wide and management-area-specific standards and guidelines for the purpose of protecting or managing forest resources. Standards and guidelines are designed to achieve desired conditions, goals, and objectives in the revised Forest Plan (see revised Forest Plan section 2.3 and Chapter 3). Various types of access onto the GMNF was studied with regard to desired conditions, goals, and objectives in the revised Forest Plan, and standards and guidelines have been designed to ensure public access does not hinder the Forest Service from achieving these things. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. The Selected Alternative represents what Forest managers believe to be the best balance of outcomes in achieving sustainable ecosystems and recreation opportunities while meeting the intent of relevant laws.
PC 11000-7:	**The Forest Service should follow the principles of multiple-use.**
SC 11000-7a	TO MAINTAIN CONSISTENCY WITH THE MISSION OF THE FOREST SERVICE
SC 11000-7b	TO ALLOW PUBLIC BUY-IN TO THE PROCESS
SC 11000-7c	BECAUSE ALL USERS DESERVE AN OPPORTUNITY TO ACCESS PUBLIC LANDS
SC 11000-7d	TO SET ASIDE LAND FOR MOTORIZED VEHICLES, HIKING OPPORTUNITIES, STUDY AREAS, AND PRESERVES FOR VALUABLE TREES, PLANTS, AND OTHER ECOLOGICAL ITEMS
SC 11000-7e	BECAUSE IT IS NOT POSSIBLE TO PROVIDE SUCH DIVERSE USES ON SMALLER PARCELS OF PUBLIC LAND
SC 11000-7f	BY PROVIDING FEWER RESTRICTIONS ON PUBLIC LANDS, INCLUDING IN AREAS WHERE CONFLICTING USES OVERLAP
	Response: The revised Forest Plan is developed under the authority of the National Forest Management Act (NFMA) and the Forest and Rangeland Resources Planning Act to “provide for multiple use and sustained yield of goods and services from the National Forest System in a way that maximizes long term benefits in an environmentally sound manner.” These laws, in concert with a number of other laws and regulations, provide the overall context for determining the best possible “balanced approach” for the Green Mountain National Forest. The NFMA regulations define “management direction” as “[A] statement of multiple-use and other goals and objectives, the associated management prescriptions, and standards and guidelines for attaining them” (36 CFR 219.3). The NFMA regulations further define “multiple-use” as making the most judicious use of the land in a combination that best meets public needs (36 CFR 219.3). These regulations require Land and Resource Management Plans to contain “[F]orest multiple-use goals and objectives that include a description of the desired future condition of the forest” and “[M]ultiple-use prescriptions and associated standards and guidelines for each management area” (36 CFR 219.11(b) and (c)). The Multiple-Use Sustained-Yield Act of 1960 states that, “It is the policy of the Congress that the National Forests are established and shall be administered

	for outdoor recreation, range, timber, watershed, and wildlife and fish purposes." This means that the National Forests will be managed to provide for the use of all the various renewable surface resources in a combination that best meets the needs of the American people (DEIS p. 1-3). The Selected Alternative and revised Forest Plan provide a balance between competing concerns while managing for biological diversity, off-road vehicles, timber harvest, and non-motorized recreation.
PC 11000-8:	**The Forest Service should revise its multiple use mandate to reflect realities of the 21st century.**
SC 11000-8a	TO ENSURE THAT THE MULTIPLE USES DO NOT HARM WATER OR SOIL RESOURCES, THE FOREST ECOSYSTEM, OR THE WILDLIFE THAT DEPEND ON FOREST STEWARDSHIP
	Response: The Forest Plan is developed under the provision of the National Forest Management Act (NFMA) and the Forest and Rangeland Resources Planning Act to "provide for multiple use and sustained yield of goods and services from the National Forest System in a way that maximizes long term benefits in an environmentally sound manner." These laws, in concert with a number of other laws and regulations (see FEIS section 3.1.5), provide the overall context for determining the best possible balanced approach for the Green Mountain National Forest. Forest-wide and management area standards and guidelines will ensure protection of resources (revised Forest Plan Chapters 3 and 4).
PC 11000-9:	**The Forest Service should look at the landscape scale with regard to wilderness as a complement to the vast sea of manipulated land around it.**
	Response: The commenter was concerned that recognition of spatial scales, as opposed to time scales, was lacking in the DEIS, particularly in section 3.1.6, as well as in relation to Wilderness. Section 3.1.6 of the DEIS is meant to simply introduce the concepts of spatial and temporal scales. Each resource effects analysis then discusses both spatial and temporal scales to the extent that they are relevant, and as required by the National Environmental Policy Act. Spatial scales were considered in the context of Wilderness evaluations (found in Appendix C of the DEIS), as well as in the context of the environmental analysis for Wilderness. In particular, the Wilderness section (3.12) of the DEIS describes the analysis area on page 3-245 as including all federal lands within the GMNF for direct and indirect effects analysis, and all lands within New England and New York that provide wilderness opportunities for the cumulative effects analysis. The spatial scale evaluated for cumulative effects on Wilderness therefore consists of a broad landscape including the White Mountains, the Green Mountains, and the Adirondacks. Spatial scales were also considered in the context of the discussion of the ecological reference area network, which provides a variety of lands that are managed predominantly under natural disturbance regimes and in which little to no harvesting will occur (section 3.11 of the DEIS). The analysis area is discussed for this section on page 3-216, and also identifies broad landscapes for the cumulative effects analysis, particularly ecological regions known as subsections that are broad geographical regions, and include areas within Vermont and New York. The roadless area evaluations in Appendix C reviewed how each area fit within

	the larger ecological context by accounting for various ecological conditions represented by these areas, and by looking at their capability in providing for significant ecological values identified in other analyses, such as the Vermont Biodiversity Project, which looked at representative landscapes across Vermont. Section 3.11 discusses the landscape context for establishing areas protected from greater levels of human intervention, and representation of various types of ecosystems in those areas. It discusses the contribution the GMNF makes to conserved lands within the State and within ecological regions of the State.
PC 11000-10:	**The Forest Service should focus on ecological dynamism as a renewed approach to forest management.**
	Response: The Forest Service recognizes that ecosystems are dynamic, and that natural disturbance regimes are important ecological processes that control the development of forested ecosystems. This is discussed in detail in the Vegetation section (section 3.5) of the DEIS. The Forest Service has a broad mission, "to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations." The Multiple-Use Sustained-Yield Act of 1960 states: "It is the policy of the Congress that the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes." In order to meet the mission as well as multiple-use, some areas are identified for protection and preservation, where natural disturbance regimes will dominate. Other areas are identified for management for purposes such as ecosystem restoration, production of goods, and maintaining or improving wildlife habitat, forest productivity, and forest health. All management is geared toward providing for future generations' use, enjoyment, and needs. The Forest Service believes that the revised Forest Plan provides a balance between management that recognizes and works with the natural dynamics of ecosystems, and management that emphasizes other uses that may interrupt those dynamics. An evaluation of how closely the lands suitable for timber management will approximate the natural range of variability associated with Northeastern forests suggests that more than 80 percent of these lands will be managed in a way consistent with the range of natural variability (see response to PC 32600-5l). Ecological sustainability is the key to maintaining species diversity, viability, and ecological productivity, which is a requirement of the agency and part of its mission (DEIS p. 3-13). In 1992, the Forest Service adopted ecosystem management as an operating philosophy (Overbay 1992), and this is discussed in detail in section 3.1.4 in the DEIS (pp. 3-11 to 3-15).

Public Involvement (12000)

PC 12000-1:	**The Forest Service should give little merit to general or non-substantive comments provided in forms or letter generators.**
	Response: Public involvement is a major component under the NEPA and NFMA regulations for developing Forest Plans. 40 CFR 1503.4 explains an agency's responsibilities for responding to comments. The Council of Environmental Quality (CEQ) regulations for implementing NEPA require

	agencies to respond to substantive comments received. The Forest Service has not addressed non-substantive comments in this appendix.
PC 12000-2:	**The Forest Service should have held public meetings in additional population centers such as New York, Boston, and Burlington in order to get a wider breadth of public interest and input.**
SC 12000-2a	BECAUSE NO MEANINGFUL OPPORTUNITIES WERE PROVIDED FOR NATIONAL AND REGIONAL AUDIENCES TO COMMENT AT KEY POINTS IN THE PROCESS
SC 12000-2b	BECAUSE THE PUBLIC MEETINGS UNDER-REPRESENTED AND UNDER-VALUED THE VAST MAJORITY OF CITIZENS WITH NON-COMMODITY INTERESTS
SC 12000-2c	BECAUSE RELIANCE ON LOCAL INPUT WILL HAVE LONG-TERM DETRIMENTAL EFFECTS
	Response: The Forest Service held more than 70 public meetings in a variety of locations (more than 12 different towns) near the GMNF and was available to meet with non-governmental organizations and the regional planning commissions. The Forest Service also accepted emails, letters, and phone calls from the public throughout the planning process. The NEPA implementing regulations require agencies to make “diligent efforts to involve the public in preparing and implementing their NEPA procedures,” and “provide public notice of NEPA-related hearings, public meetings, and the availability of environmental documents so as to inform those persons and agencies who may be interested or affected” (40 CFR 1506.6 (a) and (b)). Furthermore, NEPA regulations require an agency to publish a notice of intent in the Federal Register “as soon as practicable after its decision to prepare an environmental impact statement and before the scoping process” (40 CFR 1501.7). Under 40 CFR 1506.6 (f), agencies must, “[M]ake environmental impact statements, the comments received, and any underlying documents available to the public pursuant to the provisions of the Freedom of Information Act (5 U.S.C. 552). Appendix A of the DEIS describes in detail the public involvement that took place during the GMNF Forest Plan revision process. As indicated in Appendix A, public involvement was an integral part of the Forest Plan revision beginning with the scope of issues to be addressed through developing alternatives and selecting a preferred alternative. Public review and comment of the DEIS and proposed Forest Plans then provided the basis for the final analysis described in this FEIS and the final decision described in the ROD (FEIS p. A-1).
PC 12000-3:	**The Forest Service should allow partners in the cycling and equestrian community to provide input and take an active role in the decision-making process, similar to the role of the Appalachian Trail Council.**
	Response: The Appalachian Trail was officially recognized by the Congress in 1968 with passage of the National Trails System Act. The Appalachian National Scenic Trail (AT) is a continuous marked footpath extending approximately 2,170 miles. The management model for this National Trail system and unit of the National Park Service is a Cooperative Management System. As it passes through the GMNF, management of the AT is therefore completed by a partnership of organizations, including the Appalachian Trail Conservancy, the National Park Service, and the Forest Service. While other user groups do not participate in this cooperating body, future projects involving the AT will go through site-specific project analysis, at which time the public will have an opportunity to comment on proposed actions. For other trail

	uses, the Forest Service does encourage partner participation in trail development and management. See revised Forest Plan Goal 18. For details regarding bicycle use on the Appalachian Trail/Long Trail (AT/LT), see response to PC 53000-23.
PC 12000-4:	**The Forest Service should make all related documents available to the public in the Final EIS.**
SC 12000-4a	BECAUSE SOME OF THE DOCUMENTS REFERENCED IN THE DRAFT EIS APPENDICES ARE NOT AVAILABLE
	Response: All documents related to the FEIS, Record of Decision, and revised Forest Plan must be made available to the public pursuant to the provisions of the Freedom of Information Act (5 U.S.C. 552). The entire Administrative Record is available for public review in the GMNF Forest Supervisor's Office in Rutland, Vermont.
PC 12000-5:	**The Forest Service should improve the public involvement process to reach people who cannot attend public meetings.**
	Response: The Forest Service appreciates the commenter's concern for those who could not attend public meetings during the Forest Plan revision process. The Forest Service intentionally designed a public involvement process that was accessible to all interested parties, not just those that attended public meetings. Form the time the Notice of Intent was published until the time of the official comment period following the Notice of availability, the Forest Service invited the public to comment via email, letters, and phone calls, as well as attending meetings. In order to keep those who could not attend meetings informed, the Forest Service provided meeting information, Powerpoint presentations, and minutes on the Forest Service's Plan revision website. All comments were entered into a spreadsheet and were reviewed during the development of alternatives and management direction. The Forest Service also accepted verbal and written comments on the range of alternatives, presented at public meetings and available on the website or at the District or Supervisor offices. See also response to SC 10000-3a.
PC 12000-6:	**The Forest Service should incorporate comments from the Agency of Natural Resources ongoing, contracted review of assessments used by the GMNF.**
	Response: The Forest Service has reviewed the information related to the Social and Economic Assessment provided by the Vermont Agency of Natural Resources (VANR) in June of 2005. The Social and Economic Assessment was completed in March of 2005 and has not been revised. Some information provided in the review was part of the DEIS social and economic analysis (DEIS Ch.3 Section 3.21), including the Forest Service's specific economic contribution in timber and recreation to the six counties with NFS lands. The FEIS used constant dollars in Tables 3.21-8 and 3.21-9 (see FEIS section 3.21) as suggested in the review. The Forest Service has not received a review of the SPECTRUM analysis from VANR.

Use of Science; Research (13000)

PC 13000-1:	**The Forest Service should discount the telephone poll and companion postal poll conducted by the Center for Rural Studies.**
SC 13000-1a	BECAUSE THE WILDERNESS SOCIETY IS AN ADVOCACY GROUP NOT A RESEARCH GROUP
SC 13000-1b	BECAUSE THE POLLS DID NOT ACCOUNT FOR THE NEGATIVES OF

	WILDERNESS DESIGNATION
	Response: Data gathered from academic studies, such as the one conducted by the University of Vermont's Center for Rural Studies, were used in the assessment of wilderness need included in DEIS Appendix C. The information in the wilderness need assessment was used to supplement the site-specific roadless evaluations in making wilderness study area recommendations. This was only one piece of information considered among many for potential wilderness. Studies such as the one conducted by the Center for Rural Studies can be funded by a variety of sources, including federal or State grants, or grants from non-profit organizations such as The Wilderness Society. It is inevitable that any such study will contain a degree of bias, whether funded by the Forest Service, The Wilderness Society, or an industry group. Studies on the Green Mountain National Forest were also conducted by other academic centers, such as the Rubenstein School of Natural Resources at the University of Vermont (Manning et al. 1996). These studies were also considered in the wilderness need assessment. The Forest Service disclosed the sources of all studies referenced in DEIS Appendix C.
PC 13000-2:	**The Forest Service should research and develop a model that changes the management area designations in Alternative E to make allowance for the model.**
SC 13000-2a	TO SUBSTANTIALLY IMPROVE THE NUMBER OF GAME SPECIES PER SQUARE MILE
SC 13000-2b	TO HAVE HIGHER TIMBER MANAGEMENT LEVELS
SC 13000-2c	TO INCORPORATE VIABLE ROUTES FOR EAST-WEST SUMMER ORV OR SNOWMOBILE CONNECTOR TRAILS
SC 13000-2d	TO ENHANCE CURRENTLY NEGLECTED VALUES OVER TIME
	Response: The SPECTRUM Model was used as a tool to help develop programmatic timber harvest schedules for each alternative (see FEIS Appendix B). The costs used in SPECTRUM are direct costs associated with the program. Direct costs were used as they permit the most appropriate means of comparing alternatives. Timber program costs used in SPECTRUM included sale preparation, sale administration, and road maintenance. Indirect costs such as environmental analysis, overhead, planning, silvicultural examination, and other resource support were not used by SPECTRUM. The SPECTRUM model is a linear programming model developed by Forest Service Research to be used for Forest Planning nationally. It is beyond the scope of this analysis to develop a separate Forest Planning model. The Selected Alternative parameters that were input into the SPECTRUM model determined an optimum harvesting schedule of 16.4 MMBF per year (FEIS Table 3.13.7). This is based on achieving specific wildlife habitat objectives and also having a harvest program that has scenic, social, and resource impacts described in the FEIS. Based on available information, the Forest Service considers this a reasonable ceiling for the timber program in the next 10 to 15 years, and does not believe higher production levels could be sustained. The SPECTRUM model determined a biological capability of 27.6 MMBF per year that did not include Forest Plan constraints and requirements for non-declining, even-flow harvesting scheduling for the 150-year projection period. Objectives and outputs will be monitored over the life of the revised Forest Plan, and adjustments can be made through a revision or amendment to the Plan.

	The Multiple-Use Sustained-Yield Act of 1960 states that, "It is the policy of the Congress that the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes." This means that the National Forests will be managed to provide for the use of all the various renewable surface resources in a combination that best meets the needs of the American people. The Selected Alternative and revised Forest Plan provide a balance between competing concerns while managing for biological diversity, off-road vehicles, timber harvest, and non-motorized recreation. See response to SC 22000-4a, and PC 34000-19 and related subconcerns.
PC 13000-3:	**The Forest Service should cite any research done in the northern New England region showing increased or enhanced recreation opportunities provide a measurable economic benefit to local businesses.**
	Response: The economic analysis for recreation is based on existing use figures and changes estimated to occur to existing use figures based on management area allocations in the five alternatives (FEIS Appendix B). Spending information for visitors to national forests has been collected as a subset of information collected in the National Visitor Use Monitoring (NVUM) survey. This information is then estimated for a given forest using trip segment shares for the individual forest as weights (Stynes and White 2004). The existing use figures and the spending profiles are used in IMPLAN to calculate economic impacts associated with recreational use. Recreation use is expected to increase in the Northeast (Bowker et al. 1999) and surveys of users have shown their local spending profiles. Research done by the Vermont Tourism Data Center shows the impact of tourism on the retail sector (http://www.uvm.edu/~snrvtdc/publications/Tourism%20Industry%20Fact%20Sheet%202003.pdf) and has established per trip spending profiles for Vermont Visitors (http://www.uvm.edu/~snrvtdc/publications/2002_Visitors_Study_Report.pdf). This information was not used in the economic analysis because the Forest Service has done spending profiles more directly related to forest visitors.
PC 13000-4:	**The Forest Service should not consider the users of the Long Trail when calculating use figures of the Lye Brook Wilderness area.**
	Response: Visitor use on the GMNF was estimated using the Forest Service National Visitor Use Monitoring (NVUM) process (see FEIS Appendix B). This process was designed to provide statistically reliable estimates of recreation visitation to national forests and grasslands and designated Wilderness within them. This process generates visitation estimates for national forests as a whole, and not for individual recreation sites or Wildernesses. Moreover, NVUM is intended to help ensure Forest Service-wide consistency in data collection and establish a minimum standard of statistical accuracy. The methods the Forest Service used to collect visitor use data on the GMNF is consistent with the protocols established for the NVUM study. Refinements to the data collection process are outside the scope of the Forest Plan. Further explanation of the methods and results of the NVUM study can be found in the Visitor Use Report for the Green Mountain & Finger Lakes National Forests, available at the Supervisor's Office in Rutland or on the Internet at: http://www.fs.fed.us/recreation/programs/nvum/reports/year1/R9_Green_Mtn_final.htm
PC 13000-5:	**The Forest Service should incorporate information that compares wilderness acreage in the fifty national forests east of the Mississippi River into the wilderness sections of the Final EIS and Final Revised Plan.**

	Response: This information was considered when developing the assessment of need for additional Wilderness in the GMNF DEIS Appendix C. This information is in the project file.
PC 13000-6:	**The Forest Service should consider the social and environmental factors that the Forest will face in the next twenty-five, fifty, hundred years, and more.**
SC 13000-6a	BECAUSE FORESTS TAKE HUNDREDS OF YEARS TO GROW
SC 13000-6b	BECAUSE IT IS SHORT-SIGHTED TO CREATE A MANAGEMENT PLAN FOR FIFTEEN (OR EVEN SEVENTEEN) YEARS
	Response: As the Forest Service found in the last planning period, new research, monitoring information, shifts in public demands, technological advances, and new regulations are just a part of the changing conditions faced in managing the National Forest. Any one of these can necessitate changes in the Forest Plan. In fact, as Chapter 4 of the revised Forest Plan points out, the Plan is monitored annually to help the Forest Service determine if and when the Forest Plan needs to be changed or updated. In addition, the National Forest Management Act and its implementing regulations contained in 36 CFR 219 (1982), requires Forests to revise their plans every 10-15 years. While the initial planning period is 10 to15 years, the Forest Service considered long-term conditions and needs in developing alternatives, goals, objectives, and management direction.

Agency Organization, Funding, and Staffing (14000)

PC 14000-1:	**The Forest Service should provide more funding to increase law enforcement.**
SC 14000-1a	TO STOP ILLEGAL SUMMER ORV USE AND ENFORCE MOTORIZED VEHICLE SPEED LIMITS
SC 14000-1b	TO PROTECT HABITAT AND WALLINGFORD POND FROM BEING DESTROYED BY MOTORIZED VEHICLES
	Response: Law enforcement is an implementation concern and the revised Forest Plan, as a programmatic document, does not address the specifics of implementation. The Forest Service has a law enforcement organization that assists in this work. Forest Law Enforcement Officers (LEOs) routinely patrol to enforce rules and regulations. Congress reviews and allocates Forest budgets on an annual basis, which may, or may not, be sufficient to implement proposed annual activities. The final determining factor in carrying out the intent of the Forest Plan is the level of funding, which dictates the amount and type of law enforcement on the Forest (revised Forest Plan p. 6). See response to PC 53000-1h.
PC 14000-2:	**The Forest Service should provide assurance regarding the ability to implement the Final Plan given funding appropriations for the planning process.**
SC 14000-2a	BECAUSE WITHOUT ANY GUARANTEE, THE PUBLIC INVOLVEMENT PROCESS AND APPROVAL OF A FINAL PLAN MAY BE ONLY A FORMALITY
	Response: Congress reviews and allocates Forest budgets on an annual basis, which may, or may not, be sufficient to implement proposed annual activities. The final determining factor in carrying out the intent of the Forest Plan is the level of funding, which dictates the rate of implementation of the Plan (revised Forest Plan p. 6).

Alternatives/Options (20000)

Document general (Draft or Final EIS, Proposed or Final Plan) (21000)

PC 21000-1:	**The Forest Service should issue a new Draft EIS or a supplemental Draft EIS for public comment before final decisions are made.**
SC 21000-1d	BECAUSE CORRECTING PROBLEMS IN THE DRAFT EIS WOULD NOT MEET LEGAL SUFFICIENCY REQUIREMENTS
	Response: The proposed Forest Plan and DEIS were developed following the implementing regulations of the National Environmental Policy Act found in 40 CFR, Parts 1500-1508. Environmental Impact Statements shall be prepared in two stages – DEIS and FEIS – and may be supplemented (40 CFR, Part 1502.9). As required in Part 1503, the Forest Service obtained comments. Comments were read, coded, entered into a database, and summarized into Public Concern Statements. Comments were assessed and considered both individually and collectively, and responses were made in the FEIS by one or more of the means listed in Part 1503.4. The Forest Service believes that a supplemental DEIS is not needed, and that the draft statement fulfills and satisfies to the fullest extent possible the requirements established for final statements in section 102 (2)(C) of the Act.
SC 21000-1a	TO REFLECT THE FULL RANGE OF VALUES ASSOCIATED WITH WILDERNESS AND OTHER AREAS MANAGED FOR THEIR NATURAL CHARACTER
	Response: Appendix C of the DEIS analyzed a full range of values associated with potential wilderness areas. The Assessment of Need for Additional Wilderness on the GMNF, for example, discusses a range of wilderness values, such as economic, scientific, and research values, as well as ecological and social values. The roadless evaluations that follow in Appendix C further evaluate the tradeoffs associated with these values in each roadless area assessed for wilderness potential. The analysis of the effects of the revised Forest Plan on wilderness (FEIS section 3.12) also discusses a range of values associated with wilderness areas.
SC 21000-1b	BECAUSE THE DRAFT EIS WAS BASED ON POLITICAL, RATHER THAN SCIENTIFIC CONSIDERATIONS
	The Forest Service agrees that it should not be overly influenced by any particular group or individual, and the agency strives for land management policy that provides for maximum net public benefit. Since 1996, the Forest Service has met with, and considered comments from, numerous individuals and organizations expressing a broad range of viewpoints. The revised Forest Plan and EIS are based on the issues identified through this process. (See response to SC 11000-5.) Incorporating scientific research, inventory, and monitoring was an important part of developing the revised Forest Plan. The need to use appropriate methodologies in monitoring and evaluation, as well as to provide clear understandable scientific information for the public, are among several science-related areas of concern that have been identified (DEIS pp. 1-4).
SC 21000-1c	BECAUSE THE DRAFT EIS SEEMS TO IGNORE THE VOLUMES OF PUBLIC COMMENT

	Response: See responses to SC 10000-3a and SC 11000-5.
SC 21000-1e	TO INCLUDE PROPOSALS REJECTED IN THE DRAFT EIS, SUCH AS THE VERMONT WILDERNESS ASSOCIATION PROPOSAL
	Response: The proposed Forest Plan and DEIS were developed following the implementing regulations of the National Environmental Policy Act found in 40 CFR, Parts 1500-1508. Agencies are required to "rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated (Part 1502.14). The Vermont Wilderness Association proposal called for an additional 79,200 acres (approximately 20% of the GMNF) as Wilderness, 45,000 acres (approximately 11% of the GMNF) as National Recreation Area, and 15,000 acres (approximately 4% of the GMNF) as National Conservation Area. The Forest Service considered this proposal, but eliminated it from detailed study for a number of reasons, which are discussed in section 2.1.6 of the FEIS.
SC 21000-1f	BECAUSE THE DRAFT EIS DOES NOT INCLUDE STANDARDS GOVERNING THE DEVELOPMENT OF WIND ENERGY ON THE NATIONAL FOREST
	Response: The revised Forest Plan is a programmatic document that does not address site-specific implementation such as development of wind energy. Wind energy development, when proposed by a private proponent or developer, would be considered a non-recreation special use, and would require a non-recreation special use permit, which is defined on p. 145 in the revised Forest Plan. Several standards for this type of special use, although not specifically stated as wind energy development, are found in the revised Forest Plan on pages 44-45. Wind development, like any other site specific project, would be required to adhere to Forest-wide standards and guidelines. A number of management areas, under their non-recreation special uses standards, prohibit development of and designated sites for wind towers, or prohibit non-recreation special use permits which would include wind energy development proposals (DEIS p. 3-289, Tables 3.14-2 and 3.14-3). The commenter suggests changing the wording of the following Recreation Special Uses guideline in the revised Forest Plan (p. 44): "Special use authorizations should be issued only when there are no reasonable private land alternatives, or when the use has a clear and significant public benefit." This guideline is preceded by a standard stating "Special Use applications shall be denied if the authorizing officer determines that: The proposed use would not be in the public interest," so the language change offered in the comment is precluded. The intent of the guideline is to provide flexibility in cases where there is public benefit but it may also be reasonable to use non-NFS land. An example would be where it is reasonable to build a new road on non-NFS land to provide access to non-NFS land but there would be less impact to the environment and, therefore, a clear and significant public benefit, if the use of an existing road on NFS land were authorized.
SC 21000-1g	TO ALLOW THE PUBLIC TO COMMENT ON THE MONITORING AND EVALUATION IMPLEMENTATION GUIDE THAT WAS NOT INCLUDED IN THE DRAFT EIS
	Response: The Forest Service has decided to create and maintain the Monitoring Guide as a reference that is linked to, but not a formal part of, the

	revised Forest Plan (see revised Forest Plan Chapter 4). This approach complies with requirements of NFMA, the 1982 Planning Rule, and other relevant directives. The primary reason for using this approach is to keep the Guide current reflecting factors such as changing priorities, information on improved techniques, and new opportunities for monitoring in cooperation with others. Handling the Monitoring Guide this way means that future updates can be done as needed, without having to meet the extended timeline requirements of formal Plan amendment or revision.
PC 21000-2:	**The Forest Service should correct Appendix C to reflect additional opposition to expanding wilderness designations.**
	Response: FEIS Appendix C lists the towns that have sent the Forest Service written, formal statements with a position on wilderness. As of this writing, the Forest Service has not received such a letter from the town of Goshen, and thus Goshen was not included on the list. Similarly, Appendix C lists petitions and other positions on the wilderness issue that the Forest Service has received in writing. The referenced Open Letter to the Vermont Congressional Delegation of June 11, 2002 was sent to the Vermont Congressional Delegation and not to the Forest Service and was therefore not included in Appendix C.
PC 21000-3:	**The Forest Service should correct Appendix E to recognize that concentrated trail use can be an effective management strategy to combat resource degradation.**
	Response: Appendix E of the DEIS contains the Biological Evaluation for the GMNF. The commenter is concerned about a statement in this Appendix regarding the impact of Appalachian Trail and Long Trail hikers on alpine habitat. The section referenced by the comment discusses the impacts of the alternatives on sensitive species in alpine habitat. Potential impacts to alpine habitats are also discussed in the Areas of Special Significance section (section 3.11) of the FEIS. The section states that the quality of this habitat may decline slightly due to increasing recreational pressures. Specifically, the fact that alpine habitat is easily accessed from the Long Trail and Appalachian Trail is mentioned as one point of concern among several for this habitat. The AT/LT itself is not listed as a possible source of degradation. In fact, the Appalachian Trail and Long Trail Management Areas are listed earlier as having management direction that helps protect sensitive alpine species. The Forest Service concurs with the commenter that concentrating use on trails is preferable to unmanaged recreation, and the Forest Service will continue to work with partners such as the Appalachian Trail Conservancy in “stay-on-the-trail” education efforts.
PC 21000-4:	**The Forest Service should correct in the Final EIS and Plan that the Appalachian Trail and designated wilderness areas are fundamentally compatible.**
	Response: The DEIS does not assert that the Appalachian Trail and designated wilderness areas are incompatible. The commenter is specifically concerned with DEIS references to the Appalachian Trail and Long Trail in the Recreation section 3.10 of the DEIS. One indicator used to compare the environmental effects of the alternatives on recreation is the impacts of wilderness on recreation opportunities. In this context, it is true that recreation facilities, including trail shelters and fire towers, are specifically inconsistent with designated wilderness as determined by the Wilderness Act and by Forest Service policy. Whether or not such inconsistent facilities become “exceptions” to these rules is a matter for the Congress to decide as the designating

	authority. The Forest Service has this potential for exception incorporated into the standards and guidelines that govern Wilderness Management Areas (revised Forest Plan pp. 50-51).
PC 21000-5:	**The Forest Service should revise language regarding ecological tendencies, restoration, and recovery to recognize that the ecology of the forest is in a state of flux.**
	Response: The commenter was concerned that the language used in the effects analysis regarding restoration suggested that the Forest Service believed ecosystems were static, and the commenter contends that there is no scientific basis for recognition of an ecological condition to which an ecosystem could be restored, due to the constant change in ecosystems. First, the discipline of ecological restoration is scientifically recognized, most notably in association with the professional Society for Ecological Restoration International, and their scientific, peer-reviewed journal, *Restoration Ecology*, in publication since 1993. Ecological restoration is simply "the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed" (SER 2004). Second, the concept of ecological restoration inherently recognizes that ecosystems are dynamic. The development of ecosystems through successional stages has long been recognized. Although the notion of climax conditions (an end-point to succession) is no longer scientifically defensible, the trajectory of an ecosystem's composition and structure as it develops under natural disturbance regimes can be predicted over time. Recognition of major forest types, such as northern hardwoods, spruce-fir, and oak-hickory, suggests a basic if intuitive recognition of inherent tendencies of ecosystems. Ecosystems can and have been named, based on their potential natural vegetation. Classifications of such ecosystems form the basis for managing the National Forests, as they are required by policy on all federal lands managed by the Forest Service (FSM 2060.3). The reason ecosystems are described, named, and evaluated in terms of current compared to potential natural conditions has to do with ecological sustainability. When ecosystems experience disturbances and fluctuations similar to those experienced historically, they tend to become resilient over time in responding to these changes. Species evolve adaptations that allow them to bounce back from such disturbances. When fluctuation or disturbance patterns suddenly change, dramatic changes in species composition and ecosystem structure can occur. If dramatic enough, such disturbances can cause ecosystems to simplify or collapse, accompanied by a loss of biological diversity. Ecosystems that have experienced dramatic changes in disturbance patterns are those that benefit from restoration. As described in the Vegetation section (section 3.5) of Chapter 3 of the DEIS, ecosystems in the Northeast and on the Forest have experienced dramatic changes in disturbance patterns during the period of colonization and hill farming. More details regarding the basis for evaluating ecosystems in the context of historical disturbance patterns can be found in section 3.1.4 of the DEIS regarding ecosystem management.
PC 21000-6:	**The Forest Service should include dog sledding activities throughout the Final EIS and Final Revised Plan documents, such as in historical or economical activity lists.**
	Response: The Forest Service appreciates the insight into dog sledding activities in Vermont provided by this commenter. The list of activities was not

	meant to be all-inclusive, rather to give a feel for the types of recreation activities that occur on the GMNF. See also response to PC 53000-27, 28, and 29.
PC 21000-7:	**The Forest Service should correct Appendix B in the Final EIS to reflect realistic budget expectations and accurate timber cost and revenue figures.**
	Response: The costs displayed in FEIS Appendix B: Tables 2, 3, and 4 are direct program costs and expenses. TSPIRS costs include direct costs and indirect costs. TSPIRS analysis is no longer conducted by the Forest Service and is not relevant to the analysis conducted in the SPECTRUM model. In recent years, the value of timber sold from the GMNF annually is substantially higher than the annual cost of the timber program, including overhead. TSPIRS was developed at a time when the national timber program's focus was on producing commercially valuable timber to help meet the nation's need for wood. In this setting, it arguably made sense to stress timber output levels and profitability, but this is no longer the case. The last TSPIRS report was in 1998 and the Congress has decided that it is no longer valid. Today's timber program emphasizes using timber harvesting and timber sales as cost-effective tools for improving resource conditions on the land, and consequently the principle interest has shifted from outputs (wood produced) to outcomes (changed vegetation conditions). Only direct costs associated with the timber program were used in SPECTRUM. The SPECTRUM model was used as a tool to develop programmatic timber harvest schedules for each alternative. The economic analysis that was conducted provided a comparison of alternatives. Values for timber products were based on timber values obtained from *Northern Woodlands* magazine. Although the timber values reflect mill prices of private timber, they closely reflect GMNF stumpage prices from 1995 to1998. Stumpage prices received from the State of Vermont and the GMNF are generally higher than stumpage from private lands. Private timber is generally of lower quality than timber on Forest Service lands. GMNF timber sales consist of one to three MMBF while private sales are much smaller. The contract term is generally longer (three to five years), which allows the purchaser to respond to market fluctuations. Contract term length for private timber sales average one to two years. Recent bidding patterns and long-term demand studies indicate that the stumpage values used are probably conservative. Timber values relate closely to the quality of the products being sold, and the GMNF is in a position to sell a high percentage of high-quality material in future timber sales. The mostly likely scenario is that returns from future sales could be considerably higher than the returns projected in the SPECTRUM model. The Forest Service was unable to obtain long-range forecasts of market price trends suitable for applying to this analysis. The costs of timber outputs were based on sale preparation time (average days per acre), sale administration, and road maintenance costs. The Forest Service did not separate timber costs based on silvicultural treatment and forest types. Since most GMNF timber sales consist of a variety of silvicultural treatments and forest types, separating them out would be meaningless in evaluation of the alternatives. Only direct costs were used in the analysis. Indirect costs such as overhead, silvicultural examination, and general administration were not included in the SPECTRUM analysis.

	The Forest Service develops its budget requests consistent with the parameters identified in the revised Forest Plan. The Forest Service allocates resources to the timber management program to support multiple resource objectives including habitat management, forest health, recreation, and scenery objectives, to name a few. Not all of these objectives result in sales that are above costs, but they are necessary to meet other resource objectives.
PC 21000-8:	**The Forest Service should disclose additional cumulative effects that vary by alternative for all resource areas.**
	Response: The Forest Service is directed to give consideration to the incremental effects of past, present, and reasonably foreseeable related future actions of the Forest Service, as well as those of other agencies and individuals (FSH 1909.15-2004-2, section 15.1). The Forest Service estimated all effects by alternative, including cumulative effects in the Environmental Consequences (DEIS Chapter 3). Cumulative effects are described by alternative for each resource or issue.
PC 21000-9:	**The Forest Service should clarify the status of the Catamount Trail, or designate it as a "Forest Service System Trail," and incorporate the entire Catamount Trail on all future GMNF maps.**
SC 21000-9a	TO BE CONSISTENT WITH OTHER DESIGNATED TRAILS
	Response: The Forest Service has identified the length of the Catamount Trail (CT) within its proclamation boundary, on and off Forest Service lands. The large majority of the Catamount Trail on the Forest is a system trail. The Forest Service has also identified those sections of the CT that are not currently on its system and are working to add those sections. The CT segments that are on the GMNF trail system are depicted on Plan Revision maps, but not labeled as the Catamount Trail on the large-scale alternative maps, just as no other trails are labeled.
PC 21000-10:	**The Forest Service should include a map of the current road system by road class in the Final EIS.**
	Response: Due to complexities in printing and high costs for larger maps, the Forest Service decided to produce 11"x17" maps that could be folded easily into the final documents. The amount of information contained within a map showing all Forest roads by class cannot be read at this scale. A larger map (24"x36" or larger) would be required. A map such as this can be reviewed separately by contacting the Forest Service office in Rutland, Vermont. These maps are available on the Forest Service Plan revision website: www.fs.fed.us/r9/gmfl/nepa_planning/plan_revision
PC 21000-11:	**The Forest Service should delineate the Appalachian Trail and Long Trail on all maps, including where the trail passes through other management areas.**
	Response: The Forest Service does delineate the Appalachian Trail and Long Trails on large-scale alternative maps, including where the trail passes through more restrictive management areas, such as Wilderness. On small-scale maps, however, all trails may be omitted for purposes of clarity.
PC 21000-12:	**The Forest Service should improve the CD-ROM version of the plan revision documents.**
	Response: The Forest Service recognizes the short-comings of the Draft Plan and DEIS CD_ROM. The Forest Service will make the revised Forest Plan documents on CD-ROM more accessible and useful by including an ArcReader published map document that will provide users a free, easy-to-use way to view, explore, and print maps related to the revised Forest Plan. The

	formats for Forest Plans and Environmental Impact Statements are outlined in federal laws, agency regulations, and policies. The Forest Service serves a large and varied public, and to make these large documents more available they were produced and made available hard copy, on the GMNF web site, and on CD-ROM.
PC 21000-13:	**The Forest Service should revise the Final EIS to reflect more accurate existing conditions and account for management deficits accrued over the duration of the 1987 Plan.**
SC 21000-13a	TO MITIGATE EARLY SUCCESSIONAL COMPONENT SHORTFALLS IN FINAL REVISIONS TO THE PROPOSED FOREST PLAN
	Response: See response to PC 32500-14.
PC 21000-14:	**The Forest Service should amend the four "Basic Principles of Management" to reflect the need to protect human and natural community values and to provide benefits complementary to those provided by private land.**
	Response: Direction in the revised Forest Plan qualifies and expands upon these four basic principles discussed in the proposed Forest Plan on p. 4. As stated in the revised Forest Plan (p. 8), "[w]ith the nation's population projected to double by the end of the 21st century, the Forest Service owes a special duty to act in ways that help preserve and maintain Vermont's landscape, its communities, and rural economy." Although the Forest Service will continue to manage these lands for multiple-use purposes, the agency will also "collaborate with the State of Vermont, regional organizations, and towns so that our actions actively contribute towards sustaining the character of Vermont's rural landscape, fostering vibrant local communities and economies [and] provide a source of material for the forest products industry" (revised Forest Plan p. 9). The Forest Service addresses the need to protect human and natural community values through several of the Forest-wide goals found on pages10 through 17 in the revised Forest Plan. For example, Goal 12 strives to "[p]rovide a diverse range of high quality, sustainable, recreation opportunities that complement those provided off National Forest System lands" (revised Forest Plan p. 15). The Forest Service also addresses the need to provide benefits complementary to those provided by private land in several of the Forest-wide goals, specifically Goal 8, which strives to "[p]rovide for a sustainable supply of forest products, " and Goal 11, which strives to "[p]rovide opportunities for renewable energy use and development" (revised Forest Plan p. 14).
PC 21000-15:	**The Forest Service should include a map of existing mountain bike trails in the Final EIS.**
	Response: The revised Forest Plan is a programmatic document and therefore does not detail specific trail uses on its maps. The Forest Service does have a map of existing bicycle trails, however, which can be obtained at the Rutland offices of the Forest Service. In addition, maps and full descriptions of GMNF bicycling opportunities, as well as other types of recreation, can be found on the GMNF website at: www.fs.fed.us/r9/gmfl/green_mountain/recreation_management/recreation.htm
PC 21000-16:	**The Forest Service should clarify in the Final EIS the rationale and effects of providing below-cost timber sales.**
	Response: See response to PC 70000-3. In recent years, the value of timber sold from the GMNF was substantially higher than the annual cost of the timber

	program, including overhead. Providing below-cost timber sales was a national issue in the 1980s and is not relevant in today's timber sales program. The below-cost timber sale issue was developed at a time when the program's focus was on producing commercially valuable timber to meet the nation's demand for wood. In this setting, it arguably made sense to stress timber output levels and profitability, but this is no longer the case. Today's GMNF timber program emphasizes using timber harvesting and timber sales as cost effective tools for improving resource conditions on the land, and consequently the principal interest is outcomes as opposed to outputs. When a timber sale is offered, the Forest Service contract is normally awarded to the firm offering the highest bid. This requirement has been imposed to help insure that the government receives fair market value for the timber. The intent of the Forest-wide guideline (revised Forest Plan p. 23) is not to change budget direction, and timber funds are only to be used on suitable lands. Timber sales do not have to be above-cost because there are other non-market benefits achieved through timber harvesting besides timber output.
PC 21000-17:	**The Forest Service should identify how wetlands, vernal pools, and seeps can be better mapped in the future.**
	Response: The commenter is concerned that while State Class 2 wetlands are mapped on readily available National Wetlands Inventory maps, seeps and vernal pools are often not mapped and are difficult to see from the air. The commenter wants the Forest Service to explain how these areas can be better mapped. Methods for such mapping are operational and so are inappropriate for including in a strategic document such as a Forest Plan. Mapping of seeps and vernal pools occurs through field reconnaissance, which is initiated for a number of reasons, including amphibian inventories, rare species inventories, ecological mapping, and project development. When inventories are done or projects are proposed, the areas of interest are reviewed for known or possible wetland conditions, and areas with a moderate to high probability for seeps and vernal pools are identified for inventory. When these small wetlands are located, they are identified on maps and the coordinates of their locations recorded with Global Positioning System (GPS) technology. These areas are then added to the Forest Service database.

Plan components (22000)

PC 22000-1:	**The Forest Service should address errors and omissions that were in the Proposed Revised Plan Appendices.**
SC 22000-1a	TO INCLUDE THE TOWN OF GRANVILLE COOPERATIVE ROAD AGREEMENT IN THE LIST OF AGREEMENTS IN APPENDIX E
	Response: The Forest Service agrees and the agreement has been added to Appendix E of the revised Forest Plan.
PC 22000-2:	**The Forest Service should clarify and address errors and omissions that were in the Draft EIS.**
SC 22000-2a	TO INCLUDE THE WHITE RIVER TRAVELWAY ON THE LIST OF DEVELOPED RECREATION FACILITIES
	Response: The White River Travelway sites are considered developed recreation facilities. They are included on the list of developed recreation facilities; most sites would be considered interpretive sites in DEIS Table 3.10-3 referenced by the commenter.
SC 22000-2b	TO INCLUDE PROHIBITED DISCRETIONARY SPECIAL USES BY

	ALTERNATIVE
	Response: Indicator 2 for Non Recreation Special Uses has been revised to make it clear that the "Discretionary Uses" in question are those that include facilities or some type of development, as opposed to research, photography, or similar uses of a benign, transitory nature (FEIS section 3.14). The indicator focuses on those areas that allow some or all of the former type of "Discretionary Use" and by default, all other areas exclude them.
SC 22000-2c	TO DISCUSS IN THE VISUALS SECTION THE CUMULATIVE EFFECTS OF SKI AREA EXPANSION ON GMNF VERSUS PRIVATE LANDS
	Response: The Forest Service has reviewed your suggestion and agrees with your comment. The paragraph has been reworded for clarity (FEIS section 3.15 Visual Resource Cumulative Effects).
SC 22000-2d	BECAUSE A HALF ACRE WETLAND (AND LARGER) NEEDS THE PROTECTION OF A 50 FOOT LIMITED IMPACT ZONE, AS DO ALL STREAMS
	Response: Forest-wide S&Gs in the revised Final Plan reflect the commenter's recommendation. For wetlands, Forest Service rationale is documented in the responses to SC 31100-1a and SC 31100-1b. As stated in these responses, the protection for all wetlands was clarified and increased in the FEIS. The key wetland protections in the revised Forest Plan that, in essence, provide a "limited impact zone" are: • The Protective Strip, which minimizes soil disturbing activities (for example, harvesting) within a minimum 50 foot strip adjacent to all wetlands. • Guidance from the Forest Service Manual giving priority to the protection of wetlands and their corresponding values, on lands within100 feet of all wetlands. • A new guideline stating, "Within 100 feet of wetlands and seasonal pools, activities should be limited to those that protect, manage, and improve the condition of these resources. Acceptable activities should be approved on a case-by-case basis." All streams are protected by S&Gs in the revised Forest Plan (pp. 20-22) including the minimum 50 foot protective strip (revised Forest Plan p. 20), and Acceptable Management Practice (AMP) #14 (see guideline to follow AMPs in the revised Forest Plan, p. 21), which states: "Except for necessary construction of stream crossings, a protective strip shall be left along streams and other bodies of water in which only light thinning or selection harvesting can occur so that breaks made in the canopy are minimal and a continuous cover is maintained. Log transport machinery must remain outside a 25 foot margin…" The Forest Service believes that these S&Gs provide adequate protection for all streams.
SC 22000-2e	TO CLARIFY THE STATUS OF FOREGROUND MAPPING OF THE AT/LT CORRIDOR
	Response: The commenter is concerned about whether or not foreground mapping of the AT/LT corridor has been completed and if vistas are included. The Forest Service wants to be clear that it is only the Appalachian National Scenic Trail Management Area (8.1), not the Long Trail Management Area (8.2), that incorporates the visible foreground zone into the boundary of the management area. The revised Forest Plan states "…the Appalachian National Scenic Trail Management Area is the National Forest land mapped as the foreground area visible from the AT footpath and associated trail shelters,

	overnight use sites, viewpoints, water sources, and spur trails" (revised Forest Plan p. 66). Foreground is the part of a scene or landscape from the viewer up to one-half mile away (revised Forest Plan Glossary p. 136). Foreground mapping using the Scenery Management System principles on the Appalachian Trail has not been completed and is listed as an objective under Goal 12 of the revised Forest Plan (p. 15). The Appalachian National Scenic Trail Management Area is currently mapped at the minimum width of 500 feet on either side of the AT footpath. Until the mapping is complete, the Forest Service will analyze the foreground zone on a case-by-case basis as project proposals are submitted.
PC 22000-3:	**The Forest Service should make the Goals and Objectives more pragmatic and increase their specificity.**
SC 22000-3a	IN ADDRESSING RENEWABLE ENERGY ISSUES
SC 22000-3b	IN ADDRESSING TRAIL-RELATED RECREATION OPPORTUNITIES
SC 22000-3c	IN ADDRESSING ROAD NETWORK ISSUES
SC 22000-3f	IN ADDRESSING MAINTENANCE OF VISUAL QUALITY
SC 22000-3g	IN ADDRESSING COOPERATION WITH OTHER ORGANIZATIONS REGARDING NON-NATIVE INVASIVE SPECIES CONTROL
SC 22000-3d	BECAUSE THE CURRENT OBJECTIVES ARE NOT SUFFICIENTLY MEASURABLE
	Response: "Goals are broad, overarching statements that describe the desired conditions the Forest Service will strive to achieve through implementation of the revised Forest Plan. They are generally timeless and not measurable, and their achievement is not required" (revised Forest Plan p. 19). Goals do not reflect existing conditions, but rather describe a target or desired condition toward which management strives. "Forest objectives are concise, time-specific statements of measurable planned results or outcomes that are needed to achieve established goals. Objectives form the basis for building management programs and further planning to define the precise steps to be taken and the resources to be used in achieving goals" (revised Forest Plan p. 19). The time frame for the stated objectives is the life of the Forest Plan (10 to 15 years) unless otherwise noted. Objectives were designed to contain units of measure and trajectories such as increase or decrease. The revised Forest Plan is a programmatic document that does not contain site-specific implementation objectives.
SC 22000-3e	IN ADDRESSING THE DEFINITION OF SUSTAINABILITY
	Response: The commenter was concerned about the definition of sustainability referred to in Goal 8, page 14 of the revised Forest Plan. Goal 8 states that the Forest Service will "Provide for a sustainable supply of forest products." Sustainability referred to for Goal 8 is directly linked to the sustainability requirements of the Multiple-Use Sustained-Yield Act of 1960, specifically as stated in the Act: "'Sustained yield of the several products and services' means the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the National Forests without impairment of the productivity of the land. [16 U.S.C 531]". Sustainability (both ecological and general) and related terms are further defined in the Glossary of the revised Plan. The commenter was also concerned that the objectives for Goal 8 should represent the tools to achieve sustainable supply of forest products. However, as noted in the revised Plan, page 10, objectives are statements of planned results or outcomes that are needed to achieve the goals; they generally do not include the specific tools for achieving the objectives, which are left to site-specific project planning and

	associated analysis and public disclosure.
SC 22000-3h	BY SEPARATING AGE CLASS DISTRIBUTION OBJECTIVES BY MANAGEMENT AREA
	Response: One commenter expressed a desire to have two sets of age class distribution tables, one that is focused on the Diverse Forest Use and Moosalamoo management areas, and another that is focused on the Diverse Backcountry and Remote Wildlife management areas. There was a great deal of discussion internally during the development of the structure for the Forest revised Forest Plan on the placement of the age class objectives – whether they should reside in objectives or within management areas (see project file for notes on these discussions). In the end, the Forest Service decided that the one table contained in the objectives for Goal 2 (revised Forest Plan p. 11), and applying to all five management areas where even-age management can occur, was sufficient to help ensure that management projects proposed are consistent with management area goals and objectives. The main reason for focusing on one table for age class objectives is that these objectives are focused on habitat structure for plants and animals across the Forest wherever age class can be manipulated, rather than on habitat structure in particular management areas. Management area direction is the driver for project development, and then age class distribution is evaluated for projects, and opportunities for improvement are identified. The management area direction constrains the tools that can be applied to work toward desired age-class distribution. For instance, management areas that use extended rotations will have areas where the old age class will be closer to the upper end of the range, while management areas using standard rotations will have areas where the old age class will be closer to the lower end of the age class objective range. The primary means by which the agency ensures that projects are consistent with management area direction is through using that direction directly in project development and through public disclosure during the National Environmental Policy Act (NEPA) process.
PC 22000-4:	**The Forest Service should consider adding Goals and Objectives.**
SC 22000-4a	TO COORDINATE WITH OTHER AGENCIES AND THE PRIVATE SECTOR TO ENHANCE WILDLIFE AND FISHERIES HABITAT
	Response: Goal 20 in the revised Forest Plan is to coordinate Forest planning and implementation with federal, State, and local agencies (revised Forest Plan p. 18). The associated objective includes communication and coordination with other local organizations. The Forest Service routinely coordinates or consults with State and federal agencies and other organizations and groups as appropriate on proposed habitat management activities, management decisions, and other activities that might affect terrestrial and aquatic habitats. Although this coordination and consultation already is addressed by Goal 20 of the revised Forest Plan and direction in the Forest Service Manual, the Forest Service has added an additional Forest-wide guideline to the wildlife section: "Wildlife habitat management should be coordinated with the US Fish and Wildlife Service, the Vermont Fish and Wildlife Department, and other agencies or organizations as necessary" (revised Forest Plan p. 27).
SC 22000-4b	TO INCLUDE A GOAL PROMOTING AND INCREASING REMOTE OR WILDERNESS AREAS
	Response: The Forest Service does not have a goal to increase management areas such as remote or wilderness areas because goals in the revised Forest

	Plan are specific desired outcomes rather than desired plans. The Forest Service does not generally include "planning to plan" goals such as increasing certain management areas. The purpose of goals and objectives is to guide management decisions based on resource needs rather than create additional management areas (see revised Forest Plan p. 10). Goals are not time-specific or measurable elements, and the revised Forest Plan reflects this. See also response to PC 22000-3 for an explanation of how revised Forest Plan goals were approached. The commenter is concerned about Forest goals related to remote areas on the Forest. Goal 2 of the revised Forest Plan (p. 11), concerning habitat maintenance and restoration, does contain an objective related to increasing late-successional and old forest habitats, which may relate to the commenter's concern.
SC 22000-4c	RELATED TO MONITORING AND EVALUATION OF ACTIVITIES
	Response: The Forest Service agrees that monitoring and evaluation are critical activities essential to ensuring successful implementation of the revised Plan. In fact, the mandate from the National Forest Management Act regulations which requires monitoring and evaluation of Forest Plan implementation led to the incorporation of a Monitoring and Evaluation chapter in the Forest Plan for every national forest. Monitoring and evaluation are tools by which success is measured, as well as need for change; they are not goals in and of themselves. The Forest Service believes that the fact that there is an entire chapter in the revised Forest Plan (Chapter 4) devoted to monitoring and evaluation suggests that a goal to achieve the same purpose is not needed.
SC 22000-4d	TO INCLUDE A LAND ACQUISITION OBJECTIVE ADDRESSING THE NEED TO COMPLETE APPALACHIAN TRAIL AND LONG TRAIL PROTECTION
	Response: The revised Forest Plan lists acquisition of remaining Appalachian Trail lands as a land ownership adjustment priority. The Forest Service will thus not lose sight of this congressionally directed acquisition need. Page 11 of the revised Forest Plan states the priorities for acquiring lands that become available for purchase; lands that "benefit the Appalachian National Scenic Trail and the Long National Recreation Trail systems" are listed as an acquisition guideline. The commenter was also concerned about a statement in the DEIS regarding continued acquisition of land for inclusion in the GMNF. This statement is listed as one of ten additional public issues that were addressed in the DEIS analysis; it is a statement of a public concern and is therefore not inconsistent with GMNF goals regarding the AT and LT.
SC 22000-4e	TO INCLUDE AN OBJECTIVE FOR THE AQUATIC GOAL TO MAINTAIN AND ENHANCE EXISTING SPRINGS AND SEEPS
	Response: A commenter requested addition of an objective under Goal 4 to maintain and enhance existing springs and seeps because they provide open, snow-free areas during the winter months that are important to wildlife. Existing objectives in the revised Forest Plan include to "Maintain acres of forested wetlands" (Goal 2, p. 11) and "Maintain or restore aquatic, fisheries, and wetland habitats" (Goal 4, p. 13). Forest-wide standards and guidelines in Section 2.3.2 of the revised Forest Plan (Soil, Water, and Riparian Area Protection and Restoration) provide more specific management direction for wetlands, seasonal pools, and other "seepy or poorly drained areas." Seeps, like vernal or seasonal pools, are included in these protections of forested wetlands and wetlands in general. To clarify this point, the Forest Service has

	added ”seeps” to the revised Forest Plan glossary.
SC 22000-4f	TO ADD AN OBJECTIVE FOCUSED ON BEAVER POPULATIONS REACHING THEIR NATURAL LEVELS BECAUSE BEAVERS AND THEIR DAMS PROVIDE SUITABLE HABITAT FOR MANY SPECIES AND ARE CRITICAL TO WATER QUALITY
	Response: The Forest Service acknowledges the important role that beavers play in the creation and maintenance of wetland habitats and in regulation of water quality through numerous references in the Biological Evaluation (Appendix E: particularly see Chapter 5, Analysis of Effects, Regional Forester Sensitive Plants). The revised Forest Plan includes an objective under Goal 2 to maintain acres of forested wetlands, predominantly through natural processes (revised Forest Plan p. 11). “Natural processes” includes beaver activity. The Forest Service does not believe that additional protection for beavers is necessary. Beaver activity is not discouraged on the GMNF except as required to protect other resources (roads and culverts, for example) or to prevent damage to adjoining private property.
PC 22000-5:	**The Forest Service should revise the Goals and Objectives.**
SC 22000-5a	TO ADDRESS UTILIZING PARTNERS IN EDUCATION EFFORTS
	Response: Goal 18 of the revised Forest Plan states that the Forest Service will maintain and enhance partnerships with communities and organizations (p. 17).
SC 22000-5b	TO ADDRESS THE 2005 PLANNING RULE’S EMPHASIS ON NATIVE SPECIES
	Response: The revised Forest Plan was developed based on the 1982 Planning Rule, not on the 2000 proposed revisions to the rule, nor the Planning Rule adopted in January 2005. It is important for the goals and objectives to be consistent with the 1982 rule, including the provision for “desirable non-native” plants and animals in addition to natives. Forest-wide Standards and Guidelines highlight the desire to focus on native species, including Section 2.3.9 related to concerns with non-native invasive species and prioritizing natives in seed mixes, and Section 2.3.8 related to the emphasis on native material for stream restoration.
SC 22000-5c	TO CREATE GREATER DISTINCTIONS BETWEEN GOALS
	Response: Overlap in goals is inevitable with the closely related resource disciplines considered for management of the Forest. The Forest Service felt that it was important to have separate goals and objectives for many resource areas.
SC 22000-5d	TO CLARIFY THE SCOPE OF THE WILDERNESS MANAGEMENT GOAL
	Response: The wilderness management goal (revised Forest Plan Goal 13, p. 16) applies only to Wilderness Management Areas. In response to comments, the monitoring program described in Chapter 4 of the revised Forest Plan has been changed in relation to the wilderness monitoring goal. Wilderness Study Areas are not included in the monitoring program. The wilderness-related goal and monitoring requirement are now consistent.
SC 22000-5e	TO CLARIFY THE DISTINCTION BETWEEN POTENTIAL NATURAL VARIATION AND RANGE OF NATURAL VARIABILITY
	Response: The term “potential natural variation” is not used in either the revised Forest Plan or in the FEIS. The term “potential natural vegetation,” or PNV, is used in the DEIS (but not in the revised Forest Plan) and is defined in Section 3.5.1.1 under the subheading “Ecological Units” (DEIS p. 3-48). This definition has been added to the glossary for the FEIS. Range of natural variability (RNV) is a term used in the conservation biology discipline and has

	been variously referred to as RNV, natural range of variability, or historic range of variability. The term is defined in the revised Forest Plan glossary under "Range of Variability." The term "range of natural variability" has been added to the list of related terms associated with the definition in the glossary. Potential natural vegetation represents the vegetation that would occur in an area under historical disturbance regimes, and so represents the vegetation component of the RNV. Some goals and objectives relate to RNV, but some do not because management toward RNV is not an overarching goal of the Forest Service. See also response to PC 32600-5.
SC 22000-5f	TO INCREASE THE PERCENTAGE OF UPLAND OPENINGS DESIRED IN THE LONG-TERM COMPOSITION OBJECTIVES
	Response: The Forest Service considered natural tendencies and historical land uses while developing objectives for permanent upland openings. The Forest Service set the minimum percentage for permanent upland openings at one percent (FEIS Vegetation section 3.5, Table 3.5-4) to account for variations in budget and staffing that can restrict the agency's ability to increase acres of permanent upland openings. The Forest Service is minimally able to maintain the permanent openings currently on the GMNF, due to both staffing and budgetary shortfalls. Increasing acreage of permanent upland openings above one percent likely will happen through increases in partnerships that come with more funding. See also response to SC 22000-5g.
SC 22000-5g	TO DECREASE THE PERCENTAGE OF PERMANENT UPLAND OPENINGS DESIRED IN THE LONG-TERM COMPOSITION OBJECTIVES
	Response: Permanent upland openings are a component of early successional habitat that is important to many species of wildlife (DEIS p. 3-99). Permanent openings also contribute to other uses, including but not limited to hunting, berry picking, enjoyment of vistas, and other recreational uses. Several commenters expressed the opinion that management to create and maintain permanent upland openings above the potential natural vegetation is inappropriate. During development of the revised Forest Plan, the Forest Service purposefully included direction for the area of upland openings in an objective under Goal 2: "Maintain, and where desirable increase, the acres of upland open habitats at slightly higher than ecological tendencies to support species that prefer these habitats" (revised Forest Plan p. 27). The Vegetation section (section 3.4) of the DEIS presents the justification for this decision (DEIS p. 3-62). In summary, most of the permanent upland openings on the GMNF are a remnant legacy of the historical landscape. As these upland opening habitats dramatically increased and decreased during the past two centuries, so did the numerous species of wildlife that inhabit or depend on them. Recent declines in many of these early successional species have concerned wildlife biologists, resulting in calls for increasing the availability of early successional habitat across much of northeastern North America. (See reviews and collected papers in Thompson et al. 2001 and Litvaitis 2003.) Commenters expressed concern that the proposed increase in upland openings would benefit only a few game species and would not be large enough to provide benefit to grassland birds. Upland openings on the GMNF

	include scrub-old field and shrub habitats, as well as more pasture-like grassland habitats. The wildlife species that inhabit these habitats are substantially more numerous and diverse than a few game species and grassland birds (see the habitat matrices in DeGraaf et al. 1992, DeGraaf and Yamasaki 2001). Research in New Hampshire has demonstrated that openings of 20 to 30 acres support a greater diversity of birds, as well as several species that do not occur in smaller openings. However, openings as small as two acres can provide benefits for many early successional species (King et al. 1998, Costello et al. 2000, DeGraff and Yamasaki 2003). Several commenters expressed concern that increased acreage of permanent upland openings would endanger interior forest birds through increased rates of nest predation, brood parasitism, and fragmentation of mature forest habitat. Nest predation and parasitism are an important cause of nesting failure for forest bird species. Rates of nest loss frequently are higher in areas influenced by habitat edge between forest and openings. Habitat considerations on a greater, landscape level also influence the rates of edge-related predation (Donovan et al. 1997). For example, Rudnicky and Hunter (1993) and Darveau et al. (1997) advise caution in assuming that the results of studies in other areas may be locally relevant. Specifically, forest-edge effects appear to be less pronounced in forested landscapes than in those with more agricultural activity. Landscape-level conditions also influence nest parasitism by cowbirds. Coker and Capen (1995) found that the likelihood of cowbirds (brood parasites) being present in a given location in southern Vermont is greater in larger, less-remote, open patches near chronic disturbance (residential and agricultural development, including pasture and hayfields, ski areas, and maintained openings for wildlife), particularly if domestic livestock are nearby. Conversely, cowbirds are less likely to occur in open patches that are small, more-isolated, and removed from chronic disturbance and livestock. Parts of the GMNF land base are adjacent to agricultural landscapes in the Champlain Valley and the Valley of Vermont, where cowbirds certainly are present. Coker and Capen (1995) reported that overall abundance of cowbirds, and presumably rates of nest parasitism by cowbirds, were low in their study areas on the Green Mountain National Forest. Results of breeding bird surveys suggest that cowbird populations in Vermont have declined during the past ten years (Sauer et al. 2003). Donovan et al. (1997: a supporting reference cited by a commenter) reported increased rates of nest predation and nest parasitism in highly or moderately fragmented forest landscapes compared to unfragmented forest landscapes. The threshold for unfragmented landscape in Donovan et al. (1997) was greater than 90 percent forest cover. The current condition of the GMNF includes approximately one percent of the land base in upland openings and about two percent in wetland openings (FEIS Table 3.5-6). Of the forested lands on the GMNF, less than one percent is in regenerating age classes (FEIS Table 3.5-7). By these criteria, the GMNF land base is unfragmented at the landscape level. A commenter was against creating additional acreage of upland openings because forest-edge effects can reduce food supply with a consequent sharp reduction in reproductive output of some species. A supporting reference (Burke and Nol 1998) reported that density and pairing success of ovenbirds increased significantly with the core area of the woodlot in which they nest and that ovenbirds selected nest sites more than 250 meters from the forest edge.

	Permanent upland openings are not proposed as habitat for ovenbirds and other forest-interior species; wildlife benefits of upland openings will be for those species that utilize early successional habitats. No single set of habitat conditions or management direction can be optimal for all species of wildlife. Increasing acreage in permanent upland openings to provide suitable habitat conditions for some species of wildlife may result in locally unsuitable conditions for other species, and may lead to increased incidence of nest predation or parasitism in areas adjacent to those openings. Under the revised Forest Plan, however, the GMNF will continue to be dominated by mature northern hardwood forest (see response SC 32600-10a), which will provide ample habitat for ovenbirds and other forest-interior species that is far-removed from permanent upland openings. Additionally, Alternative E allocates approximately 140,000 acres of the GMNF, which currently is dominated by mature and old forest habitats, to MAs that promote large, contiguous blocks of mature forest in which changes to forest structure in these areas will occur through natural ecological processes (designated Wilderness, Wilderness Study Area, Remote Backcountry Forest, Ecological Special Area, Research Natural Areas, Alpine/Subalpine Special Area, Appalachian Trail, and Long Trail). In time, these areas will develop into old growth forest (see section 3.5 Vegetation in the FEIS). The White Rocks NRA includes an additional 22,700 acres in which vegetation management is limited. In time, old growth conditions will predominate in the White Rocks NRA, as well. It also can be noted that some “mature forest” species (for example, wood thrush, black-and-white warbler, and ovenbird) may forage extensively in early successional habitat, particularly during the post-fledging period (Vega Rivera et al. 1998, Marshall et al. 2003, Hartley and Burger 2004). Commenters expressed concern that expansion of upland openings encourages “browse-tolerant, low-value trees” like red maple and black birch at the expense of browse-susceptible, “valued trees” like oaks, ashes, and sugar maple, and encourages introduction of non-native invasive species (NNIS). Wildlife habitat is a primary purpose of permanent upland openings; white-tailed deer are one of many species that likely benefit from these openings, as well as from temporary openings created through forest regeneration activities. Deer do browse on regenerating trees, and a limited amount of browse-related loss is acceptable, along with regeneration damage caused by other sources. The Forest Service anticipates that such deer-related damage will be minor on the GMNF. In northwestern and north-central Pennsylvania, browsing by white-tailed deer resulted in negative impacts to forest regeneration at deer densities greater than about 20 deer per square mile (Horsley et al. 2003). In 1995, the Vermont Deer Management Team (1997) estimated deer densities in Vermont at 13 to16 deer per square mile statewide, but only about six to nine deer per square mile in Wildlife Management Units that encompass most of the GMNF land base. Deer densities are unlikely to approach 20 per square mile in the near future. Responses under PC 32300-2 address non-native invasive species (NNIS). It should be noted that the objective to have one to five percent of the GMNF land base in permanent upland openings applies to the Forest-wide landscape;

	these openings will not be distributed evenly across the Forest because of MA-specific emphases, standards, and guidelines. Responses to SC 22000-7c and to all subconcerns under PC 22000-23 address MA-specific aspects of permanent upland openings.
SC 22000-5h	BECAUSE THE OBJECTIVE FOR SOILS SHOULD INCLUDE OBJECTIVES TO MITIGATE THE EFFECTS OF ACID RAIN
	Response: Source reduction is the most effective approach to reducing the impacts of acid deposition on soils in the GMNF because there are only limited actions the Forest Service can take to truly mitigate the effects of acid deposition (both wet and dry) within the Forest. For example, liming of soils to increase the calcium availability has been suggested as a mitigation measure. However the effects of liming forested ecosystems are not well understood and are expensive except for special purposes. The Forest Service implements management recommendations from the Forest Service Northeastern Research Station to minimize the potential effects of harvesting on land affected by acid deposition. These recommendations are listed in a paper titled, "Acid deposition and its potential effects on soil productivity and timber management on the Green Mountain National Forest, Vermont" (Burt et al. 2005, p. 43). See also PC 31000-1 and related subconcerns regarding acid deposition. The Forest Service is actively involved in efforts to reduce emissions that would minimize acid rain and its effects on the forest ecosystem. This is reflected in "Goal 5: Maintain or improve air quality on the GMNF" and the accompanying objectives (revised Forest Plan p. 14). Goal 3 also has an objective to "Restore natural soil processes and functions on degraded soils" (revised Forest Plan p. 13). This objective addresses all kinds of soil degradation including that due to acid rain.
SC 22000-5i	BECAUSE THE GOAL TO PRESERVE BIOTIC COMMUNITIES IS NOT SCIENTIFICALLY DEFENSIBLE IN THE REGION
	Response: The Forest Service recognizes the concern associated with the dynamic nature of ecosystems in contrast to the language contained in Goal 13 (revised Forest Plan p. 16). Goal 13 has been revised by removing words that suggest that the Forest Service is trying to preserve ecosystems in their current state.
SC 22000-5j	BECAUSE SPECIES VIABILITY SHOULD BE A STANDARD RATHER THAN A GOAL, AS THE NATIONAL FOREST MANAGEMENT ACT REQUIRES
	Response: The National Forest Management Act (NFMA) itself does not require maintenance of species viability. NFMA specifically states that the Forest Service should "…provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives, and within the multiple-use objectives of a land management plan adopted pursuant to this section, provide, where appropriate, to the degree practicable, for steps to be taken to preserve the diversity of tree species similar to that existing in the region controlled by the plan;" [16 U.S.C. 1604(g)(3)(B)]. It is the implementing regulations, which were developed by the Forest Service in 1982, that state that "Fish and wildlife habitats shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area…" (36 CFR 219.19). In essence, the regulations do not dictate that maintenance of viability or viability conservation measures be standards. Instead, the regulations direct the Forest Service to use all planning direction tools,

	including management area allocation, goals, objectives, standards, and guidelines, to provide for viability. The revised Forest Plan provides for viability in several ways. As noted in Section 3.1.4 of the DEIS, the Forest Service has taken a coarse filter-fine filter approach to viability (DEIS pp. 3-13-14). The coarse filter portion of this approach is captured in the goals and objectives related to vegetation and habitat, such as vegetation composition objectives and wildlife habitat objectives. Such objectives will conserve most species by providing the widest variety of habitat composition, structure, and associated processes. These objectives are furthered by management area allocation, which provides some areas where natural disturbance and successional processes will predominate, and others where human uses will be more prevalent and disturbance and successional processes are sometimes managed by humans. For species that are rare or at risk, the fine filter is employed, which provides additional protections. These protections include those mandated through policies found in the Forest Service Manual 2670 for species at risk of federal listing or loss of viability, and under the Endangered Species Act for federally listed species. Additional guidance has been added to the Forest-wide standards and guidelines to reflect the importance of rare species conservation (revised Forest Plan p. 30). The primary objective for these species is to reduce risk or at least minimize or stop losses. When there is enough information known about certain rare or at-risk species to indicate additional standards and guidelines for protection, these will be added to the Forest Plan through amendments. These include standards and guidelines developed with the US Fish and Wildlife Service for federally listed species, as well as those developed through collaboration with state agencies and other partners, and those developed through agency experience on the Forest. For rare or at-risk species that do not have specific standards and guidelines listed in the revised Forest Plan, Forest Service Manual and revised Forest Plan direction require that they receive site-specific analyses when projects may impact them, and that projects are adjusted as needed to protect the species (revised Forest Plan pp. 5, 30).
SC 22000-5k	TO STRENGTHEN THE RENEWABLE ENERGY GOAL, SUCH AS BY LISTING POTENTIAL RENEWABLE ENERGY SOURCES
	Response: Potential renewable energy sources are not listed since a list might not be complete and might not include future sources. Goals are designed to be broad statements. See response to PC 22000-3.
SC 22000-5l	BECAUSE THE DESIRED PERCENT RANGES IN THE REGENERATING AGE CLASS ARE TOO LOW
	Response: See response to PC 32600-2.
SC 22000-5m	TO CLARIFY THE FISHERIES OBJECTIVE FOR STREAM MANAGEMENT
	Response: The last objective under Goal 4 (revised Forest Plan p. 13) outlines the desired future conditions for stream habitats. This objective applies to all streams since most streams on the GMNF do not fully meet these conditions.
SC 22000-5n	BECAUSE THE TRAIL PLANNING GOAL SHOULD REFER TO TRANSPORTATION PLANNING INSTEAD
	Response: The Forest Service agrees with the commenter. The Forest-wide recreation goal has an objective that states “Complete comprehensive trail planning for 100 percent of the Forest” (revised Forest Plan p. 13), and a new objective has been added under the Forest-wide Transportation Goal 14 to

	"Complete comprehensive transportation system planning for 100 percent of the Forest" (revised Forest Plan p. 16).
SC 22000-5o	BECAUSE THE RENEWABLE ENERGY GOAL CONTRADICTS THE SPECIAL USE POLICY OF NO NEW PERMITS UNTIL THE BACKLOG IS CLEARED
	Response: Recent Forest Service policy has been to stress administration of existing uses over the processing of new requests. However, Executive Order 13212, as amended by EO 13302, provides overriding direction on the matter of renewable energy to federal agencies, including the Forest Service, to "expedite their review of permits or take other actions as necessary to accelerate the completion of such projects, while maintaining safety, public health, and environmental protections." Goal 11 and its objectives provide increased opportunities for renewable energy use and development (revised Forest Plan p. 15).
SC 22000-5p	TO INCLUDE MANAGEMENT OF USER CONFLICT IN THE RECREATION GOALS AND OBJECTIVES
	Response: Potential user and resource conflicts are addressed through the programmatic goals and objectives for recreation, trails, and various resources, along with the standards and guidelines contained in the revised Forest Plan (see Chapters 2 and 3). Chapter 4, Section 4.1.2 of the revised Forest Plan highlights the Forest Service's commitment to the adaptive management process. Using results from monitoring and evaluation, the Forest Service can adjust management direction as necessary to address conflicts should they arise. The Forest Service also uses the Recreation Opportunity Spectrum (ROS), a national recreation planning framework, and site-specific analysis to manage for a range of recreation activities and opportunities and to minimize conflicts among recreation users (DEIS p. 3-198 and Table 3.10-1).
SC 22000-5q	TO INCLUDE CONSULTATION WITH OTHER ENTITIES AND THE PUBLIC IN THE LAND OWNERSHIP ADJUSTMENT PROCESS
	Response: The current process is to meet with town Select boards on the purchase of a particular parcel of land located in their town (revised Forest Plan Goal 22, p. 18). The Forest Service understands that Select board meetings are open to the public and recommends contacting the town office directly to receive notification and agenda items so that you may participate directly. Please also note that the Forest Service is not required to get consent from any given Select board, but seeks their support. There have been cases when the board has put a potential acquisition out for a town vote. Forest-wide guidelines for Land Ownership Adjustments have been changed in the revised Forest Plan to read "Consider the goals of towns, regional planning commissions, and the State of Vermont" (p. 41).
SC 22000-5r	TO ALIGN THE GOAL OF A SUSTAINABLE SUPPLY OF FOREST PRODUCTS MORE CLOSELY WITH THE EMOTIVE CHARACTERISTICS OF OTHER GOALS
	Response: The Forest Service appreciates the commenter's concerns and believes that the objective to provide high-quality sawtimber captures the importance of the GMNF's role in providing forest products for local economies (revised Forest Plan Role of the Forest, p. 9, Goal 8 p. 14). The National Forest Management Act (NFMA) requires that Forest Plans contain multiple-use goals and objectives that include a description of the desired future condition of the Forest and the identification of goods and services that are expected or provided during the planning period.

SC 22000-5s	TO REMOVE THE EXTENDED ROTATION AGE COLUMN FROM THE VEGETATIVE OBJECTIVES, AND REPLACE IT WITH TEXT CONCERNING LONGEVITY OF INDIVIDUAL TREES
	Response: The objective of using extended rotation was to increase the acres of late-successional and old forest habitats within lands suitable for timber management (see objectives under Goal 2, revised Forest Plan p. 11). There is no consensus among scientists on age criteria for the longevity of species. Tree longevity is related to species, site factors, genetics, and forest health conditions. Old growth landscapes are a natural mosaic of stands of different ages produced by patchiness of natural disturbances (Tyrrell et al. 1998, p. 22). Suitable timberlands within the Remote Wildlife Habitat (RWH) MA and the Diverse Backcountry (DBC) MA were modeled using the extended rotation stand ages. The suitable timberlands in the RWH and DBC management areas are components of the Allowable Sale Quantity.
SC 22000-5t	TO MAKE EXTENDED ROTATION AGES IN THE VEGETATIVE OBJECTIVES A STANDARD RATHER THAN A GOAL
	Response: Extended rotation ages are objectives in the revised Forest Plan (revised Forest Plan pp. 11-12). Timber harvesting is closely tied to establishing desired wildlife habitat. While habitat is not the exclusive reason for harvesting, it plays an important role in the development of integrated prescriptions for harvest treatments. Extended rotation ages were incorporated into the Diverse Backcountry and Remote Wildlife Habitat management area guidelines. This objective is designed to achieve the desired amounts and distributions of various age classes for different forest types (revised Forest Plan pp. 11-12). A balanced mix of silvicultural methods, including rotation lengths are deemed necessary to meet desired wildlife habitat objectives. Within the Diverse Backcountry management area, longer rotations of 150 years or more will provide a more mature appearing forest. In the Remote Wildlife Habitat Management Area, wildlife habitat will have a sustainable mix ranging from early successional to old forests. The revised Forest Plan is a strategic, programmatic document and is not meant to provide detailed direction for site-specific decisions. Forest Service Manuals and handbooks that relate to silvicultural techniques will be used to develop site-specific silvicultural prescriptions. Forest Service managers have the flexibility to select the most appropriate silviculture for an area that best fulfills the objective overtime. Forest-wide and management area standards and guidelines provide general direction in the selection of the appropriate silvicultural techniques.
SC 22000-5u	BY CHANGING GOAL 2 LANGUAGE TO REFLECT THAT THE GMNF SHOULD PROVIDE SOURCE POPULATIONS OF PLANTS AND ANIMALS TO HELP MAINTAIN SPECIES IN OTHER AREAS WHERE HABITAT IS OF LOWER QUALITY
	Response: The current language in Goal 2 does not preclude the potential for populations of plants and animals on the GMNF to serve as source populations to adjacent lands where habitat may be less suitable (revised Forest Plan p. 11). There are many species on the Forest, particularly rare species, where it would be impossible for Forest populations to serve as source populations. These species are rare because habitat is very limited on the Forest, compared to outside the Forest, and often the habitat is marginal in quality. In these cases, the Forest serves as a sink for source populations outside the Forest. For example, many rare species on the Forest are

	associated with habitats of the lower elevations in the large valleys (Champlain, Connecticut River, Vermont); such habitats occur only on the edges of the Forest, and tend to occur in small patches. By not defining whether species populations on the Forest act as either sources to or sinks from populations on adjacent lands, the current goal provides the needed flexibility to accommodate the various types of species populations and associated habitats that exist on the Forest.
SC 22000-5v	TO ALIGN STANDARD ROTATION AGE AND LONG-TERM COMPOSITION OBJECTIVES WITH ANNUAL TIMBER HARVEST GOALS
	Response: The SPECTRUM model was used as a tool to help develop programmatic timber sale schedules for each alternative. The harvest methods included in the timber sale schedule include thinning harvesting, shelterwood regeneration, shelterwood removal, clearcutting and uneven-aged management. Even-aged regeneration methods of shelterwood regeneration and clearcutting create early successional habitat included in the vegetation and wildlife habitat objectives. The current and revised Forest Plan standards and guidelines provided the framework of the constraints, including long-term vegetative composition and wildlife habitat objectives. A combination of harvesting timing choices was modeled by SPECTRUM for the linear programming solution for each alternative. This included extended rotations for the Diverse Backcountry Management Area and the Remote Wildlife Management Area. Standard rotation lengths with timing choices were used for the other suitable management areas (see FEIS Table 3.13-8). The harvest acreage in Table 3.13-8 includes both regeneration and intermediate harvest acres. Thinning harvests and shelterwood removal are intermediate harvests. Shelterwood regeneration, clearcuts, and selection harvesting are regeneration harvests.
SC 22000-5w	TO EMPHASIZE UTILIZING STATE-OF-THE-ART METHODS ON NEARLY ALL SILVICULTURAL PROJECTS, NOT JUST SMALL DEMONSTRATION PROJECTS
	Response: The Forest Service is committed to demonstrating innovative, scientifically, and ecologically sound management practices on all Forest projects, not just small demonstration projects (revised Forest Plan Goal 9, p. 15).
SC 22000-5x	TO INCLUDE A GOAL FOR INCREASING POPULATIONS AND DENSITIES OF GAME POPULATIONS
	Response: See responses to SC 13000-2a and SC 32500-14e.
PC 22000-6:	**The Forest Service should clarify how the softwood objective will be met given the current lack of regeneration of softwood stands.**
	Response: Based on field experience of foresters and biologists on the GMNF, as well as indications in the stand inventory database, there is abundant softwood reproduction in many stands typed as northern hardwood or mixedwood. These sites were likely softwood stands historically, but softwoods were selectively harvested, allowing hardwoods to dominate. It is the Forest Service's expectation that the gains in softwood composition will come from the: natural succession of many of these stands towards softwood dominance; restoration of softwood stands that are on softwood sites where softwood dominance is being lost; and management for maintenance of softwoods in deer wintering areas (see the FEIS Vegetation section 3.5).
PC 22000-7:	**The Forest Service should consider deleting Goals and Objectives.**
SC 22000-7a	BECAUSE THE OBJECTIVE CONCERNING MANAGEMENT OF MAST-PRODUCING SPECIES SHOULD BE A GUIDELINE, TO AVOID OVER-

	IMPLEMENTATION
	Response: A commenter expressed concern that an objective under Goal 2 to increase or expand mast-producing species will lead to over-implementation of mast production to the detriment of other goals and objectives. The revised Forest Plan includes direction for mast-producing species in objectives, standards, and guidelines (revised Forest Plan p. 29). Goals and objectives identify conditions and activities that the GMNF is working toward in order to achieve the desired future condition for the Forest. Objectives generally are accomplished by implementing projects or activities. Standards and guidelines are the specific guidance designed to achieve desired conditions, goals, and objectives in the revised Forest Plan. The fact that mast-producing species are included in a specific objective does not grant them a higher-level priority that overrides goals and objectives for other management activities, such as increasing the percent cover of aspen-birch, minimizing adverse effects of non-native invasive species, maintaining or restoring aquatic habitats, or providing a sustainable supply of forest products.
SC 22000-7b	BECAUSE THE OBJECTIVE CONCERNING MANAGEMENT OF MATURE AND OVER-MATURE SOFTWOOD SPECIES SHOULD BE A GUIDELINE, TO AVOID OVER-IMPLEMENTATION
	Response: A commenter expressed concern that an objective under Goal 4 to "Move streamside riparian area forest composition gradually towards an increase in mature and over-mature softwood species where ecologically appropriate" is too all-encompassing and will lead to over-implementation to the detriment of other goals and objectives, particularly those related to management of wildlife habitat. Goals and objectives identify conditions and activities that the GMNF is working toward in order to achieve the desired future condition for the Forest. Objectives generally are accomplished by implementing projects or activities. In this case, the Forest Service will emphasize moving forest composition in streamside riparian areas towards mature and over-mature softwood species *where ecologically appropriate* (emphasis added). This logically leads to the converse conclusion, that the Forest Service will not work towards this objective where it is ecologically inappropriate. In addition, standards and guidelines in the revised Forest Plan have been clarified to include specific direction that authorizes habitat management within riparian and wetland areas to achieve wildlife goals (revised Forest Plan p. 22). The desire for this objective is to provide for large woody debris recruitment to enhance stream systems. Also see response to SC 31100-3c.
SC 22000-7c	BECAUSE THE UPLAND OPENINGS GOAL SHOULD ONLY BE A STANDARD IN THE DIVERSE FOREST USE, DIVERSE BACKCOUNTRY, AND ESCARPMENT MANAGEMENT AREAS
	Response: The objective to have one to five percent of the GMNF land base in permanent upland openings applies to the Forest-wide landscape, but management direction for their creation and maintenance varies by MA, depending on the emphasis and desired future condition of each. Opportunity for creating and maintaining permanent upland openings will be greatest in four MAs: Diverse Forest Use, Diverse Backcountry, Remote Wildlife Habitat, and the Moosalamoo Recreation and Education Area (DEIS Table 3.5-13). Existing upland openings may be maintained but new permanent openings cannot be created in Green Mountain Escarpment, Recreation Special Areas, Alpine Ski Area Expansion, and Wilderness Study Area MAs. Upland openings will tend to be smaller, less abundant, and more temporary in MAs

	where they will be created and maintained only by natural processes: Wilderness, Remote Backcountry, Alpine Ski Area, Alpine/Subalpine Special Areas, Ecological Special Areas, Research Natural Areas Appalachian National Scenic Trail, and Long Trail. The responses to subconcerns under PC 22000-23 address permanent upland openings in several specific MAs. Also see responses to SC 22000-5f and SC 22000-5g for additional discussion of permanent upland openings.
PC 22000-8:	**The Forest Service should revise the Forest-Wide Soil Standards and Guidelines.**
SC 22000-8a	TO DELETE REFERENCES TO MANUALS AND HANDBOOKS
	Response: Forest Service manuals and handbooks are revised periodically and provide important direction and guidance for management of the Forest. FSM and FSH documents associated with the Forest Plan are listed in Appendix E. The manuals and handbooks are available on the web at http://www.fs.fed.us/im/directives. The Forest Service believes that referencing these documents in the standards and guidelines provides for a user-friendly document. When handbook or manual direction is revised, the Forest Service can analyze the updated effects on Forest Plan S&Gs and decide whether S&Gs need to be revised to provide additional direction.
SC 22000-8b	BECAUSE 20 PERCENT IS TOO STEEP FOR A SKID ROAD GRADE
	Response: Short sections of up to 20 percent grade comply with Vermont's Acceptable Management Practices (AMPs). The Forest Service minimizes the use of such grades, but when they are used, care is taken to make sure erosion control structures are effective (revised Forest Plan p. 20).
SC 22000-8c	TO INCREASE THE FLEXIBILITY OF THE PROTECTIVE STRIP STANDARD TO ADDRESS WILDLIFE CONCERNS
	Response: The Forest Service believes that the riparian area S&Gs provide adequate flexibility to allow for activities that enhance a variety of wildlife habitats (revised Forest Plan p. 20). As examples, the following activities could be implemented under the S&Gs: 1) a regeneration harvest could be done near a wetland to improve woodcock habitat; and 2) trees can be cut in a riparian area, then anchored in a stream to improve fish habitat. Such actions could be done without violation of AMPs (the AMP guideline allows the Protective Strip, or other S&Gs for wetland or vernal pool protection (revised Forest Plan p. 20-22). Note that AMPs are incorporated into the revised Forest Plan as a guideline that allows for some exceptions, provided they meet certain riparian management criteria (revised Forest Plan p. 21). Each harvesting site is monitored regularly for the compliance with the AMP guidelines. Flexibility for management exists under this standard since the protective strip only restricts soil disturbance, not management activities.
SC 22000-8d	TO ADDRESS HOW SOILS AND RIPARIAN AREAS WILL BE PROTECTED FROM SUMMER ORV USE
	Response: Standards and guidelines specific to summer ORV use are not needed. If and when a summer ORV trail is designed, it will follow all S&Gs for protection of the soil, water, and riparian resources (see revised Forest Plan section 2.3.2). In addition, other needed protection measures will be identified in a site-specific environmental analysis.
SC 22000-8e	TO INCREASE THE SIZE OF THE NO HARVESTING ZONE IN RIPARIAN AREAS
	Response: See responses to SC 31100-1a, SC 31100-1b, PC 31100-3, and

	SC 31100-3a.
SC 22000-8f	TO CLARIFY THE CANOPY CLOSURE OVER STREAM LENGTH REQUIREMENT
	Response: The Forest Service guideline regarding canopy closure reads: "An average canopy closure of at least 70% should be maintained over a stream's length…" (revised Forest Plan p. 22). This would be the case in the commenter's example of a one-mile long stream having 7/10ths of a mile at 100 percent canopy closure and 3/10ths of a mile with 0 percent canopy closure. Canopy closure is an estimate of the percentage of sky obstructed by tree limbs and leaves.
SC 22000-8g	TO CAP THE PROTECTIVE STRIP AT 50 FEET, WITH SLOPE-APPROPRIATE EROSION CONTROL MEASURES APPLIED AS THE SLOPE INCREASES
	Response: This comment emerged due to potential concerns about full compliance with the Protective Strip standards in the revised Forest Plan (see revised Forest Plan, Section 2.3.2, second standard), when applied to future downhill ski area projects on National Forest lands. The Forest Service decided not to cap the Protective Strip at 50 feet. To address a potential situation where full compliance with the Protective Strip may not be practical, the following statement was added to the introduction to the Alpine Ski Area MA Standards and Guidelines: "Forest-wide standards and guidelines apply to the extent possible. Deviations from Forest-wide standards and guidelines may occur in order to provide for the major emphasis of the Alpine Ski Area only when the appropriate level of environmental analysis has been completed. The management area standards and guidelines are to be applied in addition to Forest-wide standards and guidelines" (revised Forest Plan p. 19).
PC 22000-9:	**The Forest Service should revise the Moosalamoo Recreation and Education Management Area.**
SC 22000-9a	TO INCREASE THE SPECIFICITY OF THE WILDLIFE AND TIMBER STANDARDS AND GUIDELINES
	Response: The revised Forest Plan provides a framework and context that guides the Forest Service's daily resource management operations. The revised Forest Plan is a strategic, programmatic document and is not meant to provide detailed direction for site-specific decisions (revised Forest Plan section 1.1.2). Forest Service Manuals and Handbooks that relate to wildlife and timber management will be used to develop site-specific silvicultural prescriptions. The revised Forest Plan is designed to supplement, not replace, direction from these sources. The vegetation management strategy of the Selected Alternative is built upon maintaining biological diversity. In order to do this, the Forest Service evaluates forestry practices based on land capabilities, land type associations, ecological land types, and management area direction. The specific conditions under which silvicultural treatments may take place are to be evaluated in a site-specific analysis, depending upon a number of factors including forest health issues, the value of the timber, and overall resource objectives, including wildlife habitat objectives that can be enhanced through the use of silviculture. See Forest-wide standards and guidelines in the revised Forest Plan for timber (pp. 23-25) and wildlife (pp. 27-32).
SC 22000-9b	BECAUSE SURFACE-DISTURBING EXTRACTION IS INCOMPATIBLE WITH THE MANAGEMENT OF THE AREA

	Response: Mineral exploration and development is listed as being compatible in this management area (see p. 101 of the revised Forest Plan). Any mineral extraction project decisions to be made will be accompanied by a site-specific disclosure of environmental effects in accordance with the procedures of the National Environmental Policy Act (NEPA-40 CFR Parts 1500-1508).
SC 22000-9c	TO DESCRIBE THE TIMBER RESOURCE AVAILABLE FOR DEMONSTRATION FORESTRY IN THE MANAGEMENT AREA
	Response: The desired future condition of the Moosalamoo Recreation and Education Area MA provides discussion of the timber resource within the MA (revised Forest Plan p. 101). The Moosalamoo Recreation and Education Area MA will provide a unique opportunity to educate visitors (and local residents including school children) through service learning (and other volunteer programs) and through demonstration of sustainable forest management, wildlife habitat enhancement and other practices. Forested lands within this management area shall be part of the suitable timber base. A total of 9,613 acres of lands suitable for timber production will be available for demonstration forestry in the Moosalamoo Recreation and Education Area MA. Goal 9 of the revised Forest Plan includes objectives to develop forest demonstration sites (p. 15).
SC 22000-9d	TO MAKE IT CONSISTENT WITH THE SALISBURY TOWN PLAN
	Response: The Moosalamoo Recreation and Education Area Management Area includes seven towns. If a project is proposed in the Town of Salisbury, or any other town, the public will have an opportunity to comment on the proposal. The DEIS (p. 3-330) states "Mineral commodities do not occur, or have not occurred in commercial quantities, on the Forest." Large-scale commercial extraction is not foreseen as occurring on the Forest in the near future (DEIS p. 3-330).
PC 22000-10:	**The Forest Service should revise the Forest-Wide Mineral Standards and Guidelines.**
SC 22000-10a	TO PROHIBIT THE USE OF EXPLOSIVES FOR RECREATIONAL MINERAL COLLECTING
	Response**:** Recreational mineral collecting is only allowed as long as there is no surface disturbance (revised Forest Plan p. 23). Since explosives would disturb the surface, they would not be allowed.
SC 22000-10b	TO REFLECT THE DIFFICULTY IN ENFORCING THE STANDARD FOR NO COLLECTION OR DISTURBANCE NEAR CULTURAL SITES
	Response: The Forest Service agrees with the commenter, and this standard has been deleted in the revised Forest Plan. In order to identify and document all sites, the Forest Service would need a closure order. To get a closure order the Forest Service would have to disclose the location of the sites. By law the location of the sites cannot be disclosed, and the locations of all sites are unknown. Cultural sites will be addressed on a site-specific basis, and the Antiquities Act and other laws provide protection for those sites. See revised Forest Plan Appendix E for a list of relevant laws.
PC 22000-11:	**The Forest Service should revise the Forest-Wide Recreation and Trails Standards and Guidelines.**
SC 22000-11a	TO CLARIFY THE MOUNTAIN BICYCLES STANDARD AND GUIDELINE
	Response: Based on public comment minor adjustments have been made to the Forest-wide standards and guidelines for Trails (revised Forest Plan p. 35). Both content and terminology have been changed to clarify management intent for trail-based recreation opportunities on the Forest. Throughout the Plan documents (revised Forest Plan, FEIS, Executive Summary) references to

	mountain bikes and mountain biking have been replaced with the generic term "bicycle" where appropriate. The Forest Service recognizes that many types of bicycles, touring bicycles, hybrid bicycles, and others are used on the GMNF. In addition, the Trails standards and guidelines have been edited to clarify where direction pertaining to trails only, verses trails and roads, is intended (revised Forest Plan Section 2.3.12, p. 36). Management intent is to provide opportunities for bicycles, and saddle, pack, and draft animals on trails that have been specifically designated for that purpose through site-specific, interdisciplinary analysis and public involvement. The Forest Service recognizes that site-specific analysis is not necessary for bicycles, and saddle, pack, and draft animals on National Forest System roads.
SC 22000-11b	TO REFLECT THAT TRAILS MAY BE DESIGNATED AS INAPPROPRIATE FOR MOUNTAIN BIKING DUE TO RESOURCE CONCERNS
	Response: The revised Forest Plan is a programmatic document that does not address site-specific implementation such as the designation of bicycle trails. Decisions regarding specific trails will be made using a site-specific environmental analysis and public involvement. Programmatic direction for recreation is to provide a diverse range of high-quality, sustainable recreation opportunities that complement those provided off National Forest System lands. In the revised Plan, bicycling will be allowed only on trails designated for that use (revised Forest Plan, Chapter 2, p. 36). A standard requiring designation of trails not suitable for bicycling would be contrary to management intent. See also response to PCs 54000-2 and PC 54000-3.
SC 22000-11c	TO ACCOMMODATE CROSSING OF THE LONG TRAIL AND APPALACHIAN TRAIL BY MOUNTAIN BICYCLES
	Response: The Appalachian National Scenic Trail (AT) and the Long National Recreation Trail (LT) and side-trails that supply access to the AT and LT are to be managed as non-motorized trails primarily for "foot travel." The guideline for side trails as stated on page 35 of the revised Forest Plan provides for minor exceptions that would include bicycling and snowmobiling (although they are not specifically mentioned) where no other options exist. The desired future conditions for the AT and LT management areas further reiterate the focus on providing non-motorized trail opportunities "for those on foot and other pedestrian means such as skis or snowshoes" (revised Forest Plan p. 67 and p. 74). Other trail uses are allowed to occur at designated crossings in the AT and LT management areas (revised Forest Plan pp. 69-70 and pp. 74-75). See also response to PC 53000-14 and PC 53000-25.
SC 22000-11d	TO REFLECT POTENTIAL USER CONFLICTS IN A MULTIPLE USE TRAIL SYSTEM
	Response: See response to SC 53000-1e.
SC 22000-11e	TO SPECIFY ALLOWED SUMMER USES OF CROSS-COUNTRY SKI TRAILS
	Response: The programmatic direction for trails contained in the revised Forest Plan emphasizes multiple-use trails over single-use trails (revised Forest Plan p. 35) and applies to all Forest Service system trails unless otherwise stated (see for example the AT and LT MA direction). The entire GMNF, including cross-country ski trails, is open to foot travel in the summer. The revised Forest Plan is a programmatic document that does not address site-specific implementation such as trail use designations. Decisions regarding specific trail uses will be made using a site-specific environmental analysis and public involvement.
SC 22000-11f	TO IMPROVE OFF-SEASON TRAINING OPPORTUNITIES FOR DOG SLED

	TEAMS
	Response: Dogsledding and skijoring are allowed only on trails that are designated for that use (revised Forest Plan p. 36). Trail planning Goal 12 has an objective that states "Complete comprehensive trail planning for 100 percent of the Forest," (revised Forest Plan Goal 14, p. 15). Decisions regarding specific trail uses will be made using a site-specific environmental analysis and public involvement.
SC 22000-11g	TO STRENGTHEN THE PROTECTION OF THE LONG TRAIL IN THE NON-MOTORIZED TRAIL STANDARDS
	Response: The Forest Service does not believe that the commenter's suggested changes are necessary because protection for the Appalachian National Scenic Trail (AT) and the Long National Recreation Trail (LT) is contained in both Chapter 2 and Chapter 3 of revised Forest Plan. Programmatic direction for the AT and LT is contained in the desired future condition and Forest-wide and management area standards and guidelines (revised Forest Plan pp. 36, 66, 73). Forest-wide standards and guidelines for the AT and LT are strengthened by comprehensive management area direction for both the AT and LT (revised Forest Plan, Chapter 3, Sections 3.7 and 3.8, pp. 61-73).
SC 22000-11h	TO STRENGTHEN STANDARDS GOVERNING USE OF THE SNOWMOBILE TRAIL NETWORK, IN ORDER TO CONTROL ENVIRONMENTAL EFFECTS
	Response: The Forest Service does not believe that the commenter's suggested changes are necessary because Forest-wide standards and guidelines for Trails (revised Forest Plan Section 2.3.12, p. 35) apply to both motorized and non-motorized trail-based activities. The Motorized Vehicle Standards and Guidelines in Chapter 2 of revised Forest Plan, Section 2.3.12 apply to all types of motorized vehicle activity, including both snowmobiling and summer ORV use (pp. 37). In addition, many of the objectives under Goal 12 of the Forest-wide goals and objectives address management intent regarding trails and would also apply to snowmobile trails (revised Forest Plan, Chapter 2, p. 15). See also responses to PC 53000-22, PC 53000-16, PC 53000-17, SC 53000-17a, SC 53000-1e, and PC 31000-2 for further discussion of snowmobile issues. See FEIS sections 3.2, 3.3, 3.4 for effects to water quality, soils, and air quality.
SC 22000-11i	TO DISTINGUISH SNOWMOBILE TRAILS FROM POTENTIAL SUMMER ORV TRAILS
	Response: Summer ORV standards and guidelines have been clarified and state that summer ORV use shall be limited to connecting corridors that link sections of a larger statewide, regional, subregional, or multi-town summer motorized trail system located off National Forest System land (revised Forest Plan p. 37). Currently no summer ORV trails are designated. Designation of summer ORV trails using existing snowmobile trails, Forest roads, or constructing a new trail requires a site-specific environmental analysis and public involvement.
PC 22000-12:	**The Forest Service should strengthen standards and guidelines for motorized and non-motorized recreation.**
SC 22000-12a	TO SEPARATE MOTORIZED AND NON-MOTORIZED TRAIL CORRIDORS
	Response: See response to PC 51000-5 and SC 53000-1l.
SC 22000-12b	TO PROVIDE MONITORING AND MITIGATION MEASURES THAT COUNTER MOTORIZED VEHICLE USE AND DAMAGE
	Response: See response to PC 53000-8. Potential user and resource conflicts are addressed through the programmatic goals and objectives for recreation,

	trails, and various resources, along with the standards and guidelines contained in the revised Forest Plan (see Chapters 2 and 3). Chapter 4, Section 4.1.2 highlights the Forest Service's commitment to the adaptive management process. Using results from monitoring and evaluation, the Forest Service can adjust management direction as necessary to address user conflicts should they arise.
SC 22000-12c	TO PROVIDE MOTORIZED VEHICLE USE ENFORCEMENT MECHANISMS AND REGULATIONS
SC 22000-12d	TO ENSURE SAFEGUARDS AND ENFORCEMENT MECHANISMS EXIST ON SUMMER ORV NON-FS TRAIL SYSTEMS BEFORE AN FS TRAIL SYSTEM IS CONSIDERED
	Response: See response to 53000-1h, 53000-1u, PC 53000-8, and 53000-4e.
SC 22000-12e	TO REQUIRE OR PROMOTE THE USE OF FOUR-CYCLE ENGINES IN SUMMER ORVS AND SNOWMOBILES
	Response: See responses to SC 53000-1d and SC 53000-4p.
SC 22000-12f	TO ESTABLISH SPEED LIMITS FOR MOTORIZED RECREATION
	Response: The revised Forest Plan is a programmatic document that does not address site-specific implementation such as speed limits for summer ORV use on NFS Lands. Speed limits for motorized recreation are established administratively through Forest Orders and based on site-specific conditions. In some cases maximum speed limits may be established on a case-by-case basis, while in other instances, speed is controlled through regulations that address careless or reckless operations.
SC 22000-12g	TO RESTRICT SUMMER ORV USE TO EXISTING TOWN AND FOREST SERVICE ROADS
	Response: Management intent is to provide opportunities for motorized trail use within corridors that link sections of a larger statewide motorized trail system located off National Forest System land (revised Forest Plan p. 37). Multiple-use trails are to be emphasized over single-use trails (revised Forest Plan, Chapter 2, 2.3.12). A decision concerning potential summer ORV trail locations that may coincide with Forest Service System roads and town roads is not within the scope of this Plan and would be based on site-specific environmental analysis with public involvement.
SC 22000-12h	TO LIMIT THE SUMMER ORV OPEN SEASON TO SPECIFIC DATES
	Response: See response to PC 53000-8. The revised Forest Plan supplies strategic and programmatic direction for recreation resources including trail-based recreation opportunities. A decision to limit the summer ORV open season to July 1 through Labor Day is not within the scope of this Plan. Decisions regarding specific seasonal or temporary closures will be made using a site-specific environmental analysis and public involvement.
SC 22000-12i	TO CLARIFY HOW TRAILS WILL BE CONSTRUCTED, MAINTAINED, EVALUATED, OR CLOSED
	Response: See response to SC 53000-1u and SC 22000-11i. Trail location, design, management, and maintenance needs are most appropriately determined on a project-specific basis, rather than as part of the Plan revision process. The Forest Service Trails Management Handbook (FSH 2309.18) describes trail construction and maintenance practices for trails on NFS Lands. Trail needs are determined by considering the type and expected amount of trail use, and the site environmental conditions, such as the soil drainage and depth, slope steepness, aspect, and the frequency of streams and seeps. These considerations result in a trail design tailored to the site. This design is usually a mix of standard design elements, and special (or unique) elements

	that address specific user or environmental needs along a trail. Trail closures are also evaluated on a trail-by-trail basis, considering the environmental impacts, costs, and public desires.
SC 22000-12j	TO REQUIRE USER FEES TO FUND MITIGATION PROGRAMS
	Response: See responses to PC 55000-3 and PC 55000-4.
SC 22000-12k	TO ESTABLISH A MINIMUM AND MAXIMUM SUMMER ORV CORRIDOR LENGTH
	Response: The revised Forest Plan is a programmatic document that does not address site-specific implementation such as the specific location and length of a summer ORV corridor. The Forest-wide standards and guidelines have been modified to provide additional guidance on summer ORV trail proposals (revised Forest Plan p. 37). This further guidance includes a prohibition of trail termini on NFS lands and a prohibition of self-contained summer ORV trail systems on NFS lands. The Forest Service feels that trail lengths are a varying site-specific issue which is best addressed through site-specific environmental analysis and public involvement.
SC 22000-12l	BY CHANGING THE GUIDELINE CONCERNING ORGANIZED SUMMER ORV PARTNERS TO A STANDARD
	Response: Management direction for summer ORV trails has been clarified and strengthened in the revised Forest Plan. Two standards have been added regarding types of trails allowed, and the guideline concerning summer ORV trail partners has been strengthened (revised Forest Plan p. 37). The Forest-wide guideline concerning organized summer ORV partners now requires potential summer ORV partners to be financially and technically capable as well as willing to assume primary responsibility for all phases of trail use and development (revised Forest Plan p. 37). This management direction is not a standard in order to be consistent with GMNF policies regarding other trail partner groups.
SC 22000-12m	TO PROHIBIT THE COMMERCIAL USE OF SUMMER ORVs
	Response: See response to PC 55000-1 and SC 53000-3bb.
SC 22000-12n	TO PROHIBIT CONSTRUCTION OF SUMMER ORV TRAILS FOR ACCESSING SITES OF INTEREST OR ENHANCING THE RECREATIONAL EXPERIENCE
	Response: See response to SC 22000-12k, SC 22000-12l, SC 53000-3bb, and PC 53000-8.
SC 22000-12o	BY CHANGING THE GUIDELINE CONCERNING SUMMER ORV CONNECTING CORRIDORS TO A STANDARD
	Response: Forest-wide management direction for summer ORV connecting corridors was not a guideline in the proposed Forest Plan. It was a standard in the proposed Forest Plan, and it remains a standard in the revised Forest Plan (revised Forest Plan p. 37). Management direction for summer ORV trails has been clarified and strengthened in the revised Forest Plan. Two standards have been added regarding types of trails allowed, and the guideline concerning summer ORV trail partners has been strengthened (revised Forest Plan p. 37).
SC 22000-12p	TO PROHIBIT SUMMER ORV TRAIL CROSSING OF THE APPALACHIAN TRAIL MANAGEMENT AREA
	Response: See response to PC 53000-14.
PC 22000-13:	**The Forest Service should revise the Forest-Wide Timber Standards and Guidelines.**
SC 22000-13a	TO CLARIFY THE GUIDELINE CONCERNING BELOW-COST TIMBER SALES

	Response: See response to PC 21000-16.
SC 22000-13b	BECAUSE THE STANDARD FOR THE SELECTION OF APPROPRIATE SILVICULTURE IS TOO DISCRETIONARY, AND SHOULD BE TIED TO REAL PRACTICES
	Response: The revised Forest Plan standard originates from FSM 2470 and requires that silvicultural prescriptions be designed and/or approved by a federally certified silviculturist (revised Forest Plan p. 23). Examining forest stands, diagnosing treatment needs, and prescribing the methods, techniques, and timing of silvicultural activities are some of the most important tasks with implementing Forest Plans. The Regional Forester certifies silviculturists and reviews the certification for individuals every four years. A minimum of 80 hours of attendance at silvicultural training sessions, seminars, symposiums, and workshops are required to maintain state-of-the art skills every four years. Indeed, state-of-the art silviculture methods will be required on all silviculture projects. Interpretation and education of silvicultural methods will be emphasized within the Moosalamoo Recreation and Education management area. Silviculturists must maintain the knowledge, skills, and abilities necessary to perform tasks to implement the revised Forest Plan, and meet laws, policies, and basic resource stewardship requirements. Inherent in the standards is a need for practical skills developed through experience. Experience standards are established by the Regional Forester.
SC 22000-13c	TO STRENGTHEN THE GUIDELINES REGARDING MAST TREE RETENTION
SC 22000-13d	TO INCLUDE MAST TREE RETENTION IN THE GUIDELINES FOR SHELTERWOOD CUTS
	Response: The Forest Service agrees with the commenter that the revised Forest Plan should clarify management standards for mast tree retention, specifically as they address the grouping of wildlife reserve trees during even-aged harvesting (clearcutting and shelterwood regeneration), and more generally in terms of overall direction for implementation. The Forest Service revised the GMNF standards and guidelines for wildlife reserve trees to include retention of uncut patches totaling five percent of the harvested area during even-aged (when harvest reduces the basal area below thirty square feet per acre) (see revised Forest Plan p. 27). Incorporating a basal area threshold should make this standard easier to implement during timber harvest operations. The Forest Service recognizes that retention of large mast trees may fill several functions by providing mast and potentially den and snag habitats simultaneously.
SC 22000-13e	TO PROVIDE STANDARDS FOR UNEVEN-AGED MANAGEMENT, TO ENSURE PROJECTS FIT WITH MANAGEMENT AREA GOALS
	Response: The revised Forest Plan is a strategic, programmatic document and is not meant to provide detailed direction for site-level decisions. Forest Service Manuals and Handbooks that relate to silvicultural techniques will be used to develop site-specific silvicultural prescriptions. The revised Forest Plan is designed to supplement, not replace, direction from these sources. Forest Service managers have the flexibility to select the most appropriate silviculture for an area that best fulfills the objective overtime. The Forest Plan standard requires that silvicultural prescriptions will be designed and/or approved by a federally certified silviculturist (see revised Forest Plan Timber or Vegetation Management standards and guidelines, section 2.3.4).
PC 22000-14:	**The Forest Service should clarify all guidelines for non-recreation special use permits and the appropriate use of Forest Service lands.**

	Response: Indicator 2 for Non-Recreation Special Uses in FEIS section 3.14 has been revised to make it clear that the "Discretionary Uses" in question are those that include facilities or some type of development, as opposed to research, photography, or similar uses of a benign, transitory nature. Further, it has been clarified that Forest Service policy to deny any proposal that can reasonably accommodated on non-National Forest System lands is still in effect (FEIS, Section 3.14.1, Existing Forest Plan Management Direction), and only those proposals that meet the exceptions are then prioritized based on factors such as public benefit versus private benefit. An example of public benefit would be the relocation of a town highway, and an example of a valid private benefit might be a spring box on NFS land to provide water to a remote camp on private land.
PC 22000-15:	**The Forest Service should strengthen all standards and guidelines by increasing the number of standards and eliminating loopholes.**
	Response: Standards and guidelines are designed to achieve desired conditions, goals, and objectives in the revised Forest Plan. They are usually mitigation measures that minimize or negate the effects of a management action or land use (revised Forest Plan p. 19). Standards are Forest Plan management requirements that are applicable to all foreseeable situations, and deviation from standards requires an amendment to the revised Forest Plan. Guidelines are revised Forest Plan management requirements that are applicable to most situations, but exceptions to guidelines can be made with analysis and rationale in a decision document (revised Forest Plan p. 19). Exceptions to guidelines are infrequent events, but some flexibility is needed to address specific management issues. Standards are written using "must" and "shall," indicating non-discretionary actions. The management direction in the revised Forest Plan is written to be flexible because conditions vary across the landscape within a 10 to 15 year time period. Guidelines and standards are similar in that both set management minimums or maximums. The Forest-wide standards and guidelines are used in addition to the standards and guidelines included in management area guidance (revised Forest Plan, Chapter 3).
PC 22000-16:	**The Forest Service should revise the major emphasis of the Remote Backcountry Management Area.**
	Response: The commenter noted that in previous versions of the major emphasis for the Remote Backcountry Forest MA, management actions were restricted to, among other things, activities that help restore or maintain <u>all</u> species associated with habitats in Remote Backcountry, while in the draft Plan the word "all" was missing. The Forest Service believes that the current wording accurately reflects the major emphasis for this management area (revised Forest Plan p. 54). The wording in the draft Plan does not prevent restoration or maintenance of any species of interest, while the inclusion of the word "all" may be perceived as a requirement for restoration of every species ever known from these habitats, something that may be unrealistic or impracticable in some cases. The Forest Service works closely with the US Fish and Wildlife Service (USFWS) and State agencies in protecting species and maintaining and restoring habitat for them. Proposals for species maintenance or restoration will be evaluated using site-specific analysis, and decisions will be made on that level. Species viability will be maintained within the planning area, as required by the National Forest Management Act (see also FEIS Section 3.9).

PC 22000-17:	**The Forest Service should strengthen all standards for waters harboring native fish species.**
	Response: The standards and guidelines for fisheries provide for protection and enhancement of waters harboring native fish species (revised Forest Plan Fisheries section 2.3.8). All fish-bearing streams on the GMNF have native fish species and Forest Service focus has been to protect, enhance, or restore habitat so natural reproduction of the fisheries can be perpetuated. Also see response to PC 32500-3. See also FEIS section 3.7.
PC 22000-18:	**The Forest Service should include additional Forest-wide or management area standards.**
SC 22000-18a	TO ENSURE EXISTING WATER QUALITY IS PROTECTED AND TO PROHIBIT ACTIVITIES THAT DEGRADE EXISTING WATER QUALITY
	Response: The Forest Service intends to protect and enhance water quality Forest-wide for the duration of the next planning period. Laws, regulations, and regional or national Forest Service Directives applicable to protection of water quality are referenced in the revised Forest Plan (Appendix E-1-4), but not repeated. The Forest Service acknowledges that it must adhere to these laws, regulations, and directives. Highlights of the laws/directives are: 1) The Forest Service must meet Vermont's Water Quality Standards. 2) The Forest Service is to produce water of a quality suitable for the beneficial uses identified in the land and resource management planning process (FSM 2532.02-1). Beneficial uses are identified throughout the document titled, "Water Resource Assessment – Green Mountain National Forest – Plan Revision" (Donna 2004). 3) The Forest Service is to ensure safe drinking water subject to use on the National Forest, whether the source is natural or a developed water supply (FSM 2532.02-2). 4) The Forest Service is to promote and apply approved best management practices to all management activities as the method for control of non-point sources of water pollution, and for compliance with established state or national water quality goals. Given the overall Forest Service mission and responsibilities in managing the GMNF, it would not be reasonable to put a standard in the revised Forest Plan stating that absolutely no water quality degradation is allowed, at any time, and of any duration or magnitude. Such a standard would exceed Vermont's Water Quality standards for even Outstanding Resource Waters (ORWs). The Forest Service will follow the laws and directives referenced previously, which typically result in very small, short-term, localized instances of water degradation on lands where soil-disturbing practices (such as trail or parking lot construction, or timber harvesting) are implemented (DEIS pp.3-22-31). These impacts are unavoidable because, for example, any time a stream is crossed via hiking trail, ski road, or town road, a small amount of sedimentation is inevitable. Many waters on the Forest are recognized as some of the highest quality in the State (Donna 2004 p. D-44-47, Lowry 2004 – the ORW Petition).
SC 22000-18b	RELATED TO AIR QUALITY MANAGEMENT, IN ORDER TO MONITOR AND PROTECT AIR QUALITY RELATED VALUES
	Response: The Forest Service feels that additional standards to protect air quality are not needed because federal law regulates air quality (see revised Forest Plan Appendix E for Relevant Laws, and Forest-wide goals and

	objectives p. 14). The Forest Service is required to protect and monitor air quality related values by the following direction in the Forest Service Manual, which the Forest Service follows: • Protect the current condition of air quality related values within Class I areas (FSM 2580.43-2). • Monitor the effects of air pollution and atmospheric deposition on Forest resources. Monitor air pollutants when Forest Service goals and objectives are at risk and adequate data are not available (FSM 2580.43-4). • Cooperate with federal, State, and local air regulatory agencies to protect resource values; participate with them in the assessment of air quality monitoring needs and in the development or revisions of air quality standards and regulations affecting forest resources (FSM 2580.43-5). (See also revised Forest Plan Chapter 4, Monitoring and Evaluation.)
SC 22000-18c	FOR RENEWABLE ENERGY PROPOSALS ON THE FOREST
	Response: Energy proposals need to adhere to Forest-wide standards and guidelines in the revised Forest Plan, as well as management area direction (see Non-Recreation Special Uses S&Gs p. 44, and in each MA section). The revised Forest Plan is a programmatic document that does not address site-specific implementation such as renewable energy proposals. Decisions regarding specific renewable energy proposals will be made using a site-specific environmental analysis and public involvement. See also response to SC 22000-5o.
SC 22000-18d	TO INCLUDE A CONSULTATION PROCESS IN SPECIAL USE PERMITTING IN ORDER TO DETERMINE THE EFFECTS OF LARGE EVENTS ON STATE-WIDE AND OTHER GOVERNMENTAL SERVICES
	Response: Use of the GMNF for non-commercial group use events for expressive purposes is protected by the First Amendment. To that end, there is a 48-hour time limit on the response to an application or it is deemed approved. State Health Department, State and local law enforcement, and local emergency medical service personnel are contacted. See revised Forest Plan section 2.3.19.
SC 22000-18e	TO MAINTAIN LATE-SUCCESSIONAL FOREST AREAS AND PROHIBIT TIMBER HARVESTING IN OLD GROWTH FOREST
	Response: Areas currently known to be old growth forest are all protected within the ecological reference area network, where timber harvesting is not allowed (see FEIS Section 3.11). An area identified as having old growth characteristics discovered during the summer of 2005 was added to the French Hollow Ecological Special Area. Late successional forest and future old growth forest are also protected through the ecological reference area network. Management areas and other designations that constitute the ecological reference area network include at least five percent of each ecological type within them, so the full spectrum of biological diversity is represented within the network (revised Forest Plan Goal 6, p. 14). The effects analysis in the FEIS, Section 3.11, indicates that the ecological reference area network includes approximately 44 percent of the landbase of the Forest for the selected alternative (see Effects Analysis, Indicator 1, Alternatives B-E, intro paragraph]). These areas will become old growth forest eventually, and include small patches of existing old growth and a great deal of mature and old forest. Some ecological types are rare or uncommon on the Forest, and representing them at any level would still consist of a small patch of habitat. Consequently, some of the larger scale processes associated with old growth conditions may not be represented in these rarer ecological types.

SC 22000-18f	TO CONSULT WITH THE US FISH AND WILDLIFE SERVICE REGARDING PROJECTS POTENTIALLY IMPACTING THREATENED AND ENDANGERED SPECIES, INCLUDING THE BALD EAGLE
	Response: The Forest Service is bound by laws, regulations, and policy to protect federally listed threatened and endangered species. The Endangered Species Act specifically requires any federal agency to consult with the US Fish and Wildlife Service on any proposed action that could result in impacts on federally listed threatened and endangered species. The FEIS includes more detailed discussion of the consultation process (see FEIS section 3.8, Threatened and Endangered Species, and the BE, Appendix E).
SC 22000-18g	TO ACCOMMODATE THE USE OF PARTNERSHIPS IN MAINTAINING PERMANENT UPLAND OPENINGS
	Response: It is the intent of the Forest Service to maintain and enhance partnerships with communities and organizations to achieve Forest goals (revised Forest Plan p. 17). The Forest Service routinely coordinates or consults with State and federal agencies and other organizations and groups as appropriate on proposed habitat management activities, management decisions, and other activities that might affect terrestrial and aquatic habitats (see response to SC 22000-4a). This coordination and consultation includes partnerships for maintaining permanent upland openings as well as other wildlife habitat management activities. Many factors are considered when developing the maintenance schedule for permanent upland openings, not the least of which is nesting and reproductive seasons for birds and other wildlife.
SC 22000-18h	IN THE DIVERSE FOREST USE MA, TO ALLOW FOR LOCALIZED PROTECTION OF RECLUSIVE SPECIES, SUCH AS BLACK BEAR
	Response: A commenter expressed concern that the revised Forest Plan does not include sufficient Forest-wide protection for important habitat areas for species like black bears, which are not threatened (T), endangered (E), Regional Forester sensitive species (S), or identified species of viability concern or local interest. Of particular concern are beech stands that experience high bear use that are located in an area proposed for western expansion of the Searsburg wind generating facility. The Forest Service allocated this area to the Diverse Forest Use MA. Goal 2 in the revised Forest Plan (p. 10) is to “Maintain and restore quality, amount, and distribution of habitats to produce viable and sustainable populations of native and desirable non-native plants and animals.” Inclusion of specific standards and guidelines for TES species and species of viability concern or local interest does not diminish the Forest Service’s concern for other species that occur on the Forest. The revised Forest Plan specifically identifies bear-clawed beech trees, especially groups of such trees, as mast trees to be retained (revised Forest Plan p. 29). Additionally, Goal 7 in the revised Plan (p. 14) is to “Protect rare or outstanding biological, ecological, or geological areas on the GMNF.” Regionally important foraging habitat for black bears, as identified by biologists from the Forest Service and the Vermont Fish and Wildlife Department, are considered outstanding biological and ecological areas. Finally, projects conducted or permitted by the Forest Service that would potentially affect bear habitat, particularly one on the scale of a wind-generation facility, would be subject to site-specific environmental analysis. Under the circumstances described by this commenter, potential effects to bear habitat would be a major focus of the NEPA review.

	See also FEIS Wildlife section 3.6.
SC 22000-18i	TO STRENGTHEN AND GUIDE THE APPLICATION OF SILVICULTURAL ACTIVITIES
	Response: See response to SC 22000-13b. Revised Forest Plan direction is to provide the flexibility based on field conditions due to past experience needed to fulfill objectives over time (revised Forest Plan p. 23).
SC 22000-18j	TO ADDRESS THE POTENTIAL FOR TRAILS TO SPREAD INVASIVE SPECIES
	Response: The revised Forest Plan is a programmatic document that does not address site-specific implementation such as construction of new trails. Forest-wide standards and guidelines in section 2.3.9 Forest Health and Disturbance Processes of the revised Forest Plan (p. 33) directs the Forest Service to incorporate non-native invasive species (NNIS) information in project development, including construction of new trails. See also FEIS NNIS section 3.5.3.
SC 22000-18k	TO PROTECT INSTREAM FLOWS ON STREAMS USED FOR MAKING SNOW
	Response: Stream withdrawals for snow making are regulated according to the State of Vermont Environmental Protection Rules in 10 V.S.A. (Vermont Statutes Annotated) Chapter 41, Subchapter 3, Section 16 – Water Withdrawals for Snowmaking, which took effects on February 15, 1996. The Forest Service adheres to State regulations.
SC 22000-18l	TO CONSULT WITH THE STATE OF VERMONT REGARDING ACTIONS TAKEN ON APPALACHIAN AND LONG TRAIL EASEMENTS ACROSS STATE OF VERMONT LAND
	Response: All major federal actions require notifying interested and affected individuals and entities, as required by the National Environmental Policy Act. The appropriate State agency is notified when actions are proposed on NFS land adjacent to State land.
SC 22000-18m	TO CONSULT WITH THE STATE OF VERMONT REGARDING PROJECTS IMPACTING STATE HIGHWAYS THROUGH FOREST SERVICE LANDS
	Response: Forest-wide standards and guidelines have been modified to include cooperation with the State (revised Forest Plan p. 43). Standards in this section under Transportation Analysis, Road Design and Construction, and Road Operation and Maintenance along with the Forest Service Manual (FSM) references address consultation and cooperation with State and local governments on projects. The Forest Service has, and will continue to, consult and cooperate with State and local governments on projects within and affecting NFS lands, and the local and State routes through them.
SC 22000-18n	TO PROHIBIT NEW PERMANENT ROAD CONSTRUCTION IN INVENTORIED ROADLESS AREAS
	Response: National guidance directs that the primary purpose for the Roadless Inventory is to identify lands with the potential for wilderness designation. Restricting management activities solely because an area is in the roadless inventory goes beyond the inventory purpose. If areas are not recommended for wilderness, Forest Plan decisions will identify appropriate management area designations. The new rule governing Forest Service roadless area policy directs management plans to manage roadless areas unless State-specific rulemaking changes this management direction. See also response to PC 62000-40. Finally, it is expected that changes in the GMNF transportation system would

	be relatively minimal across the Forest and would not include any significant level of road construction in Roadless Areas or elsewhere (see FEIS section 3.20.2).
SC 22000-18o	TO REQUIRE THAT ALL SILVICULTURAL PRESCRIPTIONS BE ANALYZED FOR THEIR IMPACT ON INVASIVE SPECIES SPREAD
	Response: The revised Forest Plan is a programmatic document that does not address site-specific implementation, such as timber management activities. Any timber management project would be subject to Forest-wide standards and guidelines. Section 2.3.9 Forest Health and Disturbance Processes (revised Forest Plan p. 33) directs the Forest Service to incorporate non-native invasive species (NNIS) information in project development, including timber management activities. For general timber impacts on NNIS, reference FEIS section 3.5.3.
SC 22000-18p	TO ENSURE WILDLIFE TREE CLUMPS, SNAGS, AND DEN TREES ARE PROTECTED DURING EVEN-AGED HARVESTING
	Response: The Forest Service agrees with the commenter that the revised Forest Plan should clarify management standards for wildlife reserve trees, specifically as they address the grouping of wildlife trees during even-aged management, and more generally in terms of overall direction for implementation. The Forest Service revised the standards and guidelines for wildlife reserve trees to include retention of uncut patches totaling five percent of the harvested area during even-aged management (when harvest reduces the basal area of a stand below thirty square feet per acre) (revised Forest Plan p. 27). Incorporating a basal area threshold should make this standard easier to implement during timber harvest operations.
SC 22000-18q	TO MAINTAIN THE VIABILITY OF THE GOSHAWK POPULATION
sease	Response: A commenter stated that protection of northern goshawk nest areas loses its relevance if there is no standard to manage the overall Forest to maintain the viability of the goshawk population, and that the northern goshawk is not likely to survive in any landscape in Vermont other than public lands because of the need for large expanses of mature forest with an open understory. The Forest Service concurs that preferred habitat for the northern goshawk is interior, mature forest stands, particularly those with an open understory. The Forest Service doubts, however, that this species is unlikely to survive without public lands emphasizing mature forest management. Ellison (1985) described the northern goshawk as increasing in abundance in Vermont from 1950 through 1980 and being distributed almost state-wide. Population estimates and trends are generally lacking for the northern goshawk; breeding bird surveys do not identify a population trend during the last two decades for goshawks in the Adirondack region, in New York State as a whole, or in the northeastern United States (Sauer et al. 2003, NYDEC 2005). DeGraaf and Yamasaki (2001) describe the goshawk as an uncommon to rare resident but increasing in New England. A panel of regional experts convened by the Forest Service to assess viability concerns for wildlife species on the GMNF identified no causes for alarm for this species (SVE Bird Panel 2002). Many sources state that timber harvest is a primary threat to nesting populations through destruction of active nest trees and loss of suitable mature forest habitat (Squires and Reynolds 1997). The most effective management practices for enhancing viability for the northern goshawk on the GMNF are to

	protect nesting birds and to provide adequate suitable nesting and foraging habitat. The proposed Forest Plan included a separate standards and guidelines of each of three Species of Local Interest: great blue heron, northern goshawk, and osprey (p. 32). Because the appropriate protections for these species were very similar, the Forest Service combined them into a single set of guidelines in the revised Forest Plan (page 31). The Forest Service also added an additional guideline under Wildlife Reserve Trees – Den and Nest Trees (p. 29) that specifically identifies that raptor nest trees should be retained. In addition, applicable laws, regulations, and policies listed in FEIS section 3.1.5, as well as goals, objectives, standards, and guidelines contained in the revised Forest Plan combine to provide that the Forest Service will maintain and restore quality, amount, and distribution of habitats to produce viable and sustainable populations of native and desirable non-native plants and animals, including the northern goshawk. Under the Selected Alternative, the GMNF land base will continue to be dominated by the mature and older forest communities. Accordingly, suitable habitat for the northern goshawk age class will continue to be plentiful on the GMNF.
SC 22000-18r	TO PROTECT ALL SPECIES THAT MAKE UP THE GMNF BIODIVERSITY, AS ONLY SELECT SPECIES ARE GIVEN STANDARDS TO PROTECT THEIR LONG-TERM VIABILITY
	Response: See response to SC 22000-5j.
SC 22000-18s	TO PROVIDE ADEQUATE PROTECTION FOR ALL SPECIES BECAUSE SOME IMPERILED SPECIES ARE NOT LISTED
	Response: The Forest Service is bound by laws, regulations, and policy to protect federally listed threatened and endangered species, and those species thought to be at risk of becoming federally listed. In addition, the Forest Service is required to provide habitat to ensure viability of plant and animal species. In Section 1.1.2 of the revised Forest Plan (p. 4), the first principle of management listed is that laws, regulations, and policies will be followed, and that direction within the revised Forest Plan is meant to supplement, rather than replace this direction. Section 3.9 of the DEIS discusses the effects of the revised Forest Plan on species of potential viability concern, which includes all those currently listed as threatened, endangered, or Regional Forester's sensitive. Section 3.9.1 in particular, in the Introduction, explains in more detail how laws, regulations, and policies guide our management of imperiled species (DEIS p. 3-147). New Forest-wide objectives, standards, and guidelines associated with the Rare and Unique Biological Features sections of the revised Forest Plan have been added to clarify some of the confusion around management for these species (revised Forest Plan p. 12 and p. 30). See also response to SC 22000-5j.
PC 22000-19:	**The Forest Service should distinguish between summer and winter non-motorized recreation in the Remote Wildlife Management Area standards and guidelines, to accommodate compatible winter recreation uses.**
	Response: The Forest Service reviewed potential differences between winter and summer non-motorized recreation in the Remote Wildlife Habitat (RWH) management area, consulted with the Vermont Fish and Wildlife Department, and decided that changes were not warranted for several reasons. The emphasis and desired future condition of the RWH MA are to provide diverse habitat conditions for wildlife, while retaining the remote characteristics of the area (revised Forest Plan p. 60). Recreation resources management will be towards the desired ROS class of Semi-primitive Non-motorized. Forest Service system trails will emphasize access on foot and by other non-

	motorized means of transport, such as skis and snowshoes, although existing Forest Service System snowmobile trails may remain. Changes or additions in trail use designations may be considered where they do not compromise the values of the area. Except for reference to snowmobiles, management direction for the RWH intentionally omits distinction between winter and summer recreation uses. Seasonal management distinctions, for recreation or any other resource, will be made on a site-specific basis, to allow compatible summer or winter uses and to restrict uses that are not compatible.
PC 22000-20:	**The Forest Service should revise the Forest-Wide Visuals Standards and Guidelines.**
SC 22000-20a	TO ACCOMMODATE REDUCED ON-SITE AND OFF-SITE VIEW POTENTIAL WHERE PRIMITIVE AND SEMI-PRIMITIVE AREAS TRAVERSE EXISTING SKI AREA INFRASTRUCTURE
	Response: The Forest Service has reviewed and agrees with the commenter's suggestion to change the Forest-wide Visuals Guidelines in the revised Forest Plan (p. 38). Although the Alpine Ski Areas MA (7.1), Alpine Ski Area Expansion MA (9.3), Appalachian Trail MA (8.1), and Long Trail MA (8.2) do not overlap, alpine ski area developments have had and will continue to have visual impacts that under-achieve visual guidelines. Existing and possible future ski area developments are typically located on terrain that is highly visible from both on- and off-site locations. A note has been added to Table 2.3-2 – Visual Condition Guidelines for On-Site and Off-Site Views that allows for under-achieving the visual guidelines and refers to following Alpine Ski Area MA (7.1) direction. Management Area 7.1 direction under Visuals refers to Agriculture Handbook 617, National Forest Landscape Management, Volume 2, (Chapter 7, Ski Areas) for direction on how landscape management techniques and principles can be used in the planning, designing, and building processes to achieve and maintain desired visual conditions (revised Forest Plan p. 64).
SC 22000-20b	TO REFLECT THE DIFFICULTY WIND AND COMMUNICATION TOWERS WILL HAVE IN MEETING VISUAL QUALITY OBJECTIVES FOR THE LONG TRAIL (LT) AND APPALACHIAN TRAIL (AT)
	Response: The Forest Service has worked with the Appalachian Trail Conference (ATC) toward their goal of consistency of management for the AT throughout its length. Visual quality of the trail corridor is addressed in Forest-wide Visual standards and guidelines, as well as in specific management direction found under the Appalachian National Scenic Trail (8.1) and the Long Trail (8.2) MAs in the revised Forest Plan. Site-specific visual analysis of wind and communication tower developments will occur during site-specific environmental analysis and will take into account the location of the LT and AT and views from the trails. The Forest Service does not believe that additional visual standards on tower restrictions in the foreground and middleground zones of the Appalachian Trail are needed. Decisions regarding specific wind and communication tower locations will be made using a site-specific environmental analysis and public involvement.
PC 22000-21:	**The Forest Service should revise the Forest-Wide or management area Wildlife Standards and Guidelines.**
SC 22000-21a	TO CLARIFY WHY MORE SPECIES ARE NOT INCLUDED IN THE SENSITIVE AND LOCAL INTEREST SPECIES SECTIONS
	Response: See response to SC 22000-18s for a discussion of threatened, endangered, or Regional Forester's sensitive species and Rare and Unique Biological Features. The revised Forest Plan also includes standards and

	guidelines for the protection of Species of Local Interest: great blue heron, northern goshawk, and osprey (p. 32). These are species that are not threatened, endangered, or on the Regional Forester's sensitive list but have geographically- and biological-focused habitat concerns during nesting. For other species, habitat needs are more general and not geographically focused. For example, great blue herons nest in colonies of multiple nesting pairs in specific locations. Protection can be focused on the area surrounding the nest colony. The rusty blackbird is included in the analyses of Species of Potential Viability Concern (FEIS section 3.9) but is not listed as a Species of Local Interest. This species is a local and uncommon summer resident of open areas surrounding moderately high-elevation boreal wooded wetlands nests in high-elevation, conifer-dominated forests. Such habitats receive general protections for wetlands and surrounding lands (see section 2.3.2 in the revised Forest Plan: Forest-wide standards and guidelines for Soil, Water, and Riparian Area Protection and Restoration). Providing specific protection for rusty blackbirds would be impractical and unnecessary.
SC 22000-21b	TO MAKE THE PEREGRINE FALCON ACTIVITY PROHIBITION DATE EARLIER
	Response: Commenters suggested that the prohibition date for non-administrative activities in the 0-660 foot zone near peregrine falcon nests should be changed from March 15 to March 1 or February 1. Although peregrine falcons may occur in the vicinity of nest sites in early February, establishment of territories and nesting activities begin later. Although the March 15 date has been adequate, there is some evidence to suggest that peregrines have been nesting earlier during recent years and a revised date of March 1 is appropriate (Margaret Fowle, National Wildlife Federation, personal communication). This change has been made in the revised Forest Plan (p. 31).
SC 22000-21c	TO STRENGTHEN THE PROTECTION OF EARLY SUCCESSIONAL HABITAT
	Response: The Forest Service acknowledged the importance of early successional habitats by identifying them in the DEIS as one of four indicators to be analyzed for wildlife and wildlife habitat (FEIS section 3.6). On the GMNF, early successional habitat consists primarily of permanent upland openings (including areas such as scrub-old field and shrub habitats, as well as more pasture-like grassland habitats) and temporary openings created through silvicultural actions. Forest-wide standards and guidelines (revised Plan p. 26) provide management direction for temporary and permanent upland openings, including size, shape, and distribution. Additional guidelines in the revised Forest Plan for the Remote Wildlife Habitat MA stipulate that patches of early successional habitat should be at least two acres in size (p. 61). Patches larger than five acres will be emphasized, and patches smaller than five acres should be created only in close proximity to other patches of regeneration habitat. The Forest Service based these guidelines on management recommendations provided in many relevant scientific publications (for example, King et al. 1998, Costello et al. 2000, Thompson and DeGraaf 2001, DeGraff and Yamasaki 2003, and reviews and collected papers in Thompson et al. 2001 and Litvaitis 2003). A commenter points out that although "patches" of early successional habitat are certainly beneficial, in most landscapes the availability of large patches will be more limiting to early successional wildlife than that of small patches

	(commenter cited Thompson and DeGraaf 2001). Research in New Hampshire has demonstrated that although openings as small as two acres can provide benefits for many early successional species, openings of 20 to 30 acres support a greater diversity of birds, as well as several species that do not occur in smaller openings (King et al. 1998, Costello et al. 2000, DeGraff and Yamasaki 2003)(see discussion of permanent upland openings in responses to SC 22000-5f and SC 22000-5g). For these reasons, the Forest Service will emphasize openings larger than five acres (revised Forest Plan p. 52).
SC 22000-21d	TO PROVIDE EARLY SUCCESSIONAL HABITAT BY RETAINING THE LOWEST NUMBER OF TREES OR BASAL AREA WHEN CONDUCTING VEGETATION MANAGEMENT ACTIVITIES
	Response: A commenter suggested that standards and guidelines for wildlife reserve trees should be consolidated into the lowest possible number or basal area of retained trees possible when applied in conjunction with vegetation or timber management activities proposed for the creation, restoration, and maintenance of regeneration forest and the aspen-birch forest community type. The Forest Service changed the GMNF standards and guidelines for wildlife reserve trees by incorporating features used by the White Mountain National Forest (revised Forest Plan p. 27). These changes will make these standards and guidelines easier to implement and will emphasize retaining patches of reserve trees during even-aged harvests. These changes are compatible with regeneration of shade-intolerant tree species. The response to SC 32600-3b addresses aspen/birch communities. Additionally, a commenter proposed that Forest-wide standards for retention of potential roost trees for Indiana bats is not necessary given the limited occurrence of this species on the Forest. The Forest Service agrees that standards and guidelines for protection of roost trees potentially occupied by Indiana bats, and for conservation and enhancement of suitable roost trees for Indiana bats should apply to those areas on the GMNF where Indiana bats might occur. The revised Forest Plan identifies where potential maternity roosting habitat is located and focuses management protection in these areas and within five miles of known Indiana bat hibernacula. The Forest Service developed this management direction for Indiana bats in consultation with experts from the Forest Service, the US Fish and Wildlife Service, the Vermont Department of Fish and Game, and the University of Vermont.
SC 22000-21e	TO INCLUDE TWO SNAGS GREATER THAN 24 INCH DIAMETER PER ACRE AND AT LEAST FOUR SNAGS GREATER THAN 14 INCH DIAMETER PER ACRE
	Response: The Forest Service changed the Forest-wide standards and guidelines (S&Gs) for wildlife reserve trees to emphasize retention of uncut patches of trees during even-aged management, to clarify language describing trees and snags to be retained, and to enhance protection of potential roost trees and potential habitat for Indiana bats (revised Forest Plan pp. 27-28). The revised S&Gs place greater emphasis on the quality, or potential quality, of reserve trees (particularly as to bark condition, presence of dead limbs, cavities, etc.) than on numbers of trees of specific diameter classes. The major exception is the emphasis on retaining trees and snags of eight inch dbh and larger as potential roost sites for Indiana bats.
SC 22000-21f	TO MAINTAIN AND STRENGTHEN THE RECRUITMENT OF FUTURE SNAGS, DEN, AND MAST TREES

	Response: A commenter expressed concern that the Forest Service should retain all mast-producing species, including all oaks, beech, hickories, and walnuts which have reached mast-producing age. The revised Forest Plan includes an objective under Goal 2 to "Manage mast-producing species to increase or expand mast productivity where practical" (revised Forest Plan p. 12). A guideline emphasizes retaining large mast trees because they may fill several functions by providing mast, as well as potentially den and snag habitats. In some instances, silvicultural applications that include removal of individual mast-producing trees may be required to enhance a mast-producing stand or to promote regeneration of shade intolerant species such as oak. Additionally, management decisions, including those related to individual mast-producing trees and shrubs, are not based exclusively on considerations of wildlife habitat or any other single resource. Many other factors and resource concerns are relevant and must be considered.
SC 22000-21g	BY INCLUDING STANDARDS THAT CLEARLY RECRUIT AND INCREASE THE NUMBER OF POTENTIAL INDIANA BAT ROOST TREES
	Response: Standards and guidelines in the revised Forest Plan include retention of all known Indiana bat roost trees and all shagbark hickory trees, which are an important species used for roosting (revised Forest Plan p. 27). Standards and guidelines also generally emphasize retention of larger diameter trees and snags, den and nest trees, hard and soft snags, live and dead trees with cavities and hollows, and trees with exfoliating bark, all of which provide suitable roosting habitat for Indiana bats and other species of wildlife. Suitable roost trees should continue to be abundant on the GMNF.
PC 22000-22:	**The Forest Service should revise the Wilderness Management Area Standards and Guidelines.**
SC 22000-22a	TO RESTRICT FISH STOCKING TO NATIVE SPECIES ONLY
	Response: The Forest Service uses native species when stocking fish on the Forest, whether in a Wilderness Management Area or elsewhere. Exceptions are typically only made in cases of Atlantic Salmon restoration. The Fisheries guideline in the Wilderness MA allow for stocking of lakes that have historically been stocked (revised Forest Plan p. 50). This direction is provided by the legislative record for the Vermont Wilderness Act of 1984. Currently, ponds in designated Wilderness Areas are only stocked with native brook trout. Although highly unlikely, any stocking of non-native species would also be recommended by the Vermont Department of Fish and Wildlife since they are responsible for managing fish populations in Vermont.
SC 22000-22b	TO ALLOW THE CATAMOUNT TRAIL ASSOCIATION TO MAINTAIN BRIDGES AND TRAILS IN WILDERNESS AREAS AND TO USE HAND-HELD POWER TOOLS FOR THAT MAINTENANCE
	Response: Bridges and trails may be maintained at a minimum standard in Wilderness MAs using hand tools (revised Forest Plan p. 51). Power tools are prohibited in Wilderness Management Areas by Forest Service policy and the Wilderness Act of 1964. Exceptions to this prohibition can be made only in certain emergency conditions, as described in Forest Service Manual 2326.1.
PC 22000-23:	**The Forest Service should revise Wildlife Openings Guidelines to provide for more frequent management.**
	Response: See revised Forest Plan standards and guidelines for Openings, section 2.3.5. The frequency of management activities applied for maintenance of permanent upland openings will occur as needed to achieve habitat goals. A specific range of time for maintaining openings was not stated in order to provide flexibility in maintaining these openings.

SC 22000-23a	IN THE WHITE ROCKS MANAGEMENT AREA
	Response: Congress designated the White Rocks National Recreation Area (NRA). Standards and guidelines for the White Rocks NRA come directly from the White Rocks NRA management plan (Pramuk 1985), which was based on congressional intent, and signed by the Regional Forester. Forest Plan revision did not include revision of the White Rocks NRA Plan. See White Rocks NRA MA standards and guidelines for openings in the revised Forest Plan (p. 80).
SC 22000-23b	IN THE GREEN MOUNTAIN ESCARPMENT MANAGEMENT AREA
	Response: The Green Mountain Escarpment (Escarpment) MA (revised Forest Plan p. 86) emphasizes maintenance of natural community diversity, including such rare and uncommon types as pitch pine-oak-heath-rocky summits, temperate calcareous cliffs and outcrops, natural red pine forests, dry oak forests and woodlands, and dry oak-hickory-hophornbeam forests. As several rare species and uncommon habitats in this area require limited shade, vegetation management to maintain some of these communities will require the use of commercial and non-commercial tree harvesting, and fire. Areas of large older trees will be interspersed with regenerating areas, as well as with small patch communities of forest, woodland, and open types. The variety of natural communities will be reflective of the diversity in the terrain, and the mix of calcareous and acidic bedrock along the escarpment. New openings in the Escarpment MA should be temporary in nature, except where needed to maintain habitat for threatened, endangered, Regional Forester's sensitive species, and species of local concern, or where needed to maintain the character or purpose of the escarpment. These openings should provide a suitable mix of habitats for many species or regenerating and other open spaces.
SC 22000-23c	IN THE ALPINE SKI AREA EXPANSION MANAGEMENT AREA
	Response: The Alpine Ski Area Expansion Management Area (revised Forest Plan p. 103) recognizes the potential need for ski area expansion, and manages the land so as not to preclude future ski area development. Maintained ski trails keep the public in designated and safe areas. Additional openings might confuse skiers, leading them off of designated trails. Since Alpine Ski Area Expansion areas do not yet include ski trails, existing permanent upland openings may be maintained for wildlife. Creation of additional openings, however, could complicate future efforts to expand existing ski trail systems. See response to SC 22000-23e. The Forest Service determined that an investment in permanent upland openings was more wisely spent in areas that are intended for future habitat management.
SC 22000-23d	IN THE WILDERNESS STUDY AREA MANAGEMENT AREA
	Response: The management emphasis for Wilderness Study Areas is protecting wilderness characteristics pending legislation as to their designation (revised Forest Plan p. 110). Current activities and uses may continue only where they do not adversely impact the potential for future wilderness designation. Therefore, existing permanent upland openings may be maintained and new openings may be created only by natural processes. Creation of new permanent openings through timber or vegetation management is not compatible with the emphasis and desired future condition for this MA. The Forest Service determined that an investment in permanent upland openings was more wisely spent in areas that are intended for future habitat management.
SC 22000-23e	IN THE ALPINE SKI AREA MANAGEMENT AREA

	Response: Management area direction provides that permanent upland openings for wildlife should not be maintained or created within Alpine Ski Area MAs (revised Forest Plan p. 64). Permanent openings in these areas are for ski trails, ski lifts, and other uses specifically related to operation of the ski areas. Maintained ski trails focus public uses in designated and safe areas. Additional openings might confuse skiers or encourage them to stray from designated trails. Although not designated for wildlife, maintained ski trails do provide habitat for many grassland and shrubland species.
PC 22000-24:	**The Forest Service should revise the Ecological Special Areas Management Area standards and guidelines.**
SC 22000-24a	TO ACCOMMODATE MAINTENANCE OF THE LONG TRAIL, APPALACHIAN TRAIL, AND ASSOCIATED FACILITIES IN ECOLOGICAL SPECIAL AREAS
	Response: A number of changes have been made to the standards and guidelines for the Ecological Special Area and the Alpine and Subalpine Special Area management areas in the revised Forest Plan to accommodate these and other concerns (see revised Forest Plan p. 94 and p. 82). Such changes include adjustments to standards and guidelines for timber management, openings, and recreation that acknowledge the need to protect and maintain these major trail systems and associated facilities, while ensuring that activities are consistent with or complementary to Ecological Special Area purposes and values.
PC 22000-25:	**The Forest Service should strengthen and clarify the Appalachian Trail Management Area standards and guidelines.**
	Response: The comment contained several specific suggestions for clarifying the Appalachian Trail Management Area standards and guidelines. The Forest Service has made some of the suggested changes, including adding the referenced ATC local management planning guide to list of documents guiding trail management (revised Forest Plan p. 68). Regarding changing the Viewer Sensitivity Level of High or Very High, the revised Forest Plan does not have a Viewer Sensitivity Level of Very High and believes that the sensitivity level of High will protect the visual resources in the AT MA. For discussion of the commenters' concerns regarding summer and winter crossings of the Appalachian Trail, see response to PC 53000-14.
PC 22000-26:	**The Forest Service should revise the Remote Backcountry Management Area standards and guidelines.**
SC 22000-26a	TO ALLOW EXISTING SNOWMOBILE TRAILS TO BE RETAINED AND MAINTAINED
	Response: The major emphasis in Remote Backcountry Forest is non-motorized recreation in remote areas where natural processes dominate (revised Forest Plan p. 54). In general, alternatives were developed with the intent to maintain existing legal recreational uses. No corridor snowmobile trails were allocated to management areas that would require closure in the Selected Alternative. The Forest Service believes that the revised Forest Plan provides an appropriate balance between motorized and non-motorized recreation.
SC 22000-26b	TO ACCOMMODATE NECESSARY MANAGEMENT IN THE EVENT OF INSECT, FIRE, OR DISEASE OUTBREAKS
	Response: Management within Remote Backcountry Forest MA does accommodate management in the event of insect, fire, or disease outbreaks. Within the direction for this management area in the revised Plan, the guideline associated with Pests, Diseases, and Non-native Invasive Species indicates

	that controls are allowed (revised Plan, page 55). A new guideline has been added to clarify when controls would be used for native pests and diseases (revised Forest Plan p. 55). As noted in the Desired Future Condition for this management area, while native insects and diseases are considered part of natural disturbance processes, non-native insects and diseases like gypsy moth, emerald ash borer, and hemlock wooly adelgid are not, and may be controlled. Fire use is allowed in this management area, which means that fire will be controlled unless it occurs within a fire management prescription, which will have tight controls and will protect adjacent private property.
SC 22000-26c	TO REDUCE THE RESTRICTIONS ON TRAIL USE BY MOUNTAIN BICYCLES
	Response: Adjustments in the management area guidance have been made to clarify confusion associated with bicycle use in the Remote Backcountry Forest MA (revised Forest Plan p. 56). Specifically, some wording changes were made in the Major Emphasis and Desired Future Conditions sections of this management area to make it clear that mountain bikes are an allowed trail use, and are not any more constrained than any other trail use.
SC 22000-26d	TO CLARIFY THAT MOTORIZED EQUIPMENT USE DOES NOT REQUIRE SPECIAL PERMISSION
	Response: Motorized and mechanized equipment to accomplish the permitted activities and uses within the Remote Backcountry Forest Management Area are allowed, because use of such equipment is not specifically mentioned in the guidance for that management area (revised Forest Plan p. 54). When a management area does not address a specific use or activity within its guidance, management within that area defers to Forest-wide standards and guidelines. Forest-wide standards and guidelines do not specifically prohibit or limit the use of motorized or mechanized equipment. The only management area that prohibits or limits uses of motorized or mechanized equipment is Wilderness (revised Forest Plan p. 49). Consequently, all others allow the use of such equipment to accomplish their goals.
PC 22000-27:	**The Forest Service should revise the Remote Wildlife Management Area standards and guidelines.**
SC 22000-27a	TO ALLOW MAINTENANCE OF EXISTING SNOWMOBILE TRAILS
	Response: A standard for the Remote Wildlife Habitat MA states that motorized uses shall be limited to winter use of designated Forest Service System trails (revised Forest Plan p. 62). This means that snowmobiles are allowed, but summer ORVs are not. As described in Forest-wide standards and guidelines, National Forest System trails should be maintained to National Quality Standards to adequately and safely accommodate the most demanding or impacting type of use allowed (revised Forest Plan p. 35).
SC 22000-27b	BECAUSE THE OPENING SIZE IS EXCESSIVE FOR THE STATED INTENTION OF THE MANAGEMENT AREA, AND SEEMS INTENDED TO ACCOMMODATE COMMERCIAL LOGGING
	Response: Permanent upland openings and temporary openings are important areas for wildlife as they directly contribute to the diversity of available habitat conditions. Research in New Hampshire has demonstrated that openings as small as two acres can provide benefits for many early successional species; however, openings of 20 to 30 acres support a greater diversity of birds, as well as several species that do not occur in smaller openings (King et al. 1998, Costello et al. 2000, DeGraff and Yamasaki 2003). Timber and vegetation management are the primary tools available to the Forest Service for managing habitat diversity. For pragmatic reasons, the

	economic advantages associated with commercial timber sales may be integral to achievement of habitat goals on large-scale projects. In other cases, partnerships or volunteer agreements may be most appropriate. Such decisions are made through site-specific environmental analysis. See also FEIS Vegetation section 3.5 and Wildlife and Wildlife Habitat section 3.6.
SC 22000-27c	TO REDUCE THE RESTRICTIONS ON TRAIL CONSTRUCTION AND MAINTENANCE FOR VARIOUS USES
	Response: As described in Forest-wide standards and guidelines, National Forest System trails should be maintained to National Quality Standards to adequately and safely accommodate the most demanding or impacting type of use allowed (revised Forest Plan p. 35). A guideline for the Remote Wildlife Habitat MA states that relocation of existing trails may occur only for resource protection and visitor safety (revised Forest Plan p. 62). The intention of the MA is that existing trails may remain. Where necessary for reasons of public safety or to mitigate damage to resources, trails may be relocated. Construction activities required for necessary relocations and to maintain trails to acceptable standards are allowed. The Forest Service revised the language in the Desired Future Condition and in the standards and guidelines for this MA to provide explicit direction that maintenance, relocation, and changes in designated uses of trails, or designation of missing sections of existing trails may be allowed, provided these actions do not compromise the values for which the area was designated (revised Forest Plan pp. 60-62).
SC 22000-27d	TO CONSIDER SEASONAL MOTORIZED USE FOR RECREATIONAL HUNTING ACCESS
	Response: Access to lands allocated to the Remote Wildlife Habitat MA are accessible by open Forest Service roads and trails, as well as to non-trail access on foot. Summer off-road vehicle (ORV) trails shall be limited to connecting corridors that link sections of a larger statewide motorized trail system located off National Forest System land (revised Forest Plan p. 37). Additionally, the Forest Service will consider summer ORV trails only in the Diverse Forest Use and Diverse Backcountry MAs. Only winter motorized uses (snowmobiles) are allowed in the Remote Wildlife Habitat MA (revised Forest Plan p. 62). Responses to PCs 51500-3, 51500-7, 51500-8, and 53000-3 through 53000-14 address summer ORVs.
SC 22000-27e	TO PROHIBIT THE DEVELOPMENT OF WIND TOWER FACILITIES
	Response: Non-recreational special uses, including wind tower facilities, may be permitted in the Remote Wildlife Habitat MA, provided they are consistent with management area emphasis and desired future condition, and they will neither threaten nor diminish the character or purpose for which the MA was designated (revised Forest Plan p. 62). A proposed wind tower facility would be subject to extensive, site-specific environmental analysis and public involvement.
SC 22000-27f	TO DECREASE EMPHASIS ON RECLUSIVE SPECIES
SC 22000-27g	TO PROVIDE AGGRESSIVE VEGETATION MANAGEMENT WITH AN EMPHASIS ON WILDLIFE HABITAT
	Response: As described in the revised Forest Plan, “The major emphasis of the RWH MA is to provide a mix of different-aged forest habitats, from early succession to old forests, for the primary benefit of diverse wildlife species, including reclusive wildlife species“ (revised Forest Plan p. 60). Reclusive species should benefit from this MA, but the MA is not intended exclusively for the benefit of reclusive species.

	The Desired Future Condition describes creation and maintenance of suitable habitat for a variety of wildlife and plant species. Habitat at the landscape level will include a sustainable mix ranging from early succession to old forests (revised Forest Plan Vegetation Objectives, p. 11). Permanent upland and temporary openings will occur across the landscape in shapes and sizes that are consistent with wildlife habitat objectives. A guideline provides that timber and vegetation management should be the primary tools for habitat manipulation, including even- and uneven-aged silviculture, commercial timber sales, service contracts, volunteer activities, and partnerships (revised Forest Plan p. 61).
PC 22000-28:	**The Forest Service should explain specifically how lands in the Diverse Forest Use Management Area will meet the Desired Future Condition.**
	Response: The desired future condition will include both even-aged and uneven-aged silvicultural systems. The SPECTRUM model predicts that at least 20 percent of the harvesting on suitable lands for timber within all lands suitable for timber production will consist of uneven-aged management. The Diverse Forest Use Management Area was constrained to 50 percent of the harvests to be uneven-aged management. The constraint was imposed in the SPECTRUM modeling to duplicate the amount of uneven-aged management being conducted in the current Forest Plan MAs 2.1, 3.1, 4.1, and 4.2. The Diverse Forest Use Management Area is a combination of MAs 2.1, 3.1, 4.1, and 4.2. The revised Forest Plan provides a framework and context that guides the Forest Service's daily resource management operations. It is a programmatic document that does not contain site-specific implementation objectives. The scenic integrity of the GMNF is an important consideration, and is taken into account during site-specific analysis when deciding the use of silvicultural techniques.
PC 22000-29:	**The Forest Service should strengthen protections for wildlife species in management areas that allow special use activities such as wind facilities.**
	Response: A commenter expressed concern that MAs that allow special uses such as wind towers do not also include adequate protection to avoid or mitigate negative impacts. The specific example is important black bear feeding habitat and Bicknell's thrush breeding habitat in the area proposed for expansion of the existing Searsburg wind generation facility. The Forest Service allocated this area to the Diverse Forest Use MA in the Selected Alternative. The response to SC 22000-18h addresses concerns for this area and how the Forest Service is able to protect wildlife habitat in general and important black bear habitat in particular. Bicknell's thrush, an additional concern raised by this commenter, is a Regional Forester sensitive species (see FEIS Appendix E, Biological Evaluation, for a discussion of Bicknell's thrush). The revised Forest Plan includes an objective to "Maintain or enhance habitat conditions for Regional Forester Sensitive Species" (revised Forest Plan p. 12). Analysis and review for projects in this area, as well as elsewhere on the GMNF, will follow procedures prescribed by the National Environmental Policy Act (NEPA), and will consider habitat requirements and potential impacts to Bicknell's thrush.
PC 22000-30:	**The Forest Service should clarify the rationale for the Remote Wildlife Management Area, because it has not provided sufficient scientific justification that the species listed require habitat manipulation.**

	Response: Commenters pointed out that many species of wildlife generally avoid humans, including deer, moose, weasels, and turkeys, whereas black bears often occur near people and should not be used as a justification for needing Remote Wildlife Habitat. Another commenter added, "since when are deer at any time of the year considered a reclusive species or a species sensitive to human disturbances." Responses to PC 62000-20, PC 62000-21, and associated subconcerns include extensive discussion of the Remote Wildlife Habitat MA. In summary, the major emphasis of the RWH MA is to provide a mix of different-aged forest habitats, from early succession to old forests, for the primary benefit of diverse wildlife species, including reclusive wildlife species (revised Forest Plan p. 60). This MA will provide diverse habitat conditions while retaining the remote characteristics of the area. Reclusive species should benefit from this MA, but the MA is not intended exclusively for the benefit of reclusive species. Black bears can and do occur in and around areas of human activity. However, bears in different age and sex groups react differently to human activity, and habitat needs vary seasonally. Subadult bears, for example, which are learning the dangers associated with roads and humans, are least likely to exhibit avoidance behavior (Hammond 2002). Female black bears with cubs and bears feeding on hard mast in the fall, particularly in beech stands, may be particularly sensitive to disturbance (Hammond 2002; personal communication, 13 September 2005). The Remote Wildlife Habitat MA is particularly well suited for areas that include important bear habitat, as it provides management direction that allows maintenance and enhancement of hard-mast stands and soft mast (fruit and berries) while retaining the relative protection from disturbance. The revised Forest Plan does not imply that white-tailed deer are reclusive species, rather it points out that white-tailed deer are one of many species that should benefit from habitat management within this MA. Management direction for the Remote Wildlife Habitat MA emphasizes maintenance and enhancement of deer wintering areas because white-tailed deer are an important component of the wildlife that occur in Vermont, the availability of quality winter habitat is a potentially limiting factor for deer in much of Vermont, and application of standard silvicultural methods can maintain and enhance wintering habitat (Reay et al. 1990). A commenter pointed out that disturbance patches larger than five acres are created very infrequently in the natural disturbance regime, and species referred to in the draft Plan and DEIS (for example, black bear, bobcat, deer, and northern goshawks) apparently had thriving, fecund populations before humans created more and more large openings. Responses to SC 22000-5f, 22000-5g, subconcerns under PC 22000-23, and PC 32600-11 include extensive discussion of permanent upland openings. Of relevance here is that during development of the revised Forest Plan, the Forest Service purposefully included an objective under Goal 2 to maintain, and where desirable increase, the acres of upland open habitats at slightly higher than ecological tendencies to support species that prefer these habitats (revised Forest Plan p. 11). Historical land uses and their effects of habitat and species composition and

	abundance in the GMNF region were factors in this decision. Restoring the entire GMNF land base to a historical or natural range of variability, or to conditions that existed at some time prior to settlement by Europeans, is not the goal of future management under the revised Forest Plan. The Forest Service mission and multiple-use mandate requires that management decisions are not based solely on wildlife and wildlife habitat, natural range of variability, recreational uses, or any other a single resource.
PC 22000-31:	**The Forest Service should remove the term 'foot trail' when describing trails in the Diverse Backcountry Management Area to avoid elevating hiking use over mountain bicycling use.**
	Response: The Major Emphasis section of the Diverse Backcountry Forest Management Area direction describes the trails program in terms of a range of activities "from low use foot trails to motorized use trails" (revised Forest Plan p. 58). Management intent is to supply opportunities for a diverse range of recreation options as expressed in the Major Emphasis paragraph. No one particular activity is highlighted and therefore the Emphasis section refers to the range of options rather than individual activities such as bicycling, snowmobiles, skijoring, or cross-country skiing.
PC 22000-32:	**The Forest Service should clarify which management areas permit dog sledding teams.**
	Response: Dog sledding teams are allowed in most management areas on designated trails (revised Forest Plan p. 36). MAs that prohibit or restrict dog sledding are: Wilderness (revised Forest Plan p. 52), Alpine/Subalpine Special Areas (revised Forest Plan p. 84), Existing and Candidate Research Natural Areas (revised Forest Plan p.92), and in the Appalachian National Scenic Trail and Long Trail MAs except at designated crossings or where the trail is located on NFS roads, state highways or town roads, (revised Forest Plan pp. 70, 76). Decisions regarding specific trail uses will be made using a site-specific environmental analysis and public involvement.
PC 22000-33:	**The Forest Service should revise the Alpine/Subalpine Management Area to facilitate hiking and trail facility management in the southern "Monroe Skyline."**
	Response: Several changes were made in the revised Forest Plan to the Alpine/Subalpine Management Area to clarify management associated with the Long Trail within this MA (revised Forest Plan p. 82). Changes suggested by the commenter for geocaching were not made because Forest-wide standards and guidelines adequately address this issue. Changes suggested regarding maintenance or relocation of the trails within this management area were not made because the revised Forest Plan guideline accurately reflects the desired future condition of this MA. Changes suggested regarding new communication permits were not made because the revised Forest Plan guideline, which allows new permits only at the existing communication site at Lincoln Peak, is adequate to protect the values associated with the Long Trail and Alpine/Subalpine Special Area. Decisions regarding specific communication sites will be made using a site-specific environmental analysis and public involvement.
PC 22000-34:	**The Forest Service should clarify the width of the Alpine/Subalpine Management Area west of Sugarbush Resort, in order to protect Long Trail hikers from ski area activities.**
	Response: The Long Trail falls within the Alpine/Subalpine Management Area in the area of Sugarbush Ski Resort (revised Forest Plan p. 82). The long-term permit area for the ski area falls within the desired 500 foot buffer along

	the Long Trail, and the management areas for the Long Trail and for Sugarbush Ski Resort do not overlap. Consequently, the buffer for the Long Trail is narrower in this area. Guidance within the Alpine Ski Area Management Area makes it clear that activities within the ski area are not to create adverse impacts to the Long Trail (revised Forest Plan p. 64). There is currently no biking at Sugarbush Ski Resort, and when there has been a bike program in the past, it did not include any trails near the summit, or within 500 feet of the Long Trail. Decisions regarding specific proposals for communication and wind towers in the Alpine Ski Area MA will be made using a site-specific environmental analysis and public involvement.
PC 22000-35:	**The Forest Service should allow mountain bikes in Research Natural Areas, as their desired Recreation Opportunity Spectrum is primitive, and mountain bike use should not be excluded from primitive areas.**
	Response: The guidance for recreational use of Research Natural Areas (RNAs) is not derived from the Recreation Opportunity Spectrum, but from the purposes for establishment of and the management objectives for RNAs found in Forest Service Manual 4060. The purpose and objectives for RNAs are not recreational in nature, but are focused on research of undisturbed ecosystems and natural processes (revised Forest Plan p. 90). Consequently, most recreational uses are considered to be inconsistent with the desired future condition of RNAs. In some cases, all recreational use, including hiking, will be prohibited from RNAs if such uses interfere with the conditions of an RNA. The Forest Service decided to limit recreational use to the least intrusive uses, which are essentially non-motorized and non-mechanized, and involve no animals.
PC 22000-36:	**The Forest Service should clarify why Recreation Special Areas are different than other recreation areas.**
	Response: The Recreation Special Areas designated in the revised Forest Plan are Blueberry Lake and the Robert Frost Interpretive Trail (revised Forest Plan p. 98). These areas are characterized by recreational values that require special management prescriptions to sustain. Separate management areas are set up for these two sites to emphasize protection of these values, which, for Blueberry Lake, is the opportunity for easily accessible water-based recreation in an area largely unimpacted by other uses. The values of the Robert Frost Interpretive Trail are its National Recreation Trail status and foreground preservation values.
PC 22000-37:	**The Forest Service should retain language protecting the Appalachian and Long Trails in Alpine Ski areas.**
	Response: Thank you for your comment, the language has been retained in the revised Forest Plan. See also response to PC 22000-34.
PC 22000-38:	**The Forest Service should delete language protecting the Appalachian and Long Trails in Alpine Ski areas.**
	Response: Based on public comment, the Forest Service has made several adjustments to management direction regarding alpine ski areas. These adjustments are designed to recognize the fact that alpine ski areas on the Forest are highly developed facilities that are unique elements in the Forest landscape. Language in the Alpine Ski Area MA has been changed to increase flexibility in cases of Forest-wide and management area standard and guideline conflicts (revised Forest Plan p. 63). In addition, the Forest-wide guidelines for visual quality that pertain to Alpine Ski Areas have been refined to better address ongoing and existing ski area development (revised Forest Plan, Chapter 2, Table 2.3-2: Visual Condition Guidelines for On-Site and Off-

	Site Views, p. 38). (See response to PC 22000-34). The particular standard to which the commenter refers has not been changed. Decisions regarding particular impacts to the Appalachian National Scenic Trail and Long Trail by alpine ski areas will be made using site-specific environmental analysis and public involvement.
PC 22000-39:	**The Forest Service should strengthen standards and guidelines for protection of the Long Trail.**
	Response: As suggested by the commenter, the Forest Service has made several changes to the Long Trail Management Area standards and guidelines. The Forest Service has removed language concerning the involvement of the Appalachian Trail Conservancy in managing the Long Trail. For specific details on the language changes, see revised Forest Plan page 74. Suggested changes that were not adopted concerned summer ORV crossings of the Long Trail. The revised Forest Plan does not prohibit motorized crossings of the Long Trail. For further discussion of this topic, see responses to PCs 51500-3, 51500-7, 51500-8, and 53000-3 through 53000-14. Finally, the commenter was concerned about depiction of the Long Trail on GMNF maps. The Forest Service delineates the Appalachian and Long Trails on large-scale alternative maps, including where the trail passes through more restrictive management areas, such as Wilderness. On small-scale maps, all trails may be omitted for purposes of clarity.
PC 22000-40:	**The Forest Service should permit mountain bike use.**
SC 22000-40a	IN THE REMOTE WILDLIFE HABITAT MANAGEMENT AREA
	Response: Bicycle use is not specifically prohibited in the Remote Wildlife Habitat MA. Existing Forest Service trails will be retained. The Forest Service modified the language describing the Desired Future Condition for this MA to clarify that changes in designated uses of trails, such as adding bicycle use for a particular trail, may be considered (revised Forest Plan p. 62). Decisions regarding specific trail uses will be made using a site-specific environmental analysis and public involvement.
SC 22000-40b	TO CROSS THE APPALACHIAN TRAIL
	Response: Although generally prohibited within the Appalachian Trail Management Area, the revised Forest Plan allows bicycles on the Appalachian Trail where the Trail is on or crosses Forest System, State, or town roads. New bicycle crossing should be minimized except as mutually agreed by the Forest Service and the ATC (revised Forest Plan p. 70). Side trails to the AT are to be managed primarily as non-motorized trails designated for foot travel, but minor exceptions are allowed. See also response to SC 22000-11c and PC 53000-23.
SC 22000-40c	IN THE ALPINE/SUBALPINE MANAGEMENT AREA
	Response: The Alpine/Subalpine Management Area designated in the revised Forest Plan (p. 82) is small and restricted. It represents the only example of alpine habitat on the Forest. The areas are quite fragile and sensitive to overuse. The alpine zone is currently recovering from over-use by hikers, and adding another use to this fragile area may threaten the continued existence of two rare species in that habitat. There are currently no other trails other than the Long Trail within this management area, and bicycles are not permitted on the Long Trail. Given the fragile nature of this habitat, it is unlikely that additional new trails would be developed.
PC 22000-41:	**The Forest Service should revise the Role of the Forest.**
SC 22000-41a	TO INCLUDE MORE HISTORY OF AGRICULTURAL LAND USE PATTERNS
	Response: The Role of the Green Mountain National Forest presents the

	vision for the future of the GMNF. The Historical Perspective is presented in the first section of the Role of the Green Mountain National Forest (revised Forest Plan p. 8). This section has a brief discussion of historical land use including farming. The DEIS contains more detailed discussions of land use history in the Introduction to Chapter 3, Section 3.1.2, Vegetation Section 3.5.1.1, and Heritage Resources and Tribal Relations Section 3.16.1.
SC 22000-41b	BECAUSE IT SHOULD FOCUS, AS DID THE 1987 PLAN, ON THE FOREST'S ROLE RELATED TO PRIVATE LANDS, RATHER THAN THE FOREST AS A COMMODITY
	Response: The Role of Today's Green Mountain National Forest presents the vision for the future of the GMNF. The Role states (revised Forest Plan 8), "our management philosophy continues to be guided by the belief that public land in the Northeast will be increasingly scarce and precious. With each passing decade this increasingly involves managing among a host of often competing and sometime conflicting interests." The Role further recognizes the importance of the GMNF in perpetuating clean water, maintaining productive soils, providing trail-based activities in backcountry settings, enhancing wildlife and plant habitat conditions, providing Wilderness, serving as a model for ecological and science-based forest stewardship, and providing educational opportunities. The Role also recognizes the GMNF's place in providing commodities by placing a focus on producing high-quality, high-value forest products, and by actively contributing towards sustaining the character of Vermont's rural landscape, fostering vibrant local communities and economies. Some of these uses and benefits are particularly suited to be provided only on public lands, such as Wilderness. Many other uses and benefits may also be provided by other public and private lands but are still an important part of the role of a public land base that provides for multiple uses.
PC 22000-42:	**The Forest Service should more clearly define its role as a Federal Land Manager in federal and State air resource policies.**
	Response: The revised Forest Plan states in Principle 1 (p. 4) that the Forest Service will follow all laws and regulations as well as policies in Forest Service Manuals and Handbooks, and that the revised Forest Plan is a supplement to direction from these sources. Because the legal and administrative framework supporting the role of the Federal Land Manager in federal and State air resource policies is described in specific sections of the Clean Air Act Amendments (42 U.S.C. § 7401 et seq.), implementing regulations and EPA policies, as well as Forest Service Manual and Handbook direction (2580), it was not explicitly discussed in the revised Forest Plan. The goal, and hence the role, of the Forest Service in maintaining or improving air quality on the GMNF is referred to in the Objectives for Goal 5 (revised Forest Plan p. 14): o Continue to provide credible air quality and Air Quality Related Value monitoring data to contribute to air quality permit reviews and Regional Planning Organization processes. o Assess major new sources of air pollution to determine if they would have an adverse effect on Air Quality Related Values in the Class I Lye Brook Wilderness, and advise the appropriate air quality regulators. o Continue to manage prescribed fire in a manner that minimizes smoke impacts on air quality and visibility.
PC 22000-43:	**The Forest Service should strengthen its monitoring and evaluation section of the draft Plan.**
SC 22000-43a	BECAUSE IT IS INADEQUATE AND DID NOT INVOLVE THE PUBLIC

SC 22000-43b	BECAUSE MONITORING AND EVALUATION IS A REQUIRED ELEMENT OF A FOREST PLAN UNDER THE NATIONAL FOREST MANAGEMENT ACT, AND THE FOREST SERVICE SHOULD NOT HAVE REMOVED MONITORING TO A NOT-YET-AVAILABLE IMPLEMENTATION GUIDE
	Response: The Forest Service decided to create and maintain the Monitoring Guide as a reference that is linked to, but not a formal part of, the revised Forest Plan. This approach to monitoring and evaluation means that Chapter 4 of the revised Forest Plan is strategic in nature, as is the rest of the Plan, while the Monitoring Guide can be updated as frequently as needed to adapt to changes in technology or scientific information. Consequently, monitoring and evaluation have not been removed, but have been reorganized into a strategic component in the Plan, and an adaptive component in the Monitoring Guide separate from the Plan. Public involvement is a part of the monitoring and evaluation process (revised Forest Plan section 4.1.8, p. 123). See also response to SC 21000-1g.
SC 22000-43c	BY INCLUDING A SOILS MONITORING PROGRAM, WHICH IS A NATIONAL FOREST MANAGEMENT ACT REQUIREMENT
	Response: Monitoring of soil conditions is provided for in Chapter 4, Table 4.1-3 in the form of a monitoring question which is responsive to the NFMA requirement noted, and in Table 4.1-7 in terms of a monitoring question related to Forest Plan Goal 3 and associated objectives. The Monitoring Guide will provide a menu of specific monitoring items and associated process details for use in answering the soils monitoring question.
SC 22000-43d	BY INCLUDING INFORMATION ON PRIORITIES, IF BUDGET PROJECTIONS ARE NOT REALIZED
	Response: Prioritization for monitoring and evaluation is discussed in Section 4.1.4 of the Monitoring and Evaluation Chapter of the revised Forest Plan. The Forest Service would like to be able to monitor a wide range of key factors associated with managing all of the Forests' ecological, social, and economic resources, but the reality is that monitoring will always be limited by available funding. Given this reality, the Forest Service is challenged to maximize benefits derived from the monitoring that is funded. The Forest Service assigns a priority ranking to each of the monitoring items. Highest priority will always be given to monitoring items which are clearly specified in law or regulation, which currently are represented by items in Chapter 4, Table 4.1.3 through 4.1.5 in the revised Forest Plan. Other ways of maximizing monitoring funds include continually seeking out the most effective measures for outcomes or outputs that need to be tracked, or by doing monitoring in partnership with other agencies or groups, or by varying the monitoring schedule or intensity for some items.
SC 22000-43e	BY INCLUDING SPECIFIC POPULATION MONITORING METHODS FOR EVERY THREATENED, ENDANGERED, AND SENSITIVE GMNF SPECIES
	Response: See response to SC 22000-43a. The Forest Service approach to monitoring and evaluation is described in Chapter 4 of the revised Forest Plan. This chapter describes how the Plan takes a strategic approach to monitoring, describing the broad topics that will be monitored and the questions that need to be answered. A separate document, the Monitoring Implementation Guide, will consider this information and describe the specific items to be monitored. These items cover the categories described in Chapter 4 of the revised Forest Plan. While the implementation guide is not part of the Plan, it is closely tied to it. It is here that specific monitoring of items, such as monitoring of threatened, endangered, and sensitive species, will be considered. Monitoring will include

	items to meet the questions raised in the monitoring tables in Chapter 4, as well as a range of methods to answer these questions. For example, in some cases, the implementation guide will include protocols to monitor a species' population trend, while in other situations habitat will be monitored instead. These protocols could change over time through management of the land, and as monitoring results and new scientific information are evaluated.
SC 22000-43f	BY INCLUDING INFORMATION ON MANAGEMENT AND PERSONNEL SYSTEMS THAT SUPPORT IMPLEMENTATION OF THE PLAN
	Response: Chapter 4 of the revised Forest Plan explains the framework for monitoring and includes strategic direction (see Tables 4.1.3 through 4.1.7) for tracking progress toward desired conditions and objectives. Accountability is partially addressed by columns in these tables that give a general indication of measurement frequency and reporting frequency. The Monitoring Guide will consist of a menu of monitoring items that can be used to address the strategic monitoring questions in the monitoring chapter tables. Each monitoring item in the Monitoring Guide will further contribute to accountability by clearly presenting the details of exactly what, when, and how that item will be monitored, as well as how often and in what form results will be reported. The Forest Service also plans to enhance accountability by providing purposeful opportunities for the public and other agencies to help plan and execute monitoring and help evaluate monitoring results. As discussed in Chapter 4, what can actually be accomplished in any given year will be limited by available funding and guided by the priorities established in the Monitoring Guide.
SC 22000-43g	BECAUSE THE MANAGEMENT INDICATOR SPECIES SELECTION AND MONITORING PROGRAM IS INADEQUATE
	Response: See responses to PC 32200-1 and PC 32200-5.
SC 22000-43h	BY INCLUDING DETAILS ON RECLUSIVE WILDLIFE HABITAT MONITORING
	Response: See responses to SC 22000-43a, SC 22000-43d, and SC 22000-43e.
SC 22000-43i	BY INCLUDING SPECIFIC VEGETATIVE COMPOSITION MONITORING INFORMATION
	Response: See response to SC 22000-43a, SC 22000-43d, and SC 22000-43e. Monitoring of progress in moving toward vegetative composition goals is provided for in revised Forest Plan Chapter 4, Tables 4.1-6 and 4.1-7, in the form of specific monitoring questions that address this need. The Monitoring Guide will provide a menu of specific monitoring techniques and associated process details for use in tracking progress toward the Forest-wide vegetation and habitat goals. The Guide will spell out how and how often monitoring results will be displayed. Unless replaced with a better technology, GIS map products are likely to be a key tool for displaying and analyzing results.
PC 22000-44:	**The Forest Service should revise the definitions used in the Forest Plan.**
SC 22000-44a	BECAUSE THE TERM 'BIODIVERSITY' IS NOT WELL-DEFINED, AND SHOULD BE DELETED
	Response: The term "biodiversity" has been used in the scientific literature for at least 25 years, is well understood in the ecological sciences, and simply reflects a convenient shorthand for the term "biological diversity" (which is how it is defined in the revised Forest Plan glossary). Biodiversity is described in detail in the FEIS on pages 3-13 through 3-15 in the Ecosystem Management section (section 3.1.4). Biological diversity is used in the National Forest Management Act (NFMA), which requires the Forest Service to "provide for

	diversity of plant and animal communities based on the suitability and capability of the specific land area…" [emphasis added; 16 U.S.C. 1604(g)(3)(B)]. "Diversity" is defined by Webster as "the condition of being different." "Biological" is defined in Webster as "of or relating to biology or to life and living processes." Consequently, the simple definition of biodiversity is the differences among life and living processes. The term has always been considered broad and encompassing, representing different scales of time and space. That does not make the term poorly defined – it means that there is a diversity of life and living processes affected by Forest Service actions, and not all of those life forms and processes are well understood. Creating better understanding of the diversity of life and associated processes through monitoring and adaptive management are key components of the agency's ecosystem management approach.
SC 22000-44b	TO BETTER DEFINE VARIOUS TERMS
	Response: Terms of concern included Research Natural Area, Net Public Benefits, Non-consumptive Use, Community (natural community), and Coarse and Fine Filter Management. These terms are all defined in the glossary of the FEIS (Chapter 7). Commenters did not describe specific concerns with the existing definitions. Sources for these definitions were either Forest Service directives, or the scientific or published literature. The Forest Service believes that the terms are defined using regulatory or accepted scientific basis. Coarse and fine filter management concepts were built into the 2005 NFMA regulations (CFR 219.10).
SC 22000-44c	TO BETTER DEFINE THE TERM 'OLD GROWTH'
	Response: The definition of old growth was based in part on the definitions found in the book "Eastern Old Growth Forests" (Davis 1996) and modified based on conversations with old growth ecologists at the 6th Eastern Old Growth Forest Conference in Moultonborough, New Hampshire, in September 2004. These conversations made it clear that a precise definition of old growth was not ecologically defensible, unless one were to develop a unique definition for each natural community and associated disturbance regime. The generally understood definition of old growth, as noted by Leverett (1996), is not universal, and generally addresses natural communities that develop under more frequent disturbance regimes, such as oak-hickory or oak-pine forests in the Northeast. Leverett (1996) provides a list of 13 old growth characteristics and notes that "The absence of a characteristic [from the list] can be highly confusing to anyone with checklist in hand" (p. 7). Based on all of this information and Forest Service experience with the 1987 Plan definition, it was decided to avoid creating a checklist, and to use a more conceptual approach to the definition. The definition in the revised Forest Plan requires each potential site to be evaluated in the context of prevailing disturbance regime, its history of continuity, and its successional tendencies. The Forest Service believes that this is a more useful and defensible definition, rather than one with abundant exceptions to account for the less common natural communities.
SC 22000-44d	TO BETTER DEFINE THE TERM 'LATE SUCCESSIONAL FOREST'
	Response: The Forest Service agrees that a more robust definition of "late-successional forest" would be beneficial and have made adjustments to the definition in the glossary of the revised Forest Plan (p. 144).
SC 22000-44e	TO BETTER DEFINE THE TERM 'RESTORED ROAD'
	Response: The Forest Service does not use the term "Restored Road", although there is a definition for "Road Maintenance" in the revised Forest

	Plan and FEIS Glossary which defines that term as: "The ongoing upkeep of a road to retain or restore the road to the approved Road Management Objective (FSM 7712.3)." Areas in the revised Forest Plan or FEIS referring to road restoration could mean restoration to natural conditions, to landscape level, or to the approved road management objective through maintenance depending on the context of the statement; therefore it is not defined as a single term.
PC 22000-45:	**The Forest Service should remove all structures and facilities in wilderness areas that are not specifically reserved in enabling legislation.**
PC 22000-46:	**The Forest Service should maintain all structures and facilities in wilderness areas, as is permitted in enabling legislation, and should revise language in the Final EIS to reflect that they are compatible.**
	Response: See response to PC 62000-32.
PC 22000-47:	**The Forest Service should revise the Forest-wide land ownership guideline that states land acquisition should meet the goals of towns and the State of Vermont.**
SC 22000-47a	TO INCLUDE REGIONAL PLANNING COMMISSIONS
	Response: The Forest Service has revised the Forest-wide land ownership guideline as follows: “Consider the goals of towns, regional planning commissions, and the State of Vermont” (revised Forest Plan p. 41).
PC 22000-48:	**The Forest Service should continue to protect the natural communities along the western edge of the GMNF through the Escarpment Management Area.**
	Response: The Forest Service thanks the commenters for their appreciation of the new Green Mountain Escarpment Management Area (see revised Forest Plan p. 82) and agrees that protection of the natural communities along the escarpment through use of the Escarpment Management Area will help to protect and perpetuate their special values. Given that this management area is new, and management actions to maintain and enhance the natural communities within this landscape may be unconventional, the Forest Service believes that an appropriate balance between areas of the escarpment allocated to other management areas and to the Green Mountain Escarpment Management Area has been achieved. Except for Wilderness, management activities allowed within other management zones along the escarpment may also contribute to maintaining the natural communities there, and do not preclude the use of unconventional techniques to enhance these communities.
PC 22000-49:	**The Forest Service should create a model plan focusing on the role of the GMNF in the larger regional landscape of Vermont.**
SC 22000-49a	TO PROTECT, ENHANCE, AND RESTORE VERMONT’S NATIVE BIODIVERSITY
	Response: A commenter was concerned that the Forest Service missed the opportunity to work in partnership with the State of Vermont, the US Fish and Wildlife Service (USFWS), and The Nature Conservancy (TNC) to protect, enhance, and restore Vermont's native biodiversity. This commenter was also concerned that “the vast majority of Vermonters’ were given short shrift.” The Forest Service worked closely with the State of Vermont, the USFWS, and TNC to protect, enhance, and restore Vermont’s native biodiversity in the Forest Plan revision process. The Forest Service partnered with the University of Vermont, the State of Vermont, and TNC to create an ecological unit map of the Forest, based on TNC’s ecological map used for their ecoregional planning work. The groups then worked together using a model called C-Plan to

	identify areas of irreplaceability across the Forest. The most irreplaceable areas were designated as special management areas (the Green Mountain Escarpment and the Alpine/Subalpine Management Areas). TNC and a biologist designated by the state of Vermont, along with the public, reviewed our draft proposals in June of 2004 and were generally supportive. Comments they and others provided were incorporated into the final drafts that were provided for formal public comment. More details regarding how the revised Forest Plan addresses biodiversity at various scales can be found in the Vegetation section (section 3.5), the Wildlife and Wildlife Habitat section (section 3.6), and the Areas of Special Significance section (section 3.11) in the DEIS, as well as references cited therein. In particular, section 3.11 cites Burbank (2004), which is an assessment of special areas for the Forest. This assessment goes into more detail regarding work with TNC, the State of Vermont, and the University of Vermont regarding biodiversity conservation, which is summarized in section 3.11. The Forest Service is required to work closely with USFWS on federally listed species, and that process is ongoing and will continue. Protection, enhancement, and restoration of biodiversity is one of many emphases for which the Green Mountain National Forest is being managed under the revised Forest Plan and several goals reflect this emphasis in the revised Plan. The Forest Service mission is "to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations." The Multiple-Use Sustained-Yield Act of 1960 states: "It is the policy of the Congress that the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes." In order to meet the mission as well as multiple use, some areas are identified for protection and preservation. Other areas are identified for management. Both preservation and management can help to protect, enhance, and restore biodiversity. All management is geared toward providing for future generations' use, enjoyment, and needs, including those which have been expressed by Vermonters during public meetings and in comments during the plan revision process. See also response to SC 10000-3a and SC 21000-1c.
PC 22000-50:	**The Forest Service should modify Forest Composition Objectives to increase aspen-birch community objectives to a minimum of 5 to 10 percent.**
SC 22000-50a	TO ADDRESS HABITAT DEFICIENCIES FROM THE 1987 PLAN
SC 22000-50b	TO ADDRESS THE NEED TO CREATE EARLY SUCCESSIONAL COMPONENTS IN YOUNGER FORESTS
	Response: See response to SC 32600-3b.
PC 22000-51:	**The Forest Service should strengthen Diverse Backcountry MA Standards and Guidelines.**
SC 22000-51a	BY PROHIBITING EVEN-AGED SILVICULTURE
	Response: The primary silviculture system to be used in the Diverse Backcountry MA is even-aged (revised Forest Plan p. 59). Uneven-aged silviculture requires frequent entries to develop at least three age classes within stands. The desired future condition is for activities such as timber harvesting to be evident but scattered over time and space. While the landscape will be predominately natural appearing, evidence of human use may be evident, but will not dominate. These lands are considered suitable for timber production but will be managed with constraints such as longer

	rotations, fewer intermediate harvests, and other modifications to benefit semi-primitive recreation values. See the Vegetation section 3.5 and Timber section 3.13 in the FEIS.
SC 22000-51b	BY MAKING THE TIMBER MANAGEMENT GUIDELINES MORE CONSISTENT WITH THE GOAL OF A NATURAL-APPEARING ENVIRONMENT
	Response: Maintaining recreational and scenic values has been and will continue to be an important element in conducting timber harvesting on the GMNF. A major emphasis is for a predominately natural or natural-appearing environment (revised Forest Plan p. 58). While these areas will be predominately natural appearing, evidence of human use may be evident, but will not dominate. The visual quality objectives for these areas will be semi-primitive motorized. Offsite views from timber management will appear to be natural with only occasional evidence of human change or subordinate to the natural appearing surroundings.
SC 22000-51c	BY LIMITING PERMANENT OPENINGS TO A MAXIMUM OF ONE PERCENT OF THE AREA
SC 22000-51d	BY CREATING TEMPORARY OPENINGS WITHIN A RANGE OF SIZES LESS THAN 20 ACRES, AND MOST LESS THAN 10 ACRES
	Response: Permanent upland openings are an important component of early successional habitat beneficial to many species of wildlife. Permanent openings also contribute to other uses, including but not limited to hunting, berry picking, enjoyment of vistas, and other recreational uses. Most of the upland openings on the GMNF are a remnant legacy of the historical landscape (DEIS p. 3-62). Also see response to SC 22000-5g. The Diverse Backcountry MA guideline states that temporary openings shall be less than 20 acres in size (revised Forest Plan p. 59). Some wildlife prefer larger forest openings, and the 20 acre limit allows a range of sizes to meet a variety of resource objectives. Scenery management has been and will continue to be an important part of managing the GMNF. In many cases during site specific analysis, temporary opening sizes have been less than the maximum in order to meet other resource objectives.
SC 22000-51e	BY INCLUDING A NON-RECREATION SPECIAL USE STANDARD OR GUIDELINE ALLOWING DEVELOPMENT OF WIND TOWER FACILITIES
	Response: Development of windtower facilities is prohibited in the Diverse Backcountry Management Area to retain the remote and natural-appearing environment emphasis of the management area (revised Forest Plan p. 59). Further, construction of new roads is generally prohibited in the Diverse Backcountry MA. The commenter is also concerned about the perceived incongruency between windtower prohibition in Diverse Backcountry and the lack of prohibition in a relatively restrictive area such as Remote Wildlife Habitat. The Remote Wildlife Habitat Management Area is designed to minimize wildlife interaction with humans (revised Forest Plan p. 60). Facility development such as windtowers would not present as significant a disturbance in this management area, and is therefore not prohibited. Any proposed windtower development would require a site-specific environmental analysis to determine impacts on the Remote Wildlife Habitat MA values prior to approval. See also response to 22000-27e.
PC 22000-52:	**The Forest Service should maintain the Proposed Plan management**

	direction that combines management areas 2.1, 3.1, and 4.1 into Diverse Forest Use to provide greater management flexibility while addressing visual considerations.
	Response: The Forest Service agrees with the commenter and this language has been retained in the Selected Alternative. See response to PC 22000-28.
PC 22000-53:	**The Forest Service should maintain proposed management direction that replaces Visual Condition Standards with Visual Condition Guidelines and that separates Semi-Primitive Recreation Opportunity Spectrum classes.**
SC 22000-53a	TO IMPROVE HABITAT MANAGEMENT OUTPUTS
	Response: The Forest Service values the visual resource and has a visual management system to protect the public's aesthetic concern for the landscape. Visual Quality Objectives (VQO's) will be integrated with other resource values to design and implement habitat improvements. See revised Forest Plan standards and guidelines for Visuals, section 2.3.13. See also response to PC 31300-4.
PC 22000-54:	**The Forest Service should protect and preserve the Green Mountain Escarpment and the area expanding from the Escarpment into the Moosalamoo Recreation and Education Special Area by prohibiting timber and mineral extraction.**
	Response: Mineral extraction that causes surface disturbance is not allowed in the Green Mountain Escarpment Management Area under the Minerals standard (revised Forest Plan p. 86). Timber harvesting is allowed in this management area, but the desired future condition is to maintain and enhance the rare and uncommon natural communities in this area. One of the tools necessary for doing this is timber harvesting. Many of the natural communities in the escarpment are rare due to lack of fire disturbance, which is thought to be a natural disturbance process in this landscape. Until the Forest Service better understands the role of fire in these ecosystems and builds public support for the use of fire, prescribed burning in the Green Mountain Escarpment MA will be experimental. While the Forest Service builds this support and learns new techniques, timber harvesting can contribute to maintenance of these communities through opening the canopy for oaks and other species that prefer higher levels of light to germinate and grow. In addition, the sale of timber products within the Green Mountain Escarpment MA can provide funding for prescribed burning and other techniques to maintain and enhance these communities. Some areas within the escarpment that have been identified as significant ecological features have been placed within Ecological Special Areas in order to provide less intensive management for their special features. A significant amount of the escarpment landscape is also protected within the Wilderness and Wilderness Study Area MAs in the Selected Alternative, at Bristol Cliffs, Lye Brook, and Glastenbury. The Forest Service believes that the appropriate mix of management approaches has been provided in the Green Mountain Escarpment to protect and conserve this land type association's character.
PC 22000-55:	**The Forest Service should include standards and guidelines in the Final Revised Plan to address road salts washing into water bodies.**
SC 22000-55a	TO REDUCE IMPACTS TO SENSITIVE AQUATIC SPECIES
	Response: As stated in the response for SC 22000-55b, the GMNF does not salt roadways under its jurisdiction. Each town has policies concerning the salting of town roads, as does the Vermont Agency of Transportation for State highways. Also, the Vermont Department of Environmental Conservation and

	Vermont Department of Fish and Wildlife have jurisdiction over pollutants entering water bodies, including road salt, and its impacts on water quality and aquatic species. A discussion with Jim Kellogg, VTDEC (personal communication 1/06) indicated that he was not aware of any aquatic species specifically sensitive to salt (cloride), but in general, cloride at high levels (greater than 250 mg/l) could impact aquatic communities by making them less rich/diverse and aquatic macroinvertebrate populations less abundant. He said water bodies in Vermont's urban areas are most vulnerable, particularly in combination with other pollutants such as sediment and heavy metals, and that high chloride levels are unlikely occurring in many, if any GMNF streams.
SC 22000-55b	TO REDUCE HEALTH IMPACTS TO OLDER HUMAN POPULATIONS
	Response: Most roads on the National Forest are under the jurisdiction of the Forest Service, local towns, or the State of Vermont. The Forest Service does not salt roadways under its jurisdiction. Each town has policies concerning the salting of town roads, as does the State Agency of Transportation for State highways. The Vermont Department of Environmental Conservation has jurisdiction over pollutants entering water bodies, including road salt, and sets standards for potable water.
PC 22000-56:	**The Forest Service should include an objective in the Final Revised Plan to work with towns and government entities to identify local Right-of-Ways within the GMNF.**
SC 22000-56a	TO PROVIDE VERMONTERS WITH OPPORTUNITIES TO DEVELOP RIGHT-OF-WAYS WITHIN LOCAL DISCRETION FOR PUBLICLY VALUED PURPOSES
	Response: This is presently not an objective in the revised Forest Plan since the Forest Service has and will continue to work on road status on a case-by-case basis. Interested individuals and groups may also consult directly with specific townships; town records can provide a wealth of information, especially if a road or trail is under town jurisdiction.
PC 22000-57:	**The Forest Service should add language to the Remote Wildlife Habitat MA to permit trail bridges being retained for access.**
	Response: Existing National Forest System trails will be retained in the Remote Wildlife Habitat MA (revised Forest Plan p. 62). As described in Forest-wide standards and guidelines, National Forest System trails should be maintained to National Quality Standards to adequately and safely accommodate the most demanding or impacting type of use allowed (revised Forest Plan p. 35). This management direction includes retention and maintenance of trail bridges where needed.
PC 22000-58:	**The Forest Service should change the Escarpment MA allocation, or include a provision within the standards and guidelines, to provide management access to the Otter Creek Wildlife Management Area.**
	Response: See response to SC 62000-48b.

Alternatives (23000)

PC 23000-1:	**The Forest Service should develop and evaluate a wider range of alternatives.**
SC 23000-1a	TO INCLUDE AN ALTERNATIVE THAT REPRESENTS MANAGEMENT LIMITATIONS UNDER FLUCTUATING BUDGETS
SC 23000-1b	TO PROTECT ROADLESS AREAS, INTERIOR FORESTS, BIODIVERSITY, OR ECOLOGICAL VALUES BY MINIMIZING HUMAN DISTURBANCE OR CREATING A RESTORATION ALTERNATIVE

SC 23000-1g	TO INCLUDE AN ALTERNATIVE(S) THAT EMPHASIZES UNEVEN-AGED TIMBER MANAGEMENT OVER EVEN-AGED MANAGEMENT
SC 23000-1h	TO INCLUDE AN ALTERNATIVE(S) THAT MINIMIZES CLIMATE CHANGE DEGRADATION OR ACID DEPOSITION, AND ENHANCES CARBON SEQUESTRATION
SC 23000-1i	TO ADDRESS EMERGING TRENDS IN RECREATION AND/OR TO EXPAND BACKCOUNTRY RECREATION OPPORTUNITIES
SC 23000-1j	TO INCLUDE AN ALTERNATIVE(S) THAT MINIMIZES OR ELIMINATES ROADS, ROAD BUILDING, OR MOTORIZED ACCESS
SC 23000-1n	TO INCLUDE AN ALTERNATIVE THAT WOULD ALLOCATE ALL SUITABLE TIMBER LANDS TO THE DIVERSE FOREST USE MANAGEMENT AREA
SC 23000-1o	TO INCLUDE AN ALTERNATIVE WITH A REVISED TIMBER MANAGEMENT PLAN THAT FOCUSES ON EARLY SUCCESSIVE FOREST MANAGEMENT TO INCREASE SONGBIRD AND GAME SPECIES HABITAT
SC 23000-1p	TO INCLUDE AN ALTERNATIVE(S) THAT WOULD IMPROVE SUITABLE HABITAT FOR RECLUSIVE AND ENDANGERED SPECIES
	Response: The National Environmental Policy Act (NEPA) requires the Forest Service to analyze a range of reasonable alternatives. Consistent with NEPA, the range of alternatives is set by the purpose and need identified in the DEIS (Chapter 1 p. 1-4). The range should be sufficient to allow the public and the decision maker to assess the environmental costs and benefits of different approaches for meeting the purpose and need. Forest Service regulations for implementing the National Forest Management Act (NFMA) require the interdisciplinary team to "formulate a broad range of reasonable alternatives according to NEPA procedure…consistent with the resource integration and management requirements of 36 CFR 213.13 through 219.27" (36 CFR 219.12(f)). Those same regulations further specify that "[a]lternatives shall be distributed between the minimum resource potential and the maximum resource potential" (36 CFR 219.12(f) (1)). The requirements of 36 CFR 219.13 through 219.27 address resource integration and protection. Alternatives do not need to address every topic of interest to the public, but must speak to the issues identified in the analysis document. Issues and alternatives for the Forest Plan revision FEIS were developed based on consideration of all input gathered through an extensive public involvement effort (see Appendix A in the FEIS for details of the process); experience gained from implementing the current plan; and knowledge from scientific information and research. The Regional Forester has determined that the range of alternatives analyzed in the FEIS is adequate to meet the purpose and need and to address the identified issues.
SC 23000-1c	TO INCLUDE AN ALTERNATIVE(S) THAT INCREASES WILDERNESS STUDY AREA, NATIONAL RECREATION AREA, AND SPECIAL AREA RECOMMENDATIONS, SUCH AS THOSE PROPOSED BY THE VERMONT WILDERNESS ASSOCIATION
	Response: See response to PC 23000-1. The Vermont Wilderness Association proposal called for an additional 79,200 acres (approximately 20% of the GMNF) as Wilderness, 45,000 acres (approximately 11% of the GMNF) as National Recreation Area, and 15,000 acres (approximately 4% of the GMNF) as National Conservation Area. The Forest Service considered this proposal but eliminated it from detailed study for a number of reasons, which are discussed in section 2.1.6 of the FEIS.

SC 23000-1d	TO INCLUDE AN ALTERNATIVE(S) THAT PROHIBITS SUMMER ORV USE
SC 23000-1k	TO INCLUDE AN ALTERNATIVE(S) THAT WOULD MINIMIZE OR ELIMINATE SNOWMOBILE USE
	Response: See response to PC 23000-1. The level of opportunity for summer ORV or snowmobile use on the Forest was considered within the range of existing alternatives developed for detailed analysis in the DEIS. Management Area allocation that provides the availability for potential future summer ORV and snowmobile trail development opportunities does vary by alternative (FEIS Table 3.10-12). More restrictive Forest-wide standards and guidelines were also considered in response to public comments, including the prohibition of summer ORV use on the Forest. The Forest Service feels, however, that summer ORV and snowmobile use on the GMNF helps provide a diverse range of high quality, sustainable recreation opportunities desired by the public. Total elimination of these uses would not fulfill the purpose and need of the revised Forest Plan to provide the appropriate mix of primitive, dispersed-use opportunities and more developed, higher density opportunities on the Forest (DEIS p. 1-5).
SC 23000-1e	TO INCLUDE ALTERNATIVES WITH A BROADER RANGE OF TIMBER HARVEST LEVELS, ALLOWABLE SALE QUANTITY VALUES, SUITABLE ACRES, AND COMMERCIAL HARVEST OPPORTUNITIES
	Response: See response to PC 23000-1. Alternatives were considered in the FEIS that either greatly increased timber harvesting from existing levels or eliminated commercial timber harvesting altogether on the GMNF. Both of these alternatives were eliminated from detailed study because they did not fulfill the purpose and need for the revised Forest Plan (FEIS section 2.1.6).
SC 23000-1f	BECAUSE THE CUMULATIVE EFFECTS VARIED MINIMALLY AMONG THE DRAFT EIS ALTERNATIVES
	Response: See responses to PC 21000-8 and PC 23000-1. Cumulative effects are provided in each resource section of Chapter 3 of the FEIS, including effects that do vary by alternative. Cumulative effects for all alternatives were discussed together when they did not vary substantially by alternative. This is not considered a flaw in the analysis, but simply discloses the fact that many of the resource cumulative effects discussed do not measurably vary as a result of the management of the GMNF.
SC 23000-1l	TO INCLUDE AN ALTERNATIVE(S) THAT RECOMMENDS WILDERNESS STUDY AREA DESIGNATION FOR ALL ROADLESS AREAS
	Response: See response to PC 23000-1. An alternative was considered in the FEIS that included all inventoried roadless areas to be recommended for wilderness designation, but was eliminated from detailed study for a number of reasons (FEIS section 2.1.6).
SC 23000-1m	TO INCLUDE AN ALTERNATIVE THAT WOULD PROTECT LANDS FORMERLY OWNED BY JOSEPH BATTELL
	Response: See responses to PC 23000-1 and PC 62000-7.
SC 23000-1q	AND DEVELOP ALTERNATIVES TO ADDRESS ACID DEPOSITION EFFECTS IN COMBINATION WITH INTRUSIVE HUMAN USES OF THE FOREST, OR TO MINIMIZE WATER QUALITY OR WILDLIFE HABITAT IMPACTS
	Response: The Forest Service did not consider a separate alternative to minimize the combined impacts of acid deposition and human use of the Forest. The effects of acid deposition do not vary by alternative, and the primary sources of acid deposition are off of the Forest and not under Forest Service control (DEIS, sections 3.2 and 3.4). Developing alternatives to

	address acid deposition was not warranted. An alternative to minimize water quality impacts was not developed. Water quality will be protected under all alternatives through implementation of S&Gs, and compliance with Vermont's Water Quality Standards and State and federal wetland regulations. The Forest Service did incorporate issues related to wildlife and wildlife habitat into the range of alternatives presented in the FEIS. These issues included those raised by the public during scoping and public meetings, as well as those raised by Forest Service staff and other resource managers in the Northeast. Potential effects of alternatives on wildlife and wildlife habitat are presented and analyzed in several sections of the FEIS: 3.6 (Wildlife and Wildlife Habitat), 3.7 (Fisheries), 3.8 (Threatened and Endangered Species), 3.9 (Species of Potential Viability Concern), and Appendix E (Biological Evaluation).
PC 23000-2:	**The Forest Service should disclose additional information and provide further rationale for eliminating alternatives from detailed study.**
	Response: The NEPA implementing regulations specify that the purpose and need statement identifies what "the agency is responding [to] in proposing the alternatives" (40 CFR 1502.13). The Responsible Official is tasked with determining the purpose and need based on scoping. The NEPA requires all Federal Agencies to include in every recommendation alternatives to the proposed action (42 U.S.C. 4332, section 102 (C) (iii)). The NEPA implementing regulations state agencies shall "rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated" (40 CFR 1502.14 (a)). The Forest Service has disclosed this information in the FEIS Section 2.1.6. Forest Service regulations for implementing the National Forest Management Act (NFMA) require the interdisciplinary team to "formulate a broad range of reasonable alternatives according to NEPA procedure…consistent with the resource integration and management requirements of 36 CFR 213.13 through 219.27" (36 CFR 219.12(f)). Those same regulations further specify that "[a]lternatives shall be distributed between the minimum resource potential and the maximum resource potential" (36 CFR 219.12(f) (1)). The requirements of 36 CFR 219.13 through 219.27 address resource integration and protection.
PC 23000-3:	**The Forest Service should select Alternative A.**
SC 23000-3a	TO PROVIDE A BALANCE OF MULTIPLE USES
	Response: The Forest Service analyzed five alternatives with different outcomes and with varying management area allocations, addressing Forest Plan revision issues. Each alternative meets the intent of relevant laws under which the national forests are managed. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. In his decision, the Regional Forester considered the trade-offs among alternatives, and weighed ecological, economic, and social concerns. The Selected Alternative represents what the Forest Service believes to be the best balance of outcomes and services that will maintain sustainable ecosystems, meet the intent of relevant laws, and address the issues and concerns specific to the GMNF. See also the Environmental Consequences section for all resources in FEIS Chapter 3.

PC 23000-4:	**The Forest Service should select Alternative B.**
SC 23000-4a	TO MAXIMIZE OPPORTUNITIES FOR CREATING EARLY SUCCESSIONAL AND OTHER HABITATS
SC 23000-4b	TO MAXIMIZE TIMBER HARVESTING OPPORTUNITIES AND THE RESULTING ECONOMIC CONTRIBUTIONS
SC 23000-4c	TO INCREASE AREAS FOR REMOTE, NON-MOTORIZED RECREATION
SC 23000-4d	TO PROVIDE A BALANCE OF MULTIPLE USES
SC 23000-4e	TO MAXIMIZE PUBLIC ACCESS
	Response: The Forest Service analyzed five alternatives with different outcomes and with varying management area allocations, addressing Forest Plan revision issues. Each alternative meets the intent of relevant laws under which the national forests are managed. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. In his decision, the Regional Forester considered the trade-offs among alternatives, and weighed ecological, economic, and social concerns. The Selected Alternative represents what the Forest Service believes to be the best balance of outcomes and services that will maintain sustainable ecosystems, meet the intent of relevant laws, and address the issues and concerns specific to the GMNF. See also the Environmental Consequences section for all resources in FEIS Chapter 3.
PC 23000-5:	**The Forest Service should select Alternative B with important modifications.**
SC 23000-5a	TO INCLUDE THE GREEN MOUNTAIN ESCARPMENT MANAGEMENT AREA DESIGNATION AS PROPOSED IN ALTERNATIVE E
SC 23000-5b	TO MODIFY THE WILDERNESS MANAGEMENT AREA DESIGNATIONS TO MATCH ALTERNATIVE E
SC 23000-5c	TO REMOVE ALL WILDERNESS STUDY AREA DESIGNATIONS
	Response: The Forest Service analyzed five alternatives with different outcomes and with varying management area allocations, addressing Forest Plan revision issues. Each alternative meets the intent of relevant laws under which the national forests are managed. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. In his decision, the Regional Forester considered the trade-offs among alternatives, and weighed ecological, economic, and social concerns. The Selected Alternative represents what the Forest Service believes to be the best balance of outcomes and services that will maintain sustainable ecosystems, meet the intent of relevant laws, and address the issues and concerns specific to the GMNF. See also the Environmental Consequences section for all resources in FEIS Chapter 3.
PC 23000-6:	**The Forest Service should select Alternative C.**
SC 23000-6a	TO PROVIDE A BALANCE OF MULTIPLE USES
SC 23000-6b	TO LIMIT TIMBER HARVESTING OPPORTUNITIES AND THE RESULTING IMPACTS TO NATURAL RESOURCES
SC 23000-6c	TO LIMIT MOTORIZED RECREATION USE
SC 23000-6d	TO PROVIDE RECREATIONAL OPPORTUNITIES IN BALANCE WITH NATURAL RESOURCE PROTECTION OR RESTORATION
SC 23000-6e	TO PROVIDE INCREASED TOURISM OPPORTUNITIES AND THE RESULTING ECONOMIC CONTRIBUTIONS
SC 23000-6f	TO DESIGNATE THE MOOSALAMOO RECREATION AND EDUCATION AREA, WILDERNESS STUDY AREAS, AND SPECIAL AREAS
	Response: The Forest Service analyzed five alternatives with different

	outcomes and with varying management area allocations, addressing Forest Plan revision issues. Each alternative meets the intent of relevant laws under which the national forests are managed. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. In his decision, the Regional Forester considered the trade-offs among alternatives, and weighed ecological, economic, and social concerns. The Selected Alternative represents what the Forest Service believes to be the best balance of outcomes and services that will maintain sustainable ecosystems, meet the intent of relevant laws, and address the issues and concerns specific to the GMNF. See also the Environmental Consequences section for all resources in FEIS Chapter 3.
PC 23000-7:	**The Forest Service should not select Alternative C.**
SC 23000-7a	BECAUSE OF POTENTIAL IMPACTS TO ANIMAL HABITAT FROM MOTORIZED VEHICLES
	Response: The Forest Service analyzed five alternatives with different outcomes and with varying management area allocations, addressing Forest Plan revision issues. Each alternative meets the intent of relevant laws under which the national forests are managed. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. In his decision, the Regional Forester considered the trade-offs among alternatives, and weighed ecological, economic, and social concerns. The Selected Alternative represents what the Forest Service believes to be the best balance of outcomes and services that will maintain sustainable ecosystems, meet the intent of relevant laws, and address the issues and concerns specific to the GMNF. See also the Environmental Consequences section for all resources in FEIS Chapter 3.
PC 23000-8:	**The Forest Service should select Alternative D.**
SC 23000-8a	TO MINIMIZE HUMAN DISTURBANCE AND RESULTING IMPACTS, SUCH AS THE SPREAD OF INVASIVE SPECIES
SC 23000-8b	TO PROTECT ROADLESS AREAS, REMOTE HABITATS, BIODIVERSITY, OR ECOLOGICAL VALUES
SC 23000-8c	TO MAXIMIZE POTENTIAL WILDERNESS DESIGNATIONS
SC 23000-8d	TO PROVIDE RECREATIONAL OPPORTUNITIES IN BALANCE WITH NATURAL RESOURCE AND REMOTE FOREST HABITAT PROTECTION OR RESTORATION
SC 23000-8e	TO PROVIDE A BALANCE OF MULTIPLE USES
SC 23000-8f	TO LIMIT MOTORIZED VEHICLE USE AND OPPORTUNITIES FOR NEW ROADS
SC 23000-8g	TO LIMIT TIMBER HARVESTING
SC 23000-8h	TO MAXIMIZE ECONOMIC CONTRIBUTIONS FROM NON-MARKET VALUES
SC 23000-8i	TO MAXIMIZE PROTECTION OF THE GREEN MOUNTAIN ESCARPMENT
SC 23000-8j	TO LIMIT EXTRACTION ACTIVITIES AND NON-RECREATION SPECIAL USES, SUCH AS COMMUNICATION OR WIND POWER FACILITIES
SC 23000-8k	TO INCREASE PRIMITIVE AND SEMI-PRIMITIVE NON-MOTORIZED RECREATION OPPORTUNITY SPECTRUM ALLOCATIONS
	Response: The Forest Service analyzed five alternatives with different outcomes and with varying management area allocations, addressing Forest Plan revision issues. Each alternative meets the intent of relevant laws under which the national forests are managed. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. In his decision, the Regional Forester considered

	the trade-offs among alternatives, and weighed ecological, economic, and social concerns. The Selected Alternative represents what the Forest Service believes to be the best balance of outcomes and services that will maintain sustainable ecosystems, meet the intent of relevant laws, and address the issues and concerns specific to the GMNF. See also the Environmental Consequences section for all resources in FEIS Chapter 3.
PC 23000-9:	**The Forest Service should select Alternative D with important modifications.**
SC 23000-9a	TO INCLUDE THE MOOSALAMOO RECREATION AND EDUCATION AREA AS PROPOSED IN ALTERNATIVES C OR E, OR AS A NATIONAL RECREATION AREA
SC 23000-9b	TO INCREASE WILDERNESS STUDY AREA RECOMMENDATIONS
SC 23000-9c	TO PROHIBIT NEW ROAD CONSTRUCTION
SC 23000-9d	TO PROHIBIT TIMBER HARVESTING OR TO RESTRICT OR ALTER TIMBER HARVEST LEVELS OR METHODS, SUCH AS STRESSING UNEVEN-AGED FOREST MANAGEMENT OVER EVEN-AGED
SC 23000-9e	TO PROHIBIT SUMMER ORV USE
SC 23000-9f	TO REDUCE ACREAGE DESIGNATED AS DIVERSE FOREST USE
SC 23000-9g	TO INCLUDE THE SUNDERLAND AND STRATTON CANDIDATE RESEARCH NATURAL AREAS
SC 23000-9h	TO MAXIMIZE WILD, MATURE, OR INTERIOR FOREST AREAS FOR RECREATION, SOLITUDE, AND WILDLIFE HABITAT
SC 23000-9i	TO DESIGNATE GROUT POND AS A SPECIAL MANAGEMENT AREA AND PLACE RESTRICTIONS ON ACTIVITIES PERMITTED THERE
SC 23000-9j	TO PROVIDE PROTECTION ON FEDERAL LANDS ADJACENT TO SOMERSET RESERVOIR
	Response: The Forest Service analyzed five alternatives with different outcomes and with varying management area allocations, addressing Forest Plan revision issues. Each alternative meets the intent of relevant laws under which the national forests are managed. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. In his decision, the Regional Forester considered the trade-offs among alternatives, and weighed ecological, economic, and social concerns. The Selected Alternative represents what the Forest Service believes to be the best balance of outcomes and services that will maintain sustainable ecosystems, meet the intent of relevant laws, and address the issues and concerns specific to the GMNF. See also the Environmental Consequences section for all resources in FEIS Chapter 3.
PC 23000-10:	**The Forest Service should select Alternative E.**
SC 23000-10a	TO MAXIMIZE RECREATIONAL OPPORTUNITIES AND ACCESS
SC 23000-10b	TO PROVIDE A BALANCE OF MULTIPLE USES WHILE PROTECTING NATURAL RESOURCES, REMOTE ROADLESS AREAS, AND ECOLOGICAL VALUES
SC 23000-10c	TO PROVIDE TOURISM AND EMPLOYMENT OPPORTUNITIES AND THE RESULTING ECONOMIC CONTRIBUTIONS
SC 23000-10d	TO MAXIMIZE ROADED NATURAL AND SEMI-PRIMITIVE MOTORIZED RECREATION OPPORTUNITY SPECTRUM CLASSIFICATIONS
SC 23000-10e	TO LIMIT WILDERNESS STUDY AREA DESIGNATIONS
SC 23000-10f	TO PROVIDE A BALANCE OF MANAGEMENT AREA DESIGNATIONS
SC 23000-10g	TO PROVIDE ECOLOGICAL PROTECTION THROUGH SPECIAL AREA AND OTHER MANAGEMENT AREA DESIGNATIONS, SUCH AS GREEN

	MOUNTAIN ESCARPMENT, REMOTE BACKCOUNTRY, OR REMOTE WILDLIFE HABITAT
	Response: The Forest Service analyzed five alternatives with different outcomes and with varying management area allocations, addressing Forest Plan revision issues. Each alternative meets the intent of relevant laws under which the national forests are managed. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. In his decision, the Regional Forester considered the trade-offs among alternatives, and weighed ecological, economic, and social concerns. The Selected Alternative represents what the Forest Service believes to be the best balance of outcomes and services that will maintain sustainable ecosystems, meet the intent of relevant laws, and address the issues and concerns specific to the GMNF. See also the Environmental Consequences section for all resources in FEIS Chapter 3.
PC 23000-11:	**The Forest Service should not select Alternative E.**
SC 23000-11a	BECAUSE IT FAVORS CONSUMPTIVE USES
SC 23000-11b	BECAUSE IT OPENS THE FOREST TO UNCONTROLLED MOUNTAIN BIKE USE
SC 23000-11c	BECAUSE OF THE TIMBER HARVEST METHODS PROPOSED UNDER MANAGEMENT AREA ALLOCATIONS
	Response: The Forest Service analyzed five alternatives with different outcomes and with varying management area allocations, addressing Forest Plan revision issues. Each alternative meets the intent of relevant laws under which the national forests are managed. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. In his decision, the Regional Forester considered the trade-offs among alternatives, and weighed ecological, economic, and social concerns. The Selected Alternative represents what the Forest Service believes to be the best balance of outcomes and services that will maintain sustainable ecosystems, meet the intent of relevant laws, and address the issues and concerns specific to the GMNF. See also the Environmental Consequences section for all resources in FEIS Chapter 3.
PC 23000-12:	**The Forest Service should select Alternative E with important modifications.**
SC 23000-12a	TO LIMIT OR PROHIBIT MOTORIZED RECREATIONAL VEHICLE USE
SC 23000-12b	TO INCREASE WILDERNESS STUDY AREA RECOMMENDATIONS AND DESIGNATIONS OF MANAGEMENT AREAS THAT UTILIZE MINIMAL HUMAN INTERVENTION
SC 23000-12c	TO DECREASE WILDERNESS STUDY AREA DESIGNATIONS
SC 23000-12d	TO DESIGNATE THE STRATTON POND AREA AS A WILDERNESS STUDY AREA
SC 23000-12e	TO DESIGNATE THE SOMERSET RESERVOIR AREA AS REMOTE BACKCOUNTRY
SC 23000-12f	TO PROHIBIT TIMBER HARVESTING IN THE GROUT POND RECREATION AREA
SC 23000-12g	TO INCREASE PUBLIC ACCESS
SC 23000-12h	TO INCLUDE THE SUNDERLAND CANDIDATE RESEARCH NATURAL AREA
SC 23000-12i	TO PRESERVE GLASTENBURY MOUNTAIN AND OTHER ROADLESS AREAS WITHOUT DESIGNATING THEM AS WILDERNESS STUDY AREAS
SC 23000-12j	TO INCREASE TIMBER HARVESTING OPPORTUNITIES

	Response: The Forest Service analyzed five alternatives with different outcomes and with varying management area allocations, addressing Forest Plan revision issues. Each alternative meets the intent of relevant laws under which the national forests are managed. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. In his decision, the Regional Forester considered the trade-offs among alternatives, and weighed ecological, economic, and social concerns. The Selected Alternative represents what the Forest Service believes to be the best balance of outcomes and services that will maintain sustainable ecosystems, meet the intent of relevant laws, and address the issues and concerns specific to the GMNF. See also the Environmental Consequences section for all resources in FEIS Chapter 3.

Natural Resources Management (30000)

PC 30000-1:	**The Forest Service should protect, preserve, and restore ecosystems, forest health, and the GMNF.**
SC 30000-1a	BECAUSE ECOSYSTEMS ARE IMPORTANT TO THE FOOD CHAIN, FOOD WEB AND THE WAY OF LIFE
SC 30000-1b	BECAUSE IT IS WHAT THE CITIZENS OF VERMONT AND NEW ENGLAND WANT
SC 30000-1c	WHILE MEETING COMMERCIAL NEEDS AND PROVIDING EMPLOYMENT OPPORTUNITIES IN LOCAL COMMUNITIES
SC 30000-1d	BY NOT GIVING HIGH PRIORITY TO LOGGING AND MOTORIZED VEHICLES
SC 30000-1h	BY PROHIBITING LOGGING
SC 30000-1i	BY PROHIBITING MINERAL EXTRACTION
SC 30000-1j	BECAUSE OPEN SPACE IS DWINDLING IN THE EAST
	Response: Protection, preservation, and restoration of ecosystems and forest health are three of the many emphases for which the Green Mountain National Forest is being managed under the revised Forest Plan. The Forest Service mission is “to sustain the health, diversity, and productivity of the nation’s forests and grasslands to meet the needs of present and future generations.” The Multiple Use Sustained Yield Act of 1960 states: “It is the policy of the Congress that the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes.” In order to meet the mission as well as multiple-use, some areas are identified for protection and preservation. Other areas are identified for active management for purposes such as ecosystem restoration, production of goods, and maintaining or improving productivity and forest health. All management is intended to provide for future generations’ use, enjoyment, and needs, including those expressed by Vermonters and the New England public during meetings and in comments during the plan revision process. The Forest Service believes that the Forest Plan provides a balance between protection and preservation and management for biological diversity, extractive uses like timber harvest and mineral extraction, and motorized and non-motorized recreation. The role of the Green Mountain National Forest, as described in Section 2.1 of the revised Forest Plan, further defines this balance, with emphasis on clean water, productive soils, backcountry trail-based activities, Wilderness, enhancing wildlife and plant habitats, high-quality high-

	value forest products, fostering vibrant local communities and economies, ecological and science-based forest stewardship, and education. The revised Forest Plan has greatly increased allocations to management areas specifically designed for protection, preservation, and restoration, including Ecological Special Areas, Remote Backcountry Forest, and Wilderness Study Areas (see also Table 3.11-7 of FEIS). Areas where natural processes will dominate and where extractive or disruptive uses are limited or prohibited constitute the ecological reference area network (see section 3.11 of FEIS), and represent 44 percent of the Forest.
SC 30000-1e	BY PROHIBITING CLEARCUTTING
	Response: Clearcutting is a tool for management under very specific circumstances, and Forest-wide standards and guidelines identify these circumstances (revised Forest Plan section 2.3.4). The use of the clearcutting method is quite minimal on the Forest currently and will continue to be so under the revised Forest Plan (FEIS Table 3.13-8). The effects of this type of harvesting on ecosystems were disclosed in Chapter 3 of the FEIS.
SC 30000-1f	BY ALLOWING NATIVE INSECT AND FUNGI OUTBREAKS
	Response: The revised Forest Plan does not specifically require control of native insect and disease outbreaks. The Forest Service agrees with the commenter who indicated that these native organisms are a natural part of ecosystems in the region and play a role in natural disturbance processes which help to create diversity in forest structure. Occasionally, native pests can cause catastrophic disturbance such as mortality of whole stands of trees, which may be undesirable from a forest health or watershed protection standpoint. While control of native insect and disease outbreaks is likely to occur in areas where high-quality timber products and developed recreation are emphasized, control in other areas is prohibited or restricted to certain circumstances, such as protection of adjacent resources. As described in their Desired Future Conditions in the revised Forest Plan, management areas where control of native insects and disease is limited or prohibited include: Research Natural Areas (p. 90), Ecological Special Areas (p. 94), Remote Backcountry Forest (p. 54), Green Mountain Escarpment (p. 81), Wilderness (p. 49), Wilderness Study Areas (p. 110), Alpine/Subalpine Special Area (p. 82), and Eligible Wild, Scenic, and Recreational Rivers (pp. 105-106).
SC 30000-1g	BY PROHIBITING NEW ROAD CONSTRUCTION
	Response: The current transportation policy and rules for national forests (36 CFR 212) require each Forest to maintain the minimum road transportation system necessary to provide access to the Forest for its management, and for recreation and rural access, and to use a science-based roads analysis process to determine the minimum system. The policy also requires Forests to decommission unneeded roads, to coordinate road management with adjacent public road agencies, and to maintain a sustainable flow of goods and services while not compromising the health of the land and water. The Road Management section 3.20 of Chapter 3 of the FEIS describes the transportation analyses that have taken place and notes that changes in the road system on the GMNF are likely to be minimal because the current system is adequate to meet needs for access.
PC 30000-2:	**The Forest Service should prohibit logging and recreational vehicle use at Somerset Reservoir, the Deerfield River, and Grout Pond.**
SC 30000-2a	TO PREVENT NOISE POLLUTION
SC 30000-2b	TO PREVENT AIR POLLUTION
SC 30000-2c	TO PREVENT ANIMAL HABITAT ALTERATION

SC 30000-2d	TO PROVIDE QUIET PLACES TO RETREAT
	Response: Logging is prohibited at Grout Pond, although vegetation management may occur to maintain or protect the values associated with the special area, including recreational values associated with the camping area. The Forest Service has enlarged the Ecological Special Area surrounding Grout Pond to ensure that its ecological values are protected. Standards and guidelines for the Ecological Special Area management area have been adjusted in the revised Forest Plan to reflect the recreational values associated with Grout Pond and several other Ecological Special Areas (revised Forest Plan p. 96). The area around Grout Pond, Somerset Reservoir and the Deerfield River presently contain roads and snowmobile trails. The Somerset reservoir, which is not controlled by the Forest Service, allows for the use motor boats. Non-federal lands in the area are governed by a Federal Energy Regulatory Commission license which allows for motorized recreation, timber management and wildlife enhancements. The management area allocations for NFS lands in this area were made to be consistent with surrounding uses and desired future conditions for the area. In the Somerset Reservoir Area, the Forest Service made an adjustment in land allocation to NFS lands and the proclamation boundary mapping in the northeastern portion of the area (see revised Forest Plan Appendix F). This adjustment changed the allocation from Diverse Forest Use to Remote Wildlife Habitat, in recognition of the remote character of the landscape in this area, and in order to connect the important wildlife corridor east of Somerset Reservoir to the Stratton Mountain area to the north. With this management area change, most of the east side of Somerset Reservoir will be in allocations that do not allow new motorized recreation vehicle trails, although timber harvesting would be allowed, on long rotations, for wildlife habitat management. See also response to PC 62000-47.
PC 30000-3:	**The Forest Service should provide, to the greatest extent possible, lands managed for traditional uses such as hunting, fishing, timber harvesting, and snowmobiling.**
SC 30000-3a	BECAUSE THERE IS A DECLINE IN PRIVATE LAND AVAILABLE FOR THESE USES
	Response: See response to PC 30000-1

Physical Elements Management (31000)

PC 31000-1:	**The Forest Service should provide further analysis on the effects of acid deposition in the Final EIS and Final Revised Plan.**
	Response: The Forest Service has provided further analysis in the FEIS in two ways. First, the Forest Service produced a paper titled “Acid Deposition and its potential effects on soil productivity and timber management in the Green Mountain National Forest” (Burt et al. 2005). This paper was incorporated by reference into the FEIS. The paper is a review of the best available scientific literature regarding the effects of acid deposition on soil quality and productivity, tree and forest decline, and the cumulative effects of acid deposition and tree harvesting. Implications for management of the GMNF are also included. The paper was completed in consultation with researchers at the Forest Service’s Northeastern Forest Experiment Station.

	Secondly, as a result of the paper, additional information has been added in the FEIS, but the overall effects analyses for the soil, water, fisheries, vegetation, and timber resources did not change. Key information added in the FEIS Chapter 3.2: • Though there is little data specifically from the GMNF, it is reasonable to assume that acid deposition has changed soils on the GMNF. As a result of acid deposition some soils are likely to be more acidic, subject to greater leaching (loss) of soil nutrients such as calcium and magnesium, and have elevated levels of potentially toxic aluminum and manganese. These changes have the potential to trigger other changes in the ecosystem, including changes in soil and water quality. Many years of monitoring will be needed before the Forest Service can accurately characterize the exact magnitude of soil effects. As noted in Burt et al. (2005), monitoring programs are currently underway and the Forest Service is seeking funding for a long-term monitoring project on the GMNF. The effects of acid deposition on water resource effects are better understood. This information is documented in the FEIS (Section 3.1.1) and the paper titled, "Water Resource Assessment – Green Mountain National Forest Plan Revision" (Donna 2004; see Item C). • Harvesting on the GMNF is conducted within guidance from the research community designed to minimize nutrient losses associated with harvesting. This guidance is listed in Burt et al. 2005 (in Appendix B), and as stated in the FEIS, it calls for minimal use of clear cutting and bole-only logging, using relatively long rotations, following S&Gs, and avoidance of harvesting on high elevation and/or inherently nutrient poor soils. • Based on the best available scientific information, the effects of harvesting (as conducted on the GMNF) on soil nutrient levels and overall soil productivity are minor. This is true regardless of the magnitude of effects due to acid deposition. These FEIS statements are supported by scientific information available in Burt et al. 2005, pp. 24-28. For example, an important study supporting this conclusion was conducted at HBEF by Johnson et al. (1997). This study was based largely on actual soil and water measurements in the field. Johnson found that despite large exports of nutrients from the forest ecosystem in harvested biomass, and post harvest stream water losses, whole tree harvesting had little impact on the pools of the exchangeable nutrient cations – calcium, magnesium, and potassium. Johnson concluded that because the soil is the principle source of these nutrients, it appears that even whole tree clear-cutting of this northern hardwood forest did not compromise available soil nutrient reserves. Steve Fay, Soil Scientist on the White Mountain National Forest in New Hampshire, spoke with Johnson in 2005 to learn about the results of more recent sampling in these same harvested areas. Johnson reported to Fay that recent sampling showed there was no change in exchangeable soil calcium over a 15 year period based on repeat measurements at 60 soil pits throughout the watershed. Calcium is the nutrient of greatest concern in New England, in terms of sustaining forest soil productivity. Long term studies as conducted by Johnson are uncommon, but they provide the best available information as to the expected impacts of harvesting on the GMNF. • Conclusive evidence in New England that soil productivity has been affected by acid deposition is lacking (Burt et al. 2005), except possibly in

	high elevation spruce-fir stands (National Science and Technology Council 1998). No timber harvest is done on the GMNF in high elevation spruce-fir stands. Please note that the terms soil quality and soil productivity have differing definitions, as shown in the FEIS glossary. • Under the Forest Plan, as new scientific information on the effects of acid deposition or changes in the land condition becomes available, land management practices can be adapted accordingly.
SC 31000-1a	BECAUSE THE LAND USE HISTORY, SOILS, AND GEOLOGY OF THE GMNF HAVE MADE THE GMNF SENSITIVE TO ACID DEPOSITION
	Response: The Forest Service agrees these factors make much of the GMNF sensitive to the impacts of acid deposition. As stated in the DEIS (p. 3-27), approximately two thirds of the GMNF is mapped as having moderate to high sensitivity to sulfur and nitrogen deposition, based on a report titled, "Assessment of Forest Sensitivity to Nitrogen and Sulfur Deposition in New England and Eastern Canada" (NEG/ECP 2003). When using the NEG/ECP report, it is important to recognize the Deposition Index maps do not depict areas of current forest decline. The maps reflect "the capacity of a forest ecosystem to tolerate additional acidic deposition" (NEG/ECP 2003, p. 10). The report goes on to state, "… the deposition index …provides an indication of the time to the onset of problems. Where the index is strongly negative, health problems and growth declines should be evident now or within decades. Where the index is only slightly negative, problems may take 100 to several hundred years to develop." The report continues, "[Thus,] we can generally assume that where the critical load is exceeded today (negative deposition index)…the buffering capacity of the exchange pools at such sites has already been somewhat diminished" (NEG/ECP 2003, p. 12). While areas mapped with a negative deposition index are likely to have undergone some level of buffering capacity reduction, forest decline problems (such as growth declines) may not have occurred. Thus, there is a lag time between when the buffering capacity begins to be reduced and actual forest decline problems are detected. This lag time can last decades to several hundred years.
SC 31000-1b	BECAUSE LARGE AREAS OF THE GMNF HAVE LIKELY UNDERGONE SUBSTANTIAL CHANGES DUE TO ACID DEPOSITION
	Response: The Forest Service agrees that the soil and aquatic resources in large areas of the GMNF have undergone change due to acid deposition. The magnitude of change to the soils is not well documented across the Forest; it is expected to be variable due to differences in factors such as geology, soils, and deposition rates. The Forest Service anticipates there have been changes in important soil characteristics such as acidity, the levels of calcium and magnesium, and soil biotic communities (Burt et al. 2005; FEIS, Sections 3.1.1 and 3.1.2). Lack of local data does not diminish the importance of these effects. Change to aquatic resources, such as changes to water quality, fish and macroinvertebrate communities, are better documented (see Donna 2004, Item C; DEIS section 3.3.1).
SC 31000-1c	BECAUSE SURFACE WATERS ON THE GMNF ARE ALREADY LIKELY DEGRADED DUE TO ACID DEPOSITION
	Response: The Forest Service recognized in the DEIS, and in information incorporated by reference, that water resources have been affected by acid deposition (DEIS p. 3-35; Water Resource Assessment – GMNF Plan Revision, Donna 2004, pp. C-19-26). The magnitude of impacts to water resources is

	variable due to factors such as deposition rates and bedrock mineralogy. The cumulative effects of acid deposition and forest management activities on surface waters is similar to that described for soils (FEIS section 3.2.2 and 3.3.2, Cumulative Effects). In general, forest management activities have minor effects on surface waters due to implementation of Forest Service Manual direction, Forest-wide standards and guidelines, and project-specific mitigation measures. Acid deposition is a regional problem over which the Forest Service has no direct control. The Forest Service is specifically concerned about mercury deposition, a component of acid deposition, and a regional problem of growing concern (Stratton 2005). Beyond the control of erosion and sedimentation, no other land management measures have been identified to mitigate mercury deposition at the stand or site level.
SC 31000-1d	BECAUSE TIMBER HARVESTING FURTHER DEGRADES SOILS AND STREAMS SENSITIVE TO ACID DEPOSITION
	Response: The effects of timber harvesting on the soil and water resources are discussed in the FEIS, sections 3.2 and 3.3. The cumulative effects of harvesting, in combination with acid deposition, are also discussed in the FEIS (section 3.2.2 and 3.3.2) and in a paper titled, "Acid deposition and its potential effects on soil productivity and timber management in the Green Mountain National Forest, Vermont" (Burt et al. 2005; see pp. 24-28, incorporated by reference into the FEIS). Also see response to SC 31000-1c and SC 23000-1q.
SC 31000-1e	IN EACH ALTERNATIVE
	Response: See response to PC 31000-1. The FEIS discloses the potential impacts of acid deposition for each alternative.
SC 31000-1f	BECAUSE DATA AND INFORMATION INDICATE THAT VAST AREAS OF THE GMNF ARE CRITICALLY ACIDIFIED WITH RESULTING DECLINES IN FOREST HEALTH, IMPACTS ON AQUATIC SYSTEMS, AND EFFECTS ON WATER QUALITY
	Response: See responses to PC 31000-1, SC 31000-1b, SC 31000-1c.
SC 31000-1g	BY INCLUDING INFORMATION FROM STUDIES DONE IN VERMONT IN THE 1980s AND 1990s
	Response: Scientifically sound studies produced during this period, particularly in Vermont and New England, provided a basis for more studies from the late 1990s to the present day. It is these more recent studies that form the basis for the current understanding of acid deposition effects, as documented in a paper titled, "Acid deposition and its potential effects on soil productivity and timber management in the Green Mountain National Forest, Vermont" (Burt et al. 2005; incorporated by reference into the FEIS). Understanding of this these effects will continue to evolve as the Forest Service utilizes the best available scientific information.
SC 31000-1h	TO MINIMIZE THE IMPACTS OF ACID DEPOSITION ON WATER QUALITY AND WILDLIFE HABITAT
	Response: For the most part, the impacts of acid deposition on water quality and wildlife habitat are not under the direct control of the GMNF (FEIS Air section 3.4). As stated in the FEIS: "The quality of the air that passes over the Forest is largely determined by where the air originates. Outside influences have the greatest affect on GMNF resources, and are cumulative in nature. The emissions produced from GMNF management actions will be negligible compared to emissions generated off-Forest lands. Future levels of these pollutants depend on regulations and national policy." The GMNF will continue

	to carry out its obligations under the Clean Air Amendments (see FEIS Air section 3.4, and Laws, Regulations, and Policies section 3.1.5), thus contributing to the protection of GMNF resources and improvement of regional air quality.
SC 31000-1i	BECAUSE TWO-THIRDS OF THE FOREST IS MAPPED AS HAVING HIGH SENSITIVITY TO ACID DEPOSITION
	Response: The maps of forest sensitivity to sulfur and nitrogen deposition (NEG/ECP 2003) were considered in the DEIS (pp. 3-27 and 3-30-31) and in a paper titled, "Acid deposition and its potential effects on soil productivity and timber management in the Green Mountain National Forest, Vermont" (Burt et al. 2005; incorporated by reference into the FEIS). Also see response to comment SC 31000-1a.
SC 31000-1j	ON TIMBER SUITABILITY
	Response: Good evidence is lacking at middle to lower elevations (approximating the lands suited to timber harvest) showing forest decline, losses in site (soil) productivity, decreased biomass accumulation or tree regeneration, or long-term species shifts attributable to acid deposition (Burt et al. 2005, pp.19-28; incorporated by reference into the FEIS). For this reason, the acres of land suited to timber production based on acid deposition effects were not adjusted. Also see responses to PC 31000-1 and SC 31000-1a.
SC 31000-1k	BECAUSE THE CONCLUSION THAT THERE WOULD BE NO CUMULATIVE NEGATIVE EFFECTS ON SOILS FROM THE COMBINATION OF ACID DEPOSITION AND TIMBER HARVESTING IS SHAKY AT BEST
	Response: The FEIS cumulative effects section for soil (section 3.2) has changed, and it now addresses the cumulative effects on soil quality and soil productivity. The effects analyses consider both acid deposition and harvesting. Addressing soil quality, the FEIS says that the Forest Service expects that soil quality on the GMNF has, is, and will continue to be affected by acid deposition. Therefore: • Since the effects of Forest Service management practices (including harvesting) on soil quality would be minor under any alternative of the new Plan (see FEIS, Section 3.1.2), and • Since acid deposition is negatively affecting soil quality in important ways that vary across the landscape, • The cumulative effects on soil quality of Forest Service management practices plus acid deposition are approximately equal to the effect of acid deposition alone. Addressing soil productivity, the FEIS states: • Nutrient depletion from acid deposition is not of sufficient magnitude to decrease soil productivity and cause tree decline, on middle to lower elevations on the GMNF (see FEIS, Section 3.1.2, Indicator 3; and Burt et al. 2005, Appendix A; see response to PC 31000-1). The Forest Service acknowledges in the FEIS it is likely acid deposition is affecting soil quality, just not soil productivity. • As stated previously in this section, the effects of harvesting (biomass removal) on soil productivity are minor (see response to PC 31000-1). • Thus, the cumulative effects of acid deposition and harvesting on soil productivity are minor. A commenter believes that the weight of acid deposition evidence suggests that

	it (acid deposition) does negatively impact forest health. The Forest Service agrees, based on current scientific literature and the definition of Forest Health stated in the DEIS Glossary, that acid deposition negatively impacts forest health. For example, acid deposition can be one of several factors responsible for tree or forest decline (see Burt et al. 2005, p.17-18 for more information). It is important to clarify, however, that negative impacts to forest health do not necessarily result in decreases in individual tree growth. Nor does it necessarily equate to measurable losses in soil productivity, a term defined by the Forest Service as: "the inherent capacity of a soil to support the growth of specified plants, plant communities, or a sequence of plant communities. Soil productivity may be expressed in terms of volume or weight/unit area/year, percent plant cover, or other measures of biomass accumulation" (FSM 2509.18-2.05). Note that soil productivity is not the same as soil quality (DEIS p. 3-23). The commenter also states that air quality improvement has plateaued under the current regime. The DEIS states that, "It is likely that with current and proposed rules and regulations, air quality across the country will continue to improve over the next 15 years" (p. 3-45). This is the best projection based on the current scientific literature, existing legislation, and long-term trends in air quality. The commenter further believes that mitigation/protection measures are illusionary where a problem is not fully acknowledged. The Forest Service recognizes that acid deposition impacts are occurring on the GMNF, as they are throughout the northeast. Forest Service understanding of the effects on soils, of acid deposition and harvesting practices (including mitigation measures), are based on the best available science. Management actions are based on advice from Forest Service researchers at the Northeastern Research Station (NRS). These researchers are widely recognized as leaders in the field of acid deposition in New England, and its effects on tree decline and soil productivity. NRS researchers regularly converse with other scientists studying acid deposition effects and implement cooperative research projects to address key questions. Under the revised Forest Plan, the Forest Service will continue to implement all mitigation and soil protection measures identified by researchers at the Northeastern Research Station to minimize negative impacts to soil productivity during timber harvest. These measures are summarized in Appendix B of the acid deposition effects paper (Burt et al. 2005). No other organizations or governmental agencies have developed lists of mitigation/protection measures that have been broadly accepted by the scientific community.
PC 31000-2:	**The Forest Service should analyze the effects of current and projected snowmobile emissions on the GMNF.**
	Response: The potential effects from snowmobile emissions have been clarified in Sections 3.4.1 and 3.4.2 of the FEIS. Snowmobiles, as part of EPA's category "off-highway vehicles," are a local source of pollution in Vermont and therefore on the GMNF. Even though snowmobile emissions contribute to the total air pollution loading in Vermont, the State currently meets all ambient air quality standards across the State. Additionally, the Forest Service is a partner in the Mid-Atlantic/Northeast Visibility Union (MANE-VU), the Regional Planning Organization considering all sources and their emissions which impact visibility at Lye Brook Wilderness. Further, the air quality effects specifically from snowmobile use are not documented to be a local issue (Acheson, 2006) and

	any increase in snowmobile use is expected to be the same under any of the proposed Forest Plan alternatives. Finally, current and projected snowmobile emissions in Vermont are part of the emissions inventory being conducted by MANE-VU. This "state of the science" emissions inventory and modeling predicts snowmobile emissions in Vermont mostly decreasing in 2018 from 2002 levels for carbon monoxide, ammonia, particulates, sulfur dioxide and volatile organic compounds (Schuster 2005, MANE-VU 2006).
SC 31000-2a	TO PROVIDE AN ADEQUATE ASSESSMENT ON THE CONTRIBUTION OF LOCALIZED AND DISPERSED ACID DEPOSITION FROM CURRENT AND EXPECTED SNOWMOBILE USE
	Response: Assessing the contribution specifically from snowmobile use to local and dispersed acid deposition is a complex issue and research question involving many entities. Emissions inventories exist estimating the amount of pollution generated from snowmobiles, but there is no definitive information for Vermont or the GMNF regarding proportional contribution of those emissions to acid deposition. The Forest Service is a partner in the Vermont Monitoring Cooperative (VMC), the Mid-Atlantic/Northeast Visibility Union (MANE-VU), the Interagency Monitoring to Protect Visual Environments (IMPROVE), the National Atmospheric Deposition Program (NADP), as well as other partnerships, each of which gathers and analyzes information to help make these kinds of assessments. Acid deposition related to the quality of air was discussed on p. 3-43 of the DEIS. Further detailed discussion of the potential impacts from acid deposition in relation to soil has been clarified in the FEIS (Section 3.2).
SC 31000-2b	ON WILDLIFE AND WILDLIFE HABITAT
	Response: There is no direct sampling in the GMNF to measure pollutants (such as ammonium and sulfate) directly attributable to snowmobiles and their effects to wildlife, vegetation, or water quality. Information about the amount of pollutants in the atmosphere would be available via the Clean Air Status and Trends Network (CASTNET) or Interagency Monitoring of Protected Visual Environments (IMPROVE) network, each of which has a monitoring site located on the Forest. Further, the National Atmospheric Deposition Program operates a site near Bennington, Vermont. The Forest Service (and other entities) monitors different aspects of the aquatic, terrestrial, and biological environment of the GMNF for impacts due to air pollution. Although snowmobile emissions would contribute to total loading of pollutants at all these sites, it is unknown the proportion directly attributable to them. Discussion of snowmobile emissions and their potential impact has been clarified in the FEIS (Sections 3.4.1 and 3.4.2).
SC 31000-2c	ON HUMAN HEALTH
	Response: The specific effects of snowmobile use to local and dispersed acid deposition on human health are encompassed within the larger issue of acid deposition in general. The Vermont Air Pollution Control Division, the US Environmental Protection Agency (EPA), and others have a responsibility to assess impacts of acid deposition on human health (DEIS pp. 3-42 and 43). Further, the state of Vermont does currently meet all national and state ambient air quality standards (clarified in the FEIS, Section 3.4.1). Studies in Yellowstone National Park (NP), however, do indicate that the accumulation of large number of snowmobiles in a small area, such as entrance stations and parking lots, can result in "short-term exposures to very high levels of CO, PM, and HC" (NPS 2000, p. 9). In Yellowstone NP, one study indicated that an hourly traffic count of 450 snowmobiles would likely result in concentrations above the 1-hour carbon monoxide national ambient air quality standard of 35 parts per million near to the source. High concentrations of CO were "highly

	localized" and decreased rapidly with distance from the source. The Forest Service currently has no documentation to suggest that this kind of concentrated use occurs on the GMNF at particular locations or times which would affect the standards in the manner mentioned above (Acheson, 2006).
SC 31000-2d	ON VEGETATION
	Response: See response to SC 31000-2b.
SC 31000-2e	OUTSIDE THE GMNF
	Response: See response to PC 31000-2.
SC 31000-2f	BECAUSE TWO-STROKE ENGINES EMIT HIGH LEVELS OF BENZENE, HYDROCARBONS, AND CARBON-MONOXIDE
	Response: Two-stroke engine snowmobiles manufactured prior to 2006 emit substantial amounts of hydrocarbons (HC) and carbon monoxide (CO) and low amounts of sulfur dioxide and ammonia (NPS 2000, p. 6). Snowmobiles manufactured prior to 2006 are not subject to EPA emission standards. Starting in 2006, however, EPA is phasing in exhaust emission standards and permeation standards for recreational vehicles. These standards are to be fully implemented by 2012 (EPA 2002a, p. 4). When these standards (along with those for other recreational vehicles, recreational marine diesel engines, and large industrial spark ignition engines) are fully implemented, EPA expects a 72 percent decrease in hydrocarbon emissions, an 80 percent decrease in nitrogen oxide emissions and a 56 percent decrease in carbon monoxide from these sources (EPA 2002a, p. 6). This discussion has been added to the FEIS (Section 3.4.2).
SC 31000-2g	BECAUSE MODELING PROCEDURES TO ANALYZE THESE IMPACTS ARE AVAILABLE
	Response: Modeling procedures suggested such as those conducted for snowmobile use by the National Park Service were not conducted for snowmobile use on the GMNF since snowmobile emissions from increased use is not expected to exceed ambient air quality standards (FEIS Section 3.4.2). See also responses to PC 31000-2 and SC 31000-2c.
SC 31000-2h	ON WATER QUALITY
	Response: See response to SC 31000-2b.
PC 31000-3:	**The Forest Service should limit disturbance activities, such as timber harvesting and mechanized recreation activities, on steep slopes and soils with high potential to erode.**
	Response: The Forest Service considers steep slopes to be those greater than about 45 percent grade. Timber harvesting and motorized recreational activities are rare on these slopes, due to soil erodibility and slope stability concerns. Harvesting on slopes of 20 to 45 percent is common because erosion can be minimized by application of Acceptable Management Practices and following revised Forest Plan Forest-wide standards and guidelines (pp. 20-22), and sideslopes are normally stable. See also Soils section 3.2 in the FEIS.
PC 31000-4:	**The Forest Service should propose mitigation measures to counter snowmobile, summer ORV, truck, and automobile use on the GMNF.**
SC 31000-4a	BECAUSE THESE VEHICLES CAUSE 47 PERCENT OF ALL VOLATILE ORGANIC COMPOUND EMISSIONS AND 77 PERCENT OF ALL NITROGEN OXIDE EMISSIONS IN NEW ENGLAND
	Response: Currently, it has not been demonstrated that emissions specifically from snowmobiles, summer ORV, truck and automobile use on the GMNF are damaging resources on the GMNF, and that mitigation measures are necessary to counter that damage. The DEIS states that Vermont currently meets National Air Ambient Air Quality Standards set by the EPA (DEIS p. 3-42) and that this in

	not expected to change from Forest Service management activities on the GMNF (DEIS p. 3-45). This has been clarified in the FEIS (Section 3.4.2). The Forest Service currently monitors for air pollution impacts at several places on the Forest for effects to vegetation, soils, water, ambient air, and visibility. This information is used in conjunction with other agencies (such as the EPA) and entities (such as the Vermont Monitoring Cooperative) to inform decisions related to air pollution effects from these mobile sources as well as the many others that affect air quality on the GMNF. Forest Service participation in the MANE-VU Regional Planning Organization will continue as national air quality regulations and policies are implemented (FEIS Section 3.4.2). See also response to PC 31000-2.
PC 31000-5:	**The Forest Service should analyze the effects of climate change and of the GMNF's value as a carbon sink.**
SC 31000-5a	BECAUSE OF THE POTENTIAL FOR SIGNIFICANT ALTERATION OF THE NATURAL COMMUNITY COMPOSITION AND STRUCTURE, FOREST HEALTH, AND LONG-TERM VIABILITY OF A NUMBER OF SPECIES
SC 31000-5b	ON SPECIES COMPOSITION AND VIABILITY BECAUSE IT IS IMPORTANT TO WILDLIFE HABITAT
	Response: This issue is outside the scope of the revised Forest Plan FEIS because: 1) It is not possible at this time to reliably project the effects of climate change on the GMNF, or the cumulative effects of climate change and management practices. Such an analysis would be speculative due the lack of scientific knowledge on topics such as: the magnitude and speed of regional and local climate change, the effects it will have on vegetative species on the GMNF, the longevity of trees that make up the forest overstory on GMNF, and the cumulative effects of climate change and Forest Service management practices (Pastor and Post 1988, Davis 1989, Martin 1996, Kullman 2002); and 2) It is not possible to predict how Forest Service management will affect the value of the GMNF as a carbon sink over the next 10 to15 years, due to the unknowns surrounding carbon cycling and sequestration. Many years will be needed for researchers to develop the scientific methods and databases. For example, a large piece of information that is lacking is a regional carbon balance inventory, which would include such things as industry, human activities, human-dominated landscapes, materials use.

Water/Watershed Management (31100)

PC 31100-1:	**The Forest Service should protect wetlands and vernal pools.**
SC 31100-1a	BY EXPANDING THE STATE OF VERMONT ACCEPTABLE MANAGEMENT PRACTICES TO INCLUDE PROTECTION OF WETLAND FUNCTIONS INCLUDING FLOOD STORAGE, WILDLIFE HABITAT, AND GROUND WATER RECHARGE OR DISCHARGE
SC 31100-1d	BY PROVIDING A 100 FOOT LIMITED IMPACT ZONE AROUND VERNAL SEASONAL POOLS OR MULTI-POOL COMPLEXES
SC 31100-1e	BY ONLY ALLOWING WILDLIFE ENHANCEMENT ACTIVITIES WITHIN THE 100 FOOT BUFFER AROUND VERNAL POOLS AND MULTI-POOL COMPLEXES
SC 31100-1f	BY PROVIDING A 50 FOOT LIMITED IMPACT ZONE AROUND WETLANDS INCLUDING BEAVER FLOWAGES GREATER THAN ONE ACRE
SC 31100-1g	BY ONLY ALLOWING WILDLIFE ENHANCEMENT ACTIVITIES WITHIN THE 50 FOOT BUFFER AROUND WETLANDS

	Response: Protective strips, as identified in the AMPs, are extended to wetlands and seasonal pools as a standard in the revised Forest Plan standard and guidelines (revised Forest Plan p. 20). The protective strip consists of predominantly undisturbed soil, and it separates soil-disturbing activities such as harvesting and snowmobile trail construction from all water sources (streams, lakes, ponds, wetlands, and vernal or seasonal pools). The protective strip effectively minimizes or eliminates soil erosion and compaction in riparian areas, and the possibility of stream sedimentation. The protective strip also contributes to maintaining flood water storage capacity, ground water recharge and storage, and minimizes the impacts to wildlife habitats. Additional protection is extended to wetlands via Forest-wide S&Gs providing direction for riparian area protection, erosion and sediment control, snag retention, and practices near wetlands (revised Forest Plan pp. 20-22, 27), and a new guideline that replaces a guideline on page 22 of the revised Forest Plan: "Within 100 feet of wetlands and seasonal pools, activities should be limited to those that protect, manage, and improve the condition of these resources. Acceptable activities should be approved on a case-by-case basis." The Forest Service Manual (FSM) also provides mandatory direction for riparian area management (FSM 2526), and floodplain management and wetland protection (FSM 2527). Given the S&Gs and FSM direction, the Forest Service believes that wetlands and floodplains will be adequately protected under the revised Forest Plan. Highlights of this direction are: • Protect, manage, and improve riparian areas while implementing land and resources management activities (FSM 2526.02-1). • Manage riparian areas in relation to various legal mandates, including, but not limited to, those associated with floodplains, wetlands, water quality, dredged and fill material, endangered species, wild and scenic rivers, and cultural resources (FSM 2526.03-1). • Manage riparian areas under the principles of multiple-use and sustained-yield, while emphasizing protection and improvement of soil, water, and vegetation… Give preferential consideration to riparian-dependent resources when conflicts among land use activities occur (FSM 2526.03-2). In the revised Forest Plan, this preferential consideration is extended to wetlands and seasonal pools. • Give special attention to land and vegetation for approximately 100 feet from the edges of all perennial streams, lakes, and other bodies of water. This distance shall correspond to at least the recognizable area dominated by the riparian vegetation. Give special attention to adjacent terrestrial areas to ensure adequate protection of the riparian-dependent resources. (FSM 2526.03-5). In the revised Forest Plan, this special attention is extended to wetlands and seasonal pools. • Do not permit floodplain development and new construction in wetlands wherever there is a practicable alternative (2527.03-4). • Minimize destruction, loss and degradation of wetlands (2527.02-3). See also response to SC 31100-1b. Also see FEIS section 3.3.2, and note that the revised Forest Plan definition of riparian area includes wetlands. Therefore, all statements regarding the effects to riparian areas apply to wetlands and vernal pools.
SC 31100-1b	BY REQUIRING A MINIMUM BUFFER AROUND WETLANDS AND VERNAL

	POOLS
SC 31100-1k	TO PROTECT AMPHIBIAN HABITAT
	Response: See response to SC 31100-1a. In addition, the riparian area protection provided by FSM 2526.02-1, 2526.03-1, and 2526.03-2 would be applied to seasonal pools and wetlands. The Forest Service does not plan to adopt "minimum buffers" (or a "limited activity zones") around wetlands and vernal pools. However, the revised Forest-wide S&Gs and FSM direction would provide a similar level of wetland and vernal pool protection, for the following reasons: 1. Wetlands/seasonal pools vary greatly in their ecological composition, structures, and relationships to adjacent uplands. Management in and around wetlands and seasonal pools should be tailored to meet the protection and/or enhancement needs of the physical and biological resources. This approach to management is reflected in the Forest Service Manual (FSM 2526) and some current riparian management literature. It consists of three steps: • Identify the important riparian resources (includes streams, ponds, wetlands and seasonal pools) • Decide what characteristics for which the Forest Service want to manage (for example, amphibians, fish, scenic beauty, deer browse) • Tailor the riparian management to enhance these specific characteristics. This may or may not include a buffer zone, depending on the management emphases. For example, if the Forest Service wants to emphasize protection of amphibian habitats, then management might be for moist, shady, undisturbed areas next to wetlands. In contrast, if the Forest Service chooses to enhance woodcock habitat, a regeneration harvest next to a wetland might be appropriate. 2. Under the revised Forest Plan, approximately 60 percent of the Forest will be in management areas where harvesting is not allowed. In these areas, wetlands and seasonal pools will not generally be subject to human disturbance. 3. Uniformly applied, minimal-harvest buffers of 100 to 500 feet have been suggested to protect amphibian habitat (for example, see Calhoun et al. 2004. Habitat Management Guidelines for Vernal Pool Wildlife. Wildlife Conservation Society and Metropolitan Conservation Alliance (WCS/MCA) Technical Paper No. 6). While the Forest Service generally supports such buffers, Forest Service biologists believe that the buffer language provided in the FSM and the revised Forest-wide S&Gs adequately protect wetland and vernal pool habitats. This management guidance will help to support viable populations of most species dependent on those resources, including amphibians. Those species that require additional protection measures will be evaluated during site-specific analysis, and additional mitigation measures may be recommended as needed. 4. The following process is used to implement wetland and seasonal pool protection measures on projects: • Resource specialists (for example, a hydrologist, wildlife biologist, or timber sale administrator) make a field visit to the site of a proposed project. Wetlands and seasonal pools are identified on the ground, and marked on maps. Important resource values are identified, and the specialist(s) compile a list of S&Gs and mitigation measures need to protect the values during project implementation. Normally, the Forest Service strives to avoid or minimize any disturbance of wetlands and seasonal pools.

	• The mitigation measures are listed in an environmental assessment. • After the project is approved, field implementers (for example, timber markers or engineers) utilize the S&Gs and list of mitigation measures in project planning and implementation. • Resource specialists address questions about the implementation of S&Gs and mitigation measures, and monitor project implementation. If problems arise, they are promptly corrected.
SC 31100-1c	BY ADOPTING WETLAND ACCEPTABLE MANAGEMENT PRACTICES RELATIVE TO THEIR FUNCTIONS IN THE LANDSCAPE
	Response: Several organizations and agencies have developed Best Management Practices (BMPs; similar to Acceptable Management Practices) that incorporate specific measures to protect and maintain wetlands. The Northeastern Area State and Private Forestry developed a comprehensive set of BMPs that are available at http://www.na.fs.fed.us/spfo/pubs/n_resource/wetlands/wetlands11_access%20systems.htm The Forest Service compared these BMPs to the revised Forest-wide S&Gs (see revised Forest Plan section 2.3.2), and riparian area (including wetlands and seasonal pools) management direction provided in the Forest Service Manual. The Forest Service found that the revised Forest-wide S&Gs and manual direction (see FSM citations in SC 31100-1b) provide a level of protection that meets or exceeds that provided by most BMPs. Thus, additional BMPs are not needed. Also see response to SC 31100-1k.
SC 31100-1h	BY PROVIDING A LIMITED IMPACT ZONE AROUND WETLANDS AND SEEP AREAS LESS THAN ONE ACRE ON A CASE BY CASE BASIS
	Response: The Forest Service has decided to incorporate a new guideline that addresses this comment. It reads: "Within 100 feet of wetlands and seasonal pools, activities should be limited to those that protect, manage, and improve the condition of these resources. Acceptable activities should be approved on a case-by-case basis" (revised Forest Plan p. 22). Seeps have been added to the wetland definition in the revised Forest Plan Glossary.
SC 31100-1i	BY WORKING IN OR NEAR WETLANDS ONLY DURING FROZEN CONDITIONS

	Response: The Forest Service agrees with your comment and has modified a guideline in the revised Forest Plan to more clearly state management intentions. The revised guideline (p. 22) reads:
	• Crossing wetlands with roads or trails should be avoided whenever possible.
	• When wetlands must be crossed to provide access to adjacent uplands, crossings should be located to minimize wetland impacts, and use should be permitted:
	  o Only under frozen soil conditions; or
	  o When the ground is covered with sufficient snow to minimize soil disturbance; or
	  o When other measures are taken to assure compliance with FSM 2526.03.2 and .5

SC 31100-1j	BY NOT USING WETLANDS FOR TEMPORARY ROADS OR SKID TRAILS
	Response: The Forest Service has traditionally minimized temporary road or skid trail crossings of wetlands to avoid wetland impacts, and such crossings are more costly to construct and maintain. However, there may be instances when crossing a wetland has the least impact to resources. For example, there are thousands of wetlands on the Forest, varying in size from less than 0.01 acre to tens or hundreds of acres in size. Sometimes small wetland areas must be crossed via roads or skid

	trails to provide access to adjacent uplands. These crossings are typically 5 to 50 feet long, and crossing techniques such as log corduroy, puncheon, or brushing in are used. Wetland crossings more than 100 feet long are unusual. To avoid all wetland crossings would make large portions of the Forest inaccessible, and would leave us unable to meet the Plan objectives for vegetation and wildlife habitat management. Avoiding all wetland crossings might also require much longer skid road distances to go around wetlands. In response to this public issue, however, the second guideline in the revised Forest Plan (p. 22) was revised to better clarify under what conditions wetland crossings should be allowed and how they should be managed. See the response to SC 31100-1i for this guideline. The Forest Service recognizes that there are special road design and construction techniques available for longer (more than approximately 100 feet long) crossings, where products such as geotextile fabric, corduroy, wooden mats, chunkwood, or gravel are used. Longer wetland crossings are rarely done on the GMNF, so are typically identified in an environmental analysis, and special design or construction needs are identified on a site-specific basis. Such crossings are also subject to State and federal wetlands regulations, with corresponding reviews and requirements.
PC 31100-2:	**The Forest Service should not single out ski areas as potentially damaging to watersheds when many activities have the potential to negatively affect watersheds.**
	Response: The Forest Service agrees that many activities have the potential to negatively affect watersheds, and several of these activities are discussed in the DEIS (pp.3-32-34). The types of activities and practices that have the potential to negatively affect watersheds are also listed in Table 3.2.1, "Soil Effects of Common FS Activities on the GMNF, without soil protection measures." Major activities listed, in addition to ski areas, are: timber harvest, road construction and maintenance, recreation development, trail construction and maintenance, and mineral exploration and extraction.
PC 31100-3:	**The Forest service should increase no tree cutting or harvesting areas along streams to full tree height or 50 feet.**
	Response: The protection of streamside riparian areas is an important matter on the GMNF. See also FEIS Water section 3.1. The Forest Service examined State laws and Acceptable Management Practices, guidelines recommended by regional experts, and utilized professional on-Forest experience to formulate the standards and guidelines in the revised Forest Plan. Goals for riparian and aquatic habitats focus on maintenance and restoration of habitat to sustain viable populations, as well as to protect and restore aquatic, fishery, riparian, and wetland habitats. Along perennial streams, a 25 foot no-cut area was established to maintain bank stability and provide LWD (large woody debris) recruitment (revised Forest Plan p. 21). This standard is designed to provide for both protection and maintenance of habitat. In addition, riparian and aquatic resource objectives allow for accelerated restoration and enhancement projects to occur along streams. Also, silvicultural treatments beyond the 25 foot area can allow riparian trees to more rapidly achieve sufficient size to provide stable LWD, an important habitat element, as well as provide light gaps that can increase primary production and fish productivity in heavily shaded upland coldwater streams.
SC 31100-3a	TO ALLOW FOR THE RECRUITMENT OF LARGE WOODY DEBRIS
	Response: Amendment 6 of the 1987 Forest Plan allowed for the recruitment of

	Large Woody Debris through a number of standards and guidelines. Experience gained through active monitoring over the past 15 years indicated that these standards and guidelines were effective towards meeting LWD objectives but were difficult to apply on-the-ground by Forest Service staff. The riparian area standards and guidelines in the revised Forest Plan continue the objective of recruiting LWD to GMNF stream ecosystems by incorporating the practical knowledge gained by Forest Service resource professionals, existing stream habitat monitoring data, and information from the LWD research (Lester 2003). These data tell us that most LWD recruitment will occur within 25 feet of the streambank, and therefore our emphasis will be on this area. Distances beyond 25 feet out to 50 feet will only possibly yield LWD recruitment if trees are oriented in the right direction. Distances of 50 to 100 feet beyond the streambank are highly unlikely to yield any LWD to stream channels. The commenter also has a concern with the guideline that allows for removal of LWD in navigable waters if an impassable barrier is present. The Forest Service agrees that the term “navigable stream” can be interpreted broadly because a stream that is navigable for one person may not be for another. The intention for applying this guideline is essentially as stated by the commenter in that removal of any LWD would be limited to only streams (large streams and rivers) used heavily by canoeists and kayakers if blocked by debris jams, and on a case-by-case basis if hazardous to people or infrastructure. The 1989 Fisheries Amendment contained a similar guideline. There were very few cases during the past 16 years where LWD was removed from a stream channel and the Forest Service believes that it will be the same in the future.
SC 31100-3b	TO PROTECT AGAINST EROSION IN THE RIPARIAN AREA
	Response: The revised Forest Plan contains a soil and water protection standard that provides a protective strip of predominantly undisturbed soil a minimum of 50 feet from a water source in the riparian area (p. 20). This standard has been carried over from the 1987 Forest Plan and has been shown to protect against soil erosion in the riparian area (DEIS p. 3-25).
SC 31100-3c	TO MOVE THE FOREST COMPOSITION TO MATURE AND OVERMATURE FOR ALL FOREST TYPES, NOT JUST SOFTWOODS
SC 31100-3d	TO MOVE THE FOREST COMPOSITION TO MATURE AND OVERMATURE FOR ALL FOREST TYPES AS QUICKLY AS POSSIBLE
	Response: The Forest Service agrees with the commenter. Forest-wide standards and guidelines for riparian area protection and restoration provide for an increase in mature and over-mature trees of all Forest types by limiting harvesting in riparian areas (revised Forest Plan p. 20-22). Also see FEIS Fisheries section 3.7. There is additional emphasis on softwood species under Goal 4 because the Forest Service feels that softwood species are currently under-represented or absent in some riparian stands, especially where ecological conditions appropriate for softwood species reproduction exists. This would result in benefits for long-term LWD recruitment since softwood species decay more slowly in water than hardwood species, and provide year-long water temperature benefits to stream ecosystems for native aquatic organisms.
SC 31100-3e	TO PROTECT HABITATS FOR AMPHIBIANS
	Response: See responses to 31100-1k and other responses under PC 31100-1, especially SCs 31100-1a and 31100-1b.
PC 31100-4:	**The Forest Service should remove bias in the Final EIS against Wilderness with respect to stream restoration.**
	Response: The statements in the DEIS about fisheries management and stream restoration are not a bias against Wilderness. The Forest Service is simply stating

	that Wilderness designation at this time would limit the ability to restore stream ecosystem processes and functions, including fish habitat, that are currently absent in the majority of upland streams on the Forest and throughout Vermont (DEIS 3-132). Even in Wilderness and other areas where natural processes dominate, these functions are lacking due to historical land use (DEIS pp. 3-130-131). Examples of these stream ecosystem processes and functions include: LWD output/recruitment in stream channels from riparian areas; sediment storage and transport associated with LWD in channel; and fine and coarse organic matter for nutrient enrichment and micro-habitat for aquatic organisms. Research estimates (Nislow, personnel communication, 2005) for the GMNF and northern New England are still 70 or more years from full recovery of these stream functions if left unmanaged. The Forest Service believes that over the next several decades, active management of upland streams could address the functions currently lacking and provide benefits to aquatic resources (fisheries and physical stream attributes) and for people using them (anglers, conservationists). The Forest Service agrees with the commenter that the maintenance and restoration of riparian areas along upland streams that are strictly reliant on natural forces over the long-term may lead to fully functioning stream ecosystems in Wilderness areas, although it may take 70 to 100 years or more to achieve. See response to SC 32500-10b.
SC 31100-4a	BECAUSE LITERATURE DOCUMENTS THE SUPERIOR HEALTH AND INTEGRITY OF AQUATIC ECOSYSTEMS, INCLUDING AND ESPECIALLY FOR NATIVE FISH, IN MORE NATURAL, LESS DISTURBED ENVIRONMENTS
	Response: The Forest Service agrees that less disturbed lands generally support healthier aquatic ecosystems. See also FEIS Fisheries section 3.7. Natural environments also include natural processes, functions, and disturbance regimes which are frequently absent in landscapes with a long history of human impact, such as the GMNF, including Wilderness. The more relevant question becomes whether reintegrating processes and functions through active management (as described in response to PC 31100-4) decreases or increases aquatic ecosystem integrity. The Forest Service believes that it can increase the integrity of the aquatic ecosystem particularly as documented in stream restoration project monitoring (2000 GMNF M&E Report). The Forest Service also believes that it is not feasible or practical to think that all streams can be actively managed on the GMNF. The revised Forest Plan provides a balance between active and passive management for stream ecosystem restoration on the GMNF.
SC 31100-4b	BECAUSE OF THE GENERAL INEFFECTIVENESS AND COSTLINESS OF ARTIFICIAL RIPARIAN HABITAT RESTORATION PROJECTS
	Response: Monitoring has shown these projects to be effective in restoring riparian habitats, as well as being cost effective. Also see FEIS Water section 3.1. Riparian restoration projects have generally focused on planting native tree and shrub species under consultation with ecologists and Forest Service silviculturists to achieve a desired natural plant community within the riparian area. The projects normally involve purchasing native plant stock and utilizing Forest Service seasonal crews and partner volunteers to plant the trees, so costs associated with these projects are considered to be low. The Forest Service has also done many bank stabilization projects that generally incur more costs than riparian re-vegetation projects. Many of these projects were done in larger streams or rivers where agricultural practices had resulted in the loss of riparian vegetation and subsequent failure of the stream bank. These types of projects would generally not be conducted in small upland streams on the Forest.
SC 31100-4c	BECAUSE HEAVY LOGGING IN THE PAST IS THE REASON FOR LOW LEVELS OF LARGE WOODY DEBRIS IN STREAMS

	Response: The Forest Service acknowledges in the DEIS that historical logging and land clearing practices resulted in degraded fisheries habitat (pp. 3-130-131). See also FEIS Fisheries section 3.7. Riparian management in the revised Forest Plan is designed to enhance LWD in GMNF streams (revised Forest Plan section 2.3.2). Historical logging and intensive agricultural practices of a century or more ago, and the long recovery time for LWD recruitment, are the primary reasons for the current low levels of LWD in streams.
SC 31100-4d	BECAUSE THE COST OF ARTIFICIALLY INTRODUCING LARGE WOODY DEBRIS INTO STREAMS IS ABSURDLY HIGH
	Response: The Forest Service believes that stream habitat restoration projects conducted in the GMNF have been cost effective. The Forest Service acknowledges that it is difficult to put a dollar value on the total benefits associated with LWD restoration projects. Also, there is a wide range of costs associated with restoration work depending on the type of project being performed. For example, LWD projects in small upland streams are relatively inexpensive and can cost less than $5,000 per mile, while natural channel design restoration and channel/floodplain reconstruction in larger valley-bottom streams may costs tens of thousands of dollars. Many of these projects have resulted in improved fish populations, increased macro-invertebrate diversity (increased taxa richness), and increased habitat diversity and complexity from LWD, as well as sediment storage and transport in stream channels (GMNF 2000 M&E report). The benefits from these projects have also been widely supported by the public, and many projects are supported financially by our numerous partners.
SC 31100-4e	BECAUSE THERE ARE PLENTY OF AREAS OUTSIDE WILDERNESS WHERE THE FOREST SERVICE CAN DO STREAM RESTORATION
	Response: One of the impacts of Wilderness designation is that the Forest Service would not be able to conduct stream habitat restoration projects in these areas. The Forest Service agrees that there are streams outside of Wilderness where the GMNF can do restoration projects.
PC 31100-5:	**The Forest Service should protect riparian habitats and consider the relationship between riparian areas and surrounding wetlands and upland habitats.**
SC 31100-5a	BY PROVIDING CONNECTING WETLANDS WITH CORRIDORS OF INTACT, SUITABLE FOREST HABITAT TO ALLOW SPECIES MIGRATION AND RECOLONIZATION
SC 31100-5b	TO PROVIDE HABITATS FOR AMPHIBIANS
	Response: See responses to 31100-1k and other responses under PC 31100-1, especially SCs 31100-1a and 31100-1b.
SC 31100-5c	TO PROVIDE HABITAT FOR THE FORCIPATE EMERALD AND THE GRAY PETALTAIL, TWO SPECIES ON THE REGIONAL FORESTERS SENSITIVE SPECIES LIST
	Response: The Forest Service revised Forest-wide standards and guidelines (S&Gs) to clarify protection and management within riparian areas (revised Forest Plan pp. 20-22). See responses under PC 31100-1, especially SCs 31100-1a and 31100-1b. The Forest service developed and revised these S&Gs in consultation with state and federal agencies. The forcipate emerald is known from two sites on the southern half of the GMNF, one site near the north half of the GMNF, and one other occurrence in northeastern Vermont (USFS 2002c). The gray petaltail is known from a single, recent report in Vermont; if confirmed, it will be the only record for New England (USFS 2003f). These dragonflies occur in small wooded wetlands, occasionally little more than seeps or flowing groundwater. Although wildlife considerations during development and revision of Forest-wide, riparian S&Gs

	focused largely on habitat requirements for amphibians and reptiles, the forcipate emerald and gray petaltail will receive equal benefit. The Forest Service is confident that these S&Gs afford suitable and adequate protection for these species.

Soils Management (31200)

PC 31200-1:	**The Forest Service should protect the long term productivity of the soils.**
	Response: The Forest Service agrees. Revised Forest Plan Goal 3 (p. 13) reads, ”Maintain or restore the natural, ecological functions of the soil.” This includes maintaining the long-term soil productivity. See also Soils section 3.2 in the FEIS.
SC 31200-1a	BECAUSE ACID DEPOSITION IS A THREAT TO NORTHERN FORESTS
	Response: The Forest Service agrees and has addressed this issue in a paper titled, “Acid deposition and its potential effects on soil productivity and timber management in the Green Mountain National Forest, Vermont” (Burt et al. 2005). See also Soils section 3.2 in the FEIS.
SC 31200-1b	BECAUSE ACID DEPOSITION DEPLETES FOREST SOILS OF CRITICAL NUTRIENTS
	Response: The Forest Service agrees that this potential exists and has addressed this issue in the paper titled, “Acid deposition and its potential effects on soil productivity and timber management in the Green Mountain National Forest, Vermont” (Burt et al. 2005). See also Soils section 3.2 in the FEIS.
SC 31200-1c	BY ALTERING MANAGEMENT POLICIES, INCLUDING THE TIMBER PROGRAM, TO RESPOND TO THE COMBINED THREATS OF ACID DEPOSITION AND LOGGING TO COMPLY WITH THE LAW
	Response: See responses to SC 22000-8g, PC 31000-1 and 31000-1k, SC 34000-14h, and 23000-1q. See also FEIS Soils section 3.2, particularly Existing Condition (see section 3.2.1) and Acid Deposition under Indicator 3 (see section 3.2.2), and Forest-wide standards and guidelines in the revised Forest Plan for Soil, Water, and Riparian Areas (p. 20-22).

Visual Resources Management (31300)

PC 31300-1:	**The Forest Service should conduct an inventory of scenic vistas to provide better maintenance of existing vistas and the creation of new scenic vistas.**
	Response: Limited funding and maintenance priorities on protecting health and safety have minimized focus on the quality of some vistas on the Green Mountain National Forest. The Forest Service does maintain a vista inventory. The Forest Service agrees that lack of maintenance has allowed many vistas to grow in (see FEIS section 3.15.1, Type 1 vistas) and that there is a desire to better maintain some vistas and create new ones. Maintenance of vistas is included under Goal 15 and associated objectives in the revised Forest Plan (p. 16).
PC 31300-2:	**The Forest Service should create new scenic vistas along hiking trails.**
	Response: The Forest Service agrees that vista management is desired. Goal 15 (p. 16) of the revised Forest Plan states: “Maintain or enhance visual resources such as viewsheds, vistas, overlooks, and special features.” The revised Forest Plan sets vista management direction through management area allocation. The revised Forest Plan is a programmatic document and does not address such site-specific implementation as creating new scenic vistas.
PC 31300-3:	**The Forest Service should correct the Visual Resources effects analysis**

	to more accurately reflect the appearance of dominate ridgelines.
	Response: The Forest Service has reviewed the suggestion and agrees with the commenter. Reference to Forest Service communication sites have been removed from the paragraph in the FEIS (section 3.15 Visual Resource Existing Condition).
PC 31300-4:	**The Forest Service should screen timber harvests from trails to reduce impacts to the natural appearing landscape.**
	Response: The Forest Service has visual condition guidelines for on-site and off-site views (revised Forest Plan p. 38, Table 2.3-2) and visual condition guidelines related to timber harvest activities (revised Forest Plan p. 39, Table 2.3-3). These visual condition guidelines are based on criteria defined in the National Forest Visual Management System Handbook (USDA Forest Service 1974) and lead toward visual quality objectives (VQOs). See Glossary in revised Forest Plan or FEIS for definition of VQOs. The VQOs vary depending on whether activities can be seen from certain areas, viewer sensitivity, permanent or temporary visual condition, and the Recreation Opportunity Spectrum (ROS) classification of the management area (MA). In addition, individual MA direction provides guidance on timber harvest activities. Views from trails that have high viewer sensitivity (such as the Appalachian Trail) should appear more natural and screen the results of timber harvest activities to a higher degree than most other trails. Other trails, such as the Catamount cross-country ski trail, have moderate viewer sensitivity and may have limited views of timber harvest activities. Mitigation measures for residual debris (root wads, stumps, and slash) adjacent to trails are normally prescribed adjacent to recreation trails to minimize the appearance of the harvest. See also FEIS section 3.15, Indicator 3 - Projected Average Annual Acres Harvested by Treatment Methods with Similar Effects on Visual Quality for further discussion.

Biological Elements Management (32000)

PC 32000-1:	**The Forest Service should provide further analysis on the cumulative impacts to Threatened, Endangered and Sensitive Species, Management Indicator Species, and Regional Foresters Sensitive Species in the Final EIS.**
SC 32000-1a	BECAUSE THERE IS NO QUANTITATIVE OR SPECIFIC INFORMATION PROVIDED IN THE DRAFT EIS CUMULATIVE EFFECTS SECTION
	Response: The response to PC 32400-1 discusses the strategic approach included in the revised Forest Plan for analyses of management indicator species (MIS), threatened and endangered species and Regional Forester sensitive species (collectively TES), and other species of viability concern. Most relevant to this public comment is that the revised Forest Plan is “programmatic;” it allows, but generally does not require, specific actions on the ground. Nor does the revised Forest Plan mandate projects in a specific location at a specific time. By necessity, assessment of beneficial and negative effects, including direct and indirect effects, as well as cumulative effects, is more general than for actual site-level projects. Nevertheless, the scope of actions contemplated by the revised Forest Plan are evaluated in terms of the likely effects of proposed programs, activities, and practices, and how well these programs, activities, and practices address potential negative impacts or contain measures that might mitigate adverse effects. Evaluations and determinations of effects in the FEIS

	Chapter 3 sections on Wildlife and Wildlife Habitat (Section 3.6), Threatened and Endangered Species (Section 3.8), and on Species of Potential Viability Concern (Section 3.9), and in the Biological Evaluation (FEIS Appendix E), are based on the expected effects of revised Forest Plan implementation. These sections of the FEIS address long-term and cumulative effects and regional context for effects on MIS, TES species, and other species of potential viability concern. More detailed and quantitative effects analyses is not appropriate in a programmatic document; these analyses will be forthcoming in conjunction with site-specific projects. It should be noted that Goal 2 of the revised Forest Plan (p. 10) requires the Forest Service to maintain and restore quality, amount, and distribution of habitats to produce viable and sustainable populations of native and desirable non-native plants and animals. Objectives under this goal include working toward recovery of federally listed, threatened or endangered species; protecting critical habitat and key habitat features upon which TES species depend; developing conservation strategies for Regional Forester sensitive species; maintaining or enhancing habitats for sensitive species through conservation strategies or habitat management; and cooperating with resource management agencies of the State of Vermont on habitat management for species of State concern. Standards and guidelines (S&Gs) in the revised Forest Plan (p. 30) state that all project sites must be investigated for the presence of TES species, and/or habitat for these species prior to beginning any authorized ground-disturbing activity at the site. Specific S&Gs address protection for Indiana bat, bald eagle, and peregrine falcon. Use restrictions may be implemented to protect habitat for TES species. At the project level, Forest Service Manual 2670 requires the Forest Service to identify TES species that exist in the area project area and could be affected; important habitat for these species that might be affected; potential adverse impacts to species or habitats; means for prevention or mitigation of adverse effects; and whether specific actions to improve habitat conditions can be incorporated into the project.
SC 32000-1b	TO INCLUDE INFORMATION ON POPULATION THRESHOLDS BELOW WHICH VIABILITY IS JEOPARDIZED
SC 32000-1c	TO INCLUDE QUANTITATIVE MEASURES OF AVAILABLE HABITAT AND ITS QUALITY FOR LIFE CYCLE NEEDS
SC 32000-1d	TO PROVIDE ESTIMATES OF BOTH POPULATION LEVELS AND HABITAT AVAILABILITY UNDER DIFFERENT MANAGEMENT SCENARIOS FOR ALL PUBLIC AND PRIVATE PARTIES AFFECTING THAT WILDLIFE SPECIES AND ITS HABITAT THROUGHOUT ITS RANGE
SC 32000-1e	TO PROVIDE MITIGATION MEASURES TO REDUCE OR ELIMINATE ADVERSE CUMULATIVE EFFECTS ON INDIVIDUALS, POPULATIONS AND THEIR HABITATS
	Response: Species viability evaluation (SVE) is a qualitative process developed to identify and gather information about vertebrate, invertebrate, and plant species of potential viability concern and for existing threatened, endangered, and Regional Forester sensitive species (Schenk et al. 2002). The SVE uses professional expertise in combination with the best available information to assess risk to the current and continued viability of a species range-wide or within the analysis area. As described in section 3.9 of the FEIS (Species of Potential Viability Concern), the Forest Service conducted the SVE in cooperation with scientists qualified for each taxon (plants, insects, amphibians and reptiles, birds, and mammals) and knowledgeable (professional expertise)

	about local flora and fauna. Scientists included local wildlife and botanical experts from State agencies, faculty at local universities, Forest Service researchers, and other knowledgeable individuals. Forest Service staff and the consulted scientists reviewed available literature (best available science), data, and personal insights (professional expertise) with reference to viability issues, factors, risks, and potential outcomes for each species. The final result of the SVE process is an estimated outcome assigned to each species for current conditions and for the next 15 to 20 years, both range-wide and for the GMNF. Future outcomes for the GMNF include a separate outcome for each alternative. Each viability outcome is an index or relative measure of the environment's capability to support population abundance and distribution. It is not a prediction of population occurrence, size, density, or other demographic characteristics (Schenk et al. 2002). The Forest Service identified 27 animals and 83 plants as species of viability concern for the GMNF (Tables 3.9-1 and 3.9-2 in the FEIS). Also see response to PC 32400-1. The Forest Service used the analyses and reviews described above to develop and revise management direction, particularly standards and guidelines, for the revised Forest Plan. It is this management direction that eliminates, minimizes, or mitigates potential short- and long-term effects of management actions or other events, both "natural" and human-related, on threatened, endangered and sensitive species, management indicator species, Regional Foresters sensitive species, or other species of potential viability concern.
PC 32000-2:	**The Forest Service should include the marten in the Biological Evaluation and consider selecting the marten as a Management Indicator Species.**
SC 32000-2a	BECAUSE THE DRAFT EIS DOES NOT EVALUATE HABITAT FRAGMENTATION EFFECTS ON THE MARTEN
SC 32000-2b	BECAUSE THE MARTEN IS LISTED ON THE REGIONAL FORESTERS SENSITIVE SPECIES LIST AND VERMONT'S SPECIES OF GREATEST CONSERVATION NEED IN THE DRAFT COMPREHENSIVE WILDLIFE CONSERVATION STRATEGY
SC 32000-2c	BECAUSE THE GMNF HAS SUITABLE HABITAT FOR THE MARTEN
	Response: The American marten would be a poor choice as a management indicator species (MIS). During the Forest Plan revision process, the Forest Service considered and evaluated many species, including the marten, as potential MIS and species of potential viability concern. This evaluation included analyses of populations, habitats, and potential effects of management activities on threatened, endangered, and Regional Forester sensitive species (sections 3.8, 3.9, and Appendix E of the DEIS) and other species of viability concern (section 3.9 of the DEIS). The assembled panel of regional wildlife experts concluded that marten do not currently occur on the GMNF and probably will not in the foreseeable future (SVE Mammal Panel 2002, USFS 2002b). More recently, the Vermont Fish and Wildlife Department determined that, "Marten are presently extirpated or exist at very low levels in Vermont" (VFWD 2005: p. 88, Appendix A4). Whether or not martens become re-established on the GMNF, or in Vermont in general, will be determined by many factors. Krohn et al. (1995) speculated that higher fisher densities may limit marten populations. The Vermont Comprehensive Wildlife Conservation Strategy (VFWD 2005) recently concluded that warming climate trends could reduce the potential for marten survival in Vermont. Warmer winters that result in less snow may improve conditions for fisher, increasingly at the expense of martens.

	Conversion of habitat and forest fragmentation also can be a problem for marten; optimal habitat should be at least 75 percent late successional forest. Mature and over-mature forest currently dominate the GMNF, and they will continue to dominate the Forest during the current planning cycle and beyond (see responses to PC 32600-10 and SC 32600-10a; also DEIS p. 3-106 and p. 3-111), particularly in the higher elevations where the likelihood of martens occurring is greatest. The Forest Service cannot monitor martens as MIS on the GMNF and identify a population trend influenced by management actions if they do not exist there and they are not expected to re-establish on the Forest in the near future. The Regional Forester list of sensitive species lists the American marten as extirpated on the GMNF. For all these reasons, martens were not included in the Biological Evaluation or among the species of potential viability concern.

Listed Species/Species of Special Concern (32100)

PC 32100-1:	**The Forest Service should analyze the effects of the five alternatives on the gray wolf, eastern cougar, Canada lynx, and bald eagle.**
	Response: Five federally listed threatened and endangered (T&E) animal species occur or may occur on the GMNF: Indiana bat, gray wolf, eastern cougar, Canada lynx, and bald eagle. There are no T&E plant species of concern for the GMNF, no plant or animal species proposed for listing under the ESA that occur on the Forest, and no critical habitat on the GMNF (USFWS 2004). The Biological Evaluation (BE), included as Appendix E of the FEIS, addresses the current status of federally listed T&E species on the GMNF, and the potential effects that different Forest Plan alternatives may have on them. The BE concludes that one of these species, the Indiana bat, may be present on the GMNF and may be affected by management actions authorized by the revised Forest Plan. Section 3.8 of the FEIS (Threatened and Endangered Species) presents a summary of the more detailed analyses contained in the BE. Section 3.9 of the FEIS (Species of Potential Viability Concern) considered short- and long-term viability of these species and potential management effects of implementing the alternatives to the revised Forest Plan, both regionally and on the GMNF. Conclusions presented in the BE and FEIS are consistent with the most recent Biological Opinion from the US Fish and Wildlife Service (2000a, 2000b) and preliminary advice provided early in the Plan revision process (USFWS 2004).
SC 32100-1a	BECAUSE THERE HAVE BEEN SIGHTINGS OF GRAY WOLF AND CANADA LYNX IN QUEBEC NEAR NEW HAMPSHIRE AND VERMONT
	Response: As described in section 3.9 of the FEIS (Species of Potential Viability Concern), the Forest Service conducted the SVE in cooperation with scientists qualified for each taxon (plants, insects, amphibians and reptiles, birds, and mammals) and knowledgeable about local flora and fauna. (Also see responses to PC 32000-1 and 32400-1). It was the opinion of these scientists, as reported in section 3.9 (for example, DEIS pages 3-156, 3-158, 3-172 and equivalent passages in the FEIS) and Appendix E (Biological Evaluation: FEIS pages E-32 and E-36) of the FEIS, that several substantial obstacles challenge the return of wolves and lynx to the GMNF. Chief among these potential obstacles are lack of habitat connectivity between the GMNF and existing, viable populations of these species elsewhere in the Northeast; uncertainty as to the adequacy of the prey base on the GMNF to support these

	predators; and competition from other species, particularly coyotes and bobcats (SVE Mammal Panel 2002, USFS 2002a, USFS 2003a). The Vermont Fish and Wildlife Department conducted a similar evaluation in conjunction with its Comprehensive Wildlife Conservation Strategy (VFWD 2005). This analysis concluded that although the wolf currently occurs near Vermont in Canada and the possibility exists for migrant wolves to arrive in Vermont within the next 20 years, the St. Lawrence River and adjacent agricultural, urban, and suburban environments may pose a substantial barrier to such movement. Further, potential core habitat on the GMNF in southern Vermont is separated from other potential core habitat in northeastern Vermont. The same problems face the potential return of lynx to the GMNF, except that the nearest known viable population exists in northwestern Maine (VFWD 2005). As described in the BE, the GMNF probably represents the greatest potential core habitat for either species in southern and central Vermont, although limitations and uncertainties about habitat suitability exist for each species (for example, suitable prey base, adequate snowfall and snow conditions, and connectivity to existing populations). Fragmentation with roads and increased levels of human activity represent threats to potential core habitat areas for these species in most areas. The revised Forest Plan does not prescribe any activities that would result in such fragmentation or increased disturbance. The presence of roads and snowmobile trails can result in a range of effects on species like wolves and lynx. They can increase exposure of these species to harassment and killing, but they also can facilitate movement of the animals, especially through areas of deep snow. Paquet et al. (1999) expressed uncertainty about the overall influence of roads and snowmobile trails on possible reintroduction of wolves the Adirondack Park in New York. Such uncertainty is equally appropriate for the possible influence of roads and snowmobile trails on these species on the GMNF. Further, management in the revised Forest Plan is more likely to enhance the potential habitat for these species by maintaining and enhancing diversity of habitat and increasing potential diversity and abundance of prey (USFS 2002a, b; SVE Mammal Panel 2002). The Forest Service has no control over habitat conditions or other factors that influence the populations and movements of these species outside of the GMNF land base. The Forest Service is aware that individual wolves and lynx have been sighted and trapped near Vermont. These events prove that individual animals are present and may be the initial indications of range extension in the near future, but such events do not verify the presence of a viable, extant population. State wildlife biologists would not be overly surprised by sightings of a lynx in the Northeast Kingdom of Vermont (VFWD 2005), but such an event is far removed from having the species occur on the GMNF, and farther removed from having a viable population of lynx on the Forest.
SC 32100-1b	BECAUSE THERE HAVE BEEN SIGHTINGS OF EASTERN COUGAR IN VERMONT
	Response: The information provided in responses to PC 32100-1 and SC 32100-1a also applies to cougars. The BE (Appendix E of the FEIS) lists recent confirmed records for cougars in Vermont, Maine, and New Brunswick, Canada. Attempts to verify the identification of cougar from samples collected

	in Vermont produced conflicting results at different laboratories. Thus, for the three documented sightings of cougars cited by the commenter, it is not possible to determine sub-specific designation, or whether the cougars were former captive animals. The closest extant population of cougars is not known with certainty; it is likely in Manitoba but possibly in western Ontario, Minnesota, or Michigan (SVE Mammal Panel 2002, USFS 2002b). Vermont's Comprehensive Wildlife Conservation Strategy (CWCS) (VFWD 2005: Appendix A4, p. 109) reported, "Anecdotal reports of field sightings are fairly frequent; however definitive, tangible evidence of the animal's presence in Vermont and the northeast is notably lacking."
SC 32100-1c	BECAUSE THE CANADA LYNX, EASTERN COUGAR AND GRAY WOLF ARE LISTED ON THE VERMONT'S SPECIES OF GREATEST CONSERVATION NEED IN THE DRAFT COMPREHENSIVE WILDLIFE CONSERVATION STRATEGY
	Response: The Vermont Fish and Wildlife Department's Comprehensive Wildlife Conservation Strategy (VFWD 2005) did include the wolf (presented as "*Canis* sp?," reflecting the uncertainty over the genetic relationships among large canids in the Northeast, both currently and historically), Canada lynx, and mountain lion among the State's "Mammals Species of Greatest Conservation Need." As described in SC 32100-1a and SC 32100-1b, however, the CWCS also acknowledged that viable populations of these species do not exist in Vermont. The possibility exists that migrant wolves and lynx may appear in the State and that field sightings of cougars are fairly frequent in Vermont, although tangible evidence of their presence is lacking.
SC 32100-1d	ON THE DEGREE TO WHICH EACH ALTERNATIVE IMPROVES THE POSSIBILITY THAT THESE SPECIES MIGHT RETURN TO THE GMNF
	Response: The Biological Evaluation (Appendix E of the FEIS) includes descriptions of habitat requirements for gray wolf, eastern cougar, Canada lynx, and bald eagle. The GMNF probably represents the greatest potential core habitat for the wolf, cougar, and lynx in southern and central Vermont, although limitations and uncertainties about habitat suitability exist for each species (for example, suitable prey base, adequate snowfall and snow conditions, connectivity to existing populations). Fragmentation of habitat by roads and increased levels of human activity represent the threats to potential core habitat areas for these species in most areas. The revised Forest Plan does not prescribe any activities that would result in such fragmentation or increased activity. Further, as described in the Biological Evaluation (FEIS Appendix E: pages E-31 to E-37), management under the revised Forest Plan is more likely to enhance the potential habitat for these species by maintaining and enhancing diversity of habitat and increasing potential diversity and abundance of prey. The Forest Service has no control over habitat conditions or other factors that influence the populations and movements of these species outside of the GMNF land base. Bald eagles are not known to nest on the GMNF, although potentially-suitable nesting habitat occurs on the Forest. Non-breeding and migrant eagles do occur near the Forest and probably forage on the Forest occasionally. Management under the revised Forest Plan will continue preservation, maintenance, and enhancement of suitable habitat conditions on the Forest. The suitability of the GMNF for bald eagles likely will increase in the future as trees adjacent to large water bodies become older, larger, and more suitable for perching and nesting. Nothing contained in the revised Forest Plan diminishes potential suitability of nesting habitat for bald eagles on the GMNF.

SC 32100-1e	BECAUSE FOREST MANAGEMENT CHANGES TO SUPPORT THESE SPECIES AND OTHER TOP PREDATORS COULD TAKE DECADES
	Response: A commenter wrote, "Obviously it could take decades for changes in forest management to support a population of wolves or other top predators. Why is the Forest Service not planning now for such a development?" All the responses in this section (PC 32100-1 through SC 32100-1d) address habitat concerns, evidence of occurrence, and likelihood of re-established populations for wolves, cougars, and lynx in Vermont and on the GMNF. As described above, in the FEIS, and in the Biological Evaluation, no aspect of management prescribed in the revised Forest Plan precludes the return of these species to the GMNF or in any way diminishes the potential suitability of habitat conditions on the Forest. The revised Forest Plan provides for construction of up to five miles of new roads (Appendix D, Proposed and Probable Practices: p. D-4). However the remote, core areas of the GMNF that are of greatest importance to species like the wolf, cougar, and lynx will remain largely un-fragmented forest dominated by mature and older northern hardwood forest stands that experience low levels of human activity. Management under the revised Forest Plan should enhance the potential prey base for these species by maintaining and enhancing diversity of habitat and increasing diversity and abundance of prey. The suitability of the GMNF for bald eagles likely will increase in the future as trees adjacent to large water bodies become older, larger, and more suitable for perching and nesting. Forest management cannot accelerate growth of these trees. The Forest Service cannot control or manage other potentially limiting habitat features, such as climate, snowfall, competition from other carnivores, or habitat features outside of the GMNF land base.
PC 32100-2:	**The Forest Service should include the golden-winged warbler and New England cottontail in the Biological Evaluation and/or Final EIS listing of Non-Threatened, Endangered, and Sensitive species of viability concern.**
	Response: A commenter expressed disappointment that the golden-winged warbler and New England cottontail are not included in analyses in the EIS or in the Biological Evaluation (BE). During the Forest Plan revision process, the Forest Service considered and evaluated many species of potential viability concern. This evaluation included analyses of populations, habitats, and potential effects of management activities on federally listed threatened or endangered (T&E) species and Regional Forester sensitive species (RFSS) in sections 3.8, 3.9, and BE (Appendix E) of the FEIS; Section 3.9 of the EIS included equivalent analyses of other species of potential viability concern that are not T&E species or RFSS. As the commenter acknowledged, neither golden-winged warbler nor New England cottontail are T&E species or RFSS, therefore these species were considered in the process for inclusion as species of potential viability concern in section 3.9. The golden-winged warbler and New England cottontail are both species of early successional habitats, such as openings in deciduous forests that follow logging, fire, or other disturbance; second-growth woods; old fields or overgrown pastures with few trees and a dense understory of forbs, grasses, or ferns; and idle agricultural lands. Both species have undergone significant population decline in the New England region caused by loss of habitat, especially through successional change and changing land practices (Confer 1992, Litvaitis 1993, DeGraaf and Yamasaki 2001, Buehler et al. 2005). The

	project file includes more-detailed literature reviews for these species (USFS 2001, USFS 2003d). The assembled panel of regional wildlife experts concluded although golden-winged warblers occur and breed near the GMNF, they are not known to breed on the Forest. The likelihood of New England cottontails occurring on the GMNF currently is negligible and it will remain so without reintroduction (USFS 2001, SVE Bird Panel 2002, SVE Mammal Panel 2002, USFS 2003d). The Vermont Fish and Wildlife Department reached similar conclusions regarding the status of these species in Vermont (VFWD 2005). The VFWD identified the golden-winged warbler as one of the avian species of greatest conservation need in Vermont although unable to cite specific information for Vermont beyond North American Breeding Bird Survey data (Sauer et al. 2003) and summaries from Partners in Flight (Hodgman and Rosenberg 2000, Rosenberg and Hodgman 2000). VFWD (2005) listed the New England cottontail as one of the mammal species of greatest concern, although describing it as rare and possibly extirpated in Vermont. This species was abundant in Vermont in the 1940s, but last documented in 1946. The Forest Service acknowledged the importance of early successional habitats by identifying them in the DEIS and FEIS as one of four indicators to be analyzed for wildlife and wildlife habitat (see response to SC 22000-21c, PC 32500-14, PC 32600-4). Implementation of the Selected Alternative should provide increased acreage of early successional habitats, thus improving habitat conditions for these species (FEIS section 3.6, Wildlife and Wildlife Habitat). Recovery of the New England cottontail to population levels where it returns to the GMNF is unlikely to occur without substantial habitat change and management effort outside of GMNF lands. Although the likelihood of golden-winged warblers occurring on the GMNF as breeding birds may be greater, such an event probably will require greater management and conservation action than can be provided solely by the Forest Service on GMNF lands (USFS 2001, SVE Bird Panel 2002, SVE Mammal Panel 2002, USFS 2003d).
SC 32100-2a	TO BETTER REPRESENT AN ARRAY OF SPECIES ASSOCIATED WITH DECLINING REGENERATION AND YOUNG FOREST HABITAT TYPES
	Response: The Forest Service selected five management indicator species (MIS) for the revised Forest Plan. One of these, American woodcock, is an MIS of early successional habitat (DEIS p. 3-104). The New England cottontail currently does not occur on the GMNF, the golden-winged warbler probably does not occur as a breeding species, and neither is likely to do so during the life of the revised Forest Plan (see response to PC 32100-2). Thus, neither species is suitable as an MIS or as a less formal indicator or representative of early successional habitat on the Forest.
PC 32100-3:	**The Forest Service should actively manage vegetation to provide habitat for known declining Threatened, Endangered, and Sensitive species, species of concern, or priority species such as the golden winged warbler, American woodcock, and New England cottontail.**
	Response: The species identified by this commenter are all early successional species. The Forest Service acknowledged the importance of early successional habitats by identifying them in the DEIS and FEIS as one of four indicators to be analyzed for wildlife and wildlife habitat (see response to SC 22000-21c, PC 32500-14, PC 32600-4). Implementation of the Selected Alternative should provide increased acreage of early successional habitats,

	thus improving habitat conditions for these species (FEIS section 3.6, Wildlife and Wildlife Habitat). The commenter pointed out that during recent years, the Forest Service has focused substantial management attention and effort to assess "… alleged, but unsubstantiated, impacts to TES species [Indiana bat] thought to use mature forest habitats.... However, no correspondingly rigorous initiatives were implemented to address known and scientifically justified concerns regarding habitat needs of declining … priority species [that] require early successional habitats." The Forest Service focused considerable attention on the Indiana bat because new information indicated that the federally endangered Indiana bat might occur on the GMNF. In accordance with the provisions of the Endangered Species Act, the Forest Service conducted an analysis of this new information and potential effects that Forest Service management might have on Indiana bats. These analyses concluded with formal consultation with the US Fish and Wildlife Service (USDA 1999, USFWS 2000a, 2000b, USDA 2001) and amendment of the 1987 Forest Plan (USDA 2002). The Forest service acknowledges that the species mentioned by the commenter (golden-winged warbler, American woodcock, and New England cottontail) are sources of concern for wildlife biologists and resource managers (see responses to PC 32100-2 and SC 32100-2a; also see Hodgman and Rosenberg 2000, Rosenberg and Hodgman 2000, TNC 2002, Kelly 2004). None of these species is federally listed under the Endangered Species Act, therefore they were not included in the above-mentioned consultation with the US Fish and Wildlife Service. The Forest Service acknowledged the importance of early successional habitats by identifying them in the DEIS as one of four indicators to be analyzed for wildlife and wildlife habitat (see response to SC 22000-21c, PC 32500-14, PC 32600-4) (DEIS p. 3-97). Implementation of the revised Forest Plan should provide increased acreage of early successional habitats, thus improving habitat conditions for these species. Additionally, the Selected Alternative includes one of these species, American woodcock, as one of its management indicator species (MIS) (FEIS section 3.6, Wildlife and Wildlife Habitat).
PC 32100-4:	**The Forest Service should more closely examine and monitor the rare and endangered plant species found on the GMNF**
SC 32100-4a	BECAUSE THE LARGE TRACTS OF LAND MAKE THE GMNF AN IDEAL PLACE TO STUDY LOCAL FLORA AND TRACK POPULATION SIZE
SC 32100-4b	BECAUSE LARGE, RELATIVELY UNDISTURBED TRACTS OF LAND ARE NOT AVAILABLE ELSEWHERE FOR SCIENTIFIC STUDY
	Response: Forest Service Manual (FSM) 2670 direction requires that the agency work with the US Fish and Wildlife Service (USFWS) and state agencies to protect rare and endangered species and manage habitat to support their viability. In addition, the FSM also requires the Forest Service to examine proposed projects on the Forest to determine if management actions may lead to loss of viability or trends toward federal listing. The Green Mountain National Forest, with Vermont Nongame and Natural Heritage Program (VNNHP), New England Wildflower Society, and a cadre of volunteers, inventory and monitor rare and endangered plants found on the Forest. Inventories of potential rare plant habitat on the Forest were conducted by VNNHP and the Forest Service during the 1990s (Burbank 2004). The Forest Service has hosted researchers studying rare plants and

	will continue to encourage researchers to study rare plants on the Forest under the revised Forest Plan. All known locations of rare plants are tracked in a Geographic Information System and in a database. These locations are monitored periodically and their health will be evaluated every five years (revised Forest Plan Chapter 4, Table 4.1-7, p. 121). A comprehensive species evaluation process was conducted to evaluate the state of knowledge of rare and endangered species on the GMNF for plant revision (FEIS Section 3.9.1). VNNHP continues to conduct state-wide inventories of different natural community types, and provides information to the Forest Service on new locations of rare plants found on the GMNF. Additional inventories will be conducted as necessary for site-specific project analyses.
PC 32100-5:	**The Forest Service should evaluate and state the degree of fragmentation that will result from the proposed Forest Plan.**
SC 32100-5a	BECAUSE MANY THREATENED, ENDANGERED AND SENSITIVE SPECIES AND REGIONAL FORESTER'S SENSITIVE SPECIES ARE SENSITIVE TO FRAGMENTATION
SC 32100-5b	BECAUSE THE DRAFT EIS STATES THAT FRAGMENTATION DOES NOT VARY BY ALTERNATIVE
SC 32100-5c	BECAUSE THE DRAFT EIS STATES IN SEVERAL PLACES THAT FRAGMENTATION WILL HAVE AN IMPACT ON THE VIABILITY OF SPECIES THAT ARE SENSITIVE TO FRAGMENTATION
	Response: Most of the concerns of this commenter stem from different interpretations of the term "fragmentation," exacerbated by confusing use of the word in the DEIS and Biological Evaluation (BE). The term "fragmentation" is used differently by different people, or in different situations. "Forest fragmentation," as it is used in the FEIS and BE, refers to breaking up contiguous tracts of forest land with permanent or long-term changes of forest to non-forest uses (after Rosenberg et al. 1999, 2003). These non-forest uses include urban, commercial, and industrial development; construction of housing; agriculture; gravel pits and other mineral extraction facilities; roads, golf courses, ski areas, campgrounds, and other developed recreational facilities; and permanent upland openings for wildlife. By this definition, forest fragmentation generally does not include temporary openings created by timber harvest, other vegetation management activities, or natural events that create temporary breaks in the forest canopy. These temporary openings are regenerating forest stands that will advance through seral or successional stages to older forest types. Another commenter requested that the Forest Service change its definition and use of the term "fragmentation" to differentiate between forest fragmentation and other actions or events that cause temporary breaks in forest canopy (see response to PC 32500-6, SC 32500-6a, and SC 32500-6b). The Forest Service agrees with this second commenter and has clarified this distinction throughout the FEIS and BE. When stating that "each alternative varies little from the existing condition on the Forest" relative to fragmentation, the Forest Service referred both to forest fragmentation (permanent or long-term change of forest land to non-forest uses), as well as to creation of temporary openings of regenerating forest stands. The GMNF land base includes developed recreation facilities in several locations (for example, Hapgood Pond and Grout Pond campgrounds, and Texas Falls Recreation Area) and allocates 2,889 acres and 518 acres to management areas for alpine ski areas and ski area expansion, respectively. The GMNF also includes permanent roads, many of which are town and State

	highways. Appendix D of the revised Forest Plan (Proposed and Probable Practices) lists anticipated levels of development during the first 10 years of implementation of the revised Plan (for example, construction of 0-5 miles of new roads, reconstruction of 5-10 miles of local roads, rehabilitation of 200-400 miles of trails). Management actions carried out at these levels under any of the alternatives are unlikely to create or advance forest fragmentation from these kinds of sources. Similarly, the acres of temporary breaks in mature forest canopy created through forest regeneration activities varied little by alternatives (ranging from 5% to 7% of the GMNF; see Tables 3.5-16 through 3.5-20 in Vegetation section 3.5 of the FEIS). As described in the FEIS and BE, forest fragmentation, particularly creation of roads and residential or commercial development, can be a serious threat to species like wolves, cougars, and lynx in some parts of their range. Although these species do not currently occur on the GMNF, the commenter states that forest fragmentation will preclude the availability of suitable habitat on the GMNF, thus preventing their return through natural colonization or introduction. As described above in this response, true forest fragmentation of this sort is unlikely to be a limiting factor on the GMNF at present or in the foreseeable future. As reported in section 3.9 of the FEIS and Appendix E (Biological Evaluation), substantial obstacles beyond fragmentation on the Forest challenge the return of species like wolves, cougars, and Canada lynx to the GMNF. In fact, introduction of temporary openings (early successional forest stands) in and adjacent to large, contiguous tracts of un-fragmented, forest habitat, however, could enhance potential core habitat for each of these species by increasing diversity of habitat and diversity and availability of potential prey. Canada lynx, in particular, forage extensively in early successional habitat. As described in the draft and FEIS and the BE, some species of wildlife may be displaced by temporary openings in mature forest cover. These breaks in continuous habitat occasionally are described as “habitat fragmentation” in scientific literature, particularly those addressing forest birds and amphibians, although these papers typically refer to openings on a much larger scale that those occurring on the GMNF. For example, Rudnicki and Hunter (1993) and Hagan et al. (1996) analyzed habitat “fragmentation” effects of large-scale timber harvest on birds in industrial forests of Maine. For those species and situations on the GMNF where such openings may affect a species movements (for example, Jefferson salamander and West Virginia white butterfly), the potential effects are presented and addressed in the BE or Chapter 3.9 of the FEIS (Species of Potential Viability Concern), as appropriate. As described elsewhere, other species of wildlife, particularly birds and mammals, would benefit from introduction of early successional habitat (see responses to PC 32500-14 and SCs 32100-1d and 32100-1e).
PC 32100-6:	**The Forest Service should review available scientific literature on regionally declining wildlife populations associated with early successional forest habitat, particularly golden-winged warbler and New England cottontail.**
	Response: The Forest Service is aware of and has reviewed an extensive body of literature that addresses the decline of early successional habitat in the Northeast, including DeGraaf and Yamasaki (2001), Litvaitis (2001), Hunter et al. (2001), and other references cited by the commenter. In particular,

	Thompson et al. (2001) and Litvaitis (2003) present collected papers that address conservation issues related to early successional habitat. During the Forest Plan revision process, the Forest Service also reviewed and assessed the local and regional status of many species of wildlife, including the golden-winged warbler and New England cottontail and other early successional species (see responses to PC 32100-2, PC 32100-3, and SC 32100-6). Scoping early in the Forest Plan revision process identified insufficient abundance and quality of early successional habitat as public concern. This was a statewide concern, not merely for the GMNF. The Forest Service identified early successional habitat as one of four major indicators for evaluating potential effects of alternatives on wildlife and wildlife habitat. See responses to SC 22000-21c, PC 32500-14, and PC 32600-4.
SC 32100-6a	TO REASSESS THEIR ELIGIBILITY FOR NON-THREATENED, ENDANGERED, AND SENSITIVE SPECIES OR REGIONAL FORESTER SENSITIVE SPECIES LISTS
	Response: A commenter requested that the Forest Service consider regionally declining wildlife populations associated with early successional forest habitat, particularly the golden-winged warbler and New England cottontail, as potential candidates for Regional Forester sensitive species or other species of potential viability concern. During the Forest Plan revision process, the Forest Service considered and evaluated many species as potential MIS and species of potential viability concern. This evaluation included analyses of populations, habitats, and potential effects of management activities on threatened, endangered, and Regional Forester sensitive species (Chapters 3.8, 3.9, and Appendix E of the DEIS) and other species of viability concern (Chapter 3.9 of the DEIS). After reviewing the conclusions of the assembled panel of regional wildlife experts (USFS 2001, SVE Bird Panel 2002, SVE Mammal Panel 2002, USFS 2003d), the Forest Service decided not to include these species for specific focus at this time. Instead, the Forest Service will focus more generally on early successional habitat. See also responses to PC 32100-2 and PC 32100-3.
PC 32100-7:	**The Forest Service should analyze the landscape context for management of the Indiana bat.**
SC 32100-7a	TO INCLUDE THE OPEN LANDS OF THE CHAMPLAIN VALLEY
	Response: The revised Forest Plan, sections 3.7 (Threatened and Endangered Species) and 3.8 (Species of Potential Viability Concern) of the FEIS, and the BE (FEIS Appendix E) acknowledge that analysis of potential habitat-related management effects relative to Indiana bats must focus on habitats essential to four major aspects of the species' natural history: summer roosts, especially maternity roosting areas; summer foraging habitat; roosting and foraging habitat near hibernacula where bats swarm immediately prior to hibernation; and the hibernacula themselves. Hibernacula used by Indiana bats typically are caves or abandoned mines, which in Vermont tend to be in mountainous terrain; therefore much of the roosting habitat located near those hibernacula also is in mountainous areas. The revised Forest Plan defines areas on the GMNF where Indiana bat maternity roosting sites are most likely to occur during the non-hibernating period (April 15 through September 30) as: • Lands adjacent to the Champlain Valley or in the Valley of Vermont (adjacent to Route 7) that are below 800 feet elevation). • Other areas specifically identified by the US Fish and Wildlife Service. The revised Forest Plan also recognizes the importance of habitat within five miles of known Indiana bat hibernacula. Revised standards and guidelines in

	the revised Forest Plan provide protection against direct effects of management activities on Indiana bats and direction for protection and enhancement of potential roosting habitat. The Forest Service developed these revisions in consultation with bat experts from the US Forest Service, the US Fish and Wildlife Service, the Vermont Fish and Wildlife Department, and the University of Vermont. The GMNF lands identified in the revised Forest Plan as those where Indiana bats are likely to occur is consistent the landscape-scale view provided in the cumulative effects analysis in section 3.8 of the FEIS and the BE. In summary, the Champlain Valley, to the north and west of the GMNF, represents the most suitable summer habitat for Indiana bats in Vermont, due to the mild climate and favorable mix of agricultural and other open lands and forest conditions that provide a suitable range of summer roosting and foraging habitats. Further, the suitability of Indiana bat habitat in this region should remain high unless the area experiences dramatic changes in land use patterns. It is uncertain whether the lower-elevation portions of the GMNF can add significantly to the existing roosting and foraging conditions in the Northeast region. The relative importance of GMNF lands to Indiana bats can change in time through acquisition of additional lands that provide foraging or roosting habitat or that are near hibernacula, identification of additional hibernacula inhabited by Indiana bats, or new information about the abundance, distribution, or general biology of Indiana bats in Vermont. See also response SC 32100-8a.
PC 32100-8:	**The Forest Service should protect all potential roosting areas for the Indiana bat.**
SC 32100-8a	IN LOWER ELEVATION AREAS
	Response: The Forest Service made additional revisions to wildlife reserve tree standards and guidelines in the revised Forest Plan (pp. 27-29). Wildlife reserve trees include trees used or potentially usable by Indiana bats as roosts. The Forest Service also will concentrate protection efforts for Indiana bat roost trees and roosting habitat on forest lands within five miles of known hibernacula and lands adjacent to the Champlain Valley or the Valley of Vermont (adjacent to Route 7) that are below 800 feet elevation. The Forest Service developed these changes in consultation with bat experts from the US Fish and Wildlife Service, the Vermont Fish and Wildlife Department, and the University of Vermont. This is consistent with findings of recent research in the Champlain Valley in Vermont and New York (Watrous et al., *in press*; US Forest Service and Vermont Fish and Wildlife Department, unpublished data). As one of the final steps in the Plan revision process, the Forest Service will consult with the US Fish and Wildlife Service on potential effects that implementation of the revised Forest Plan might have on individuals, populations, and habitat of federally listed threatened, endangered, and proposed species. This consultation will include thorough evaluation of protections afforded to Indiana bats and potential effects that forest management activities may have on them. See also response to SC 32100-7a.
PC 32100-9:	**The Forest Service should improve Indiana bat summer habitat by creating openings and patches.**
SC 32100-9a	TO REDUCE FOREST CANOPY CLOSURE IN ORDER TO SHIFT OVERALL FOREST CANOPY CLOSURE TO THE OPTIMAL RANGE FOR THESE

	CONDITIONS
SC 32100-9b	TO CREATE EARLY SUCCESSIONAL HABITAT TO PROVIDE FORAGING HABITAT
SC 32100-9c	TO AID IN THE RECOVERY EFFORTS OF THE INDIANA BAT BY PROVIDING A MOSAIC OF FORAGING AND ROOSTING HABITAT ON THE GMNF
	Response: Recent research indicates that the only limited portions of the GMNF are likely to provide suitable roosting and foraging habitat for Indiana bats during the non-hibernating period (April 15 through September 30). See responses to SC 32100-7a and SC 32100-8a. Within those lands where Indiana bats are most likely to occur, Forest-wide standards and guidelines for wildlife reserve trees will protect suitable and future roost trees and snags revised Forest Plan pp. 27-29). Site-specific vegetation management activities may be appropriate for enhancing foraging habitat. Any such habitat enhancement activities would be planned and conducted in consultation with bat experts from the US Fish and Wildlife Service, the Vermont Fish and Wildlife Department, and other appropriate partners.

Management Indicator Species (32200)

PC 32200-1:	**The Forest Service should select appropriate Management Indicator Species (MIS).**
	Response: The Forest Service received many and varied comments related to the selection of management indicator species (MIS) for the revised Forest Plan. These comments demonstrated the diverse opinions regarding wildlife, habitat management, and the course that the Forest Service should follow during the next planning cycle and beyond, particularly relative to the selection of MIS and the habitats and conditions selected for monitoring with MIS. Although different aspects of these comments are separated into 13 subconcerns, the concerns and responses are inter-related. Accordingly, the responses in this section should be taken together. As presented in the Code of Federal Regulations [36 CFR 219.19(a)(1)], the Forest Service shall select management indicator species “to estimate the effects of each alternative on fish and wildlife populations,” and state the reasons why each was selected. Further, “These species shall be selected because their population changes are believed to indicate the effects of management activities. In the selection of management indicator species, the following categories shall be represented where appropriate: Endangered and threatened plant and animal species identified on State and federal lists for the planning area; species with special habitat needs that may be influenced significantly by planned management programs; species commonly hunted, fished, or trapped; non-game species of special interest; and additional plant or animal species selected because their population changes are believed to indicate the effects of management activities on other species of selected major biological communities or on water quality.…” The Forest Service Manual (FSM 2621.1) includes similar direction for selection of MIS: “Select management indicators for a forest plan or project that best represent the issues, concerns, and opportunities to support recovery of federally listed species, provide continued viability of sensitive species, and enhance management of wildlife and fish for commercial, recreational,

	scientific, subsistence, or aesthetic values or uses. Management indicators representing overall objectives for wildlife, fish, and plants may include species, groups of species with similar habitat relationships, or habitats that are of high concern." The Forest Service considered many species as potential MIS for the GMNF. The Forest Plan revision process included analyses of populations, habitats, and potential effects of management activities on threatened, endangered, and Regional Forester sensitive species (sections 3.8, 3.9, and Appendix E of the FEIS) and other species of viability concern (section 3.9 of the FEIS). The Forest Service also conducted a systematic review of the selection, use, and monitoring of MIS included in the 1987 Forest Plan (Toth 2000). Regulations in 36 CFR 219.19 state that MIS "shall be selected because their population changes are believed to indicate the effects of management activities." The Forest Service considers it logical and appropriate, therefore, to focus selection of MIS based on the management activities that may result in a change in species population and that differ between alternatives in the planning process. Accordingly, the Forest Service selected five MIS for the GMNF: white-tailed deer, gray squirrel, American woodcock, ruffed grouse, and brook trout (DEIS p. 3-104). The selection of these species is consistent with regulations pertaining to selection of MIS (CFR 36 219.19) and also with other national forests within Region 9. Chapter 3.6 of the FEIS and Appendix C of the revised Forest Plan present the rationale for selection of these MIS for the revised Plan, as well as rationale for disposition of MIS included in the1987 Forest Plan. The relationship between habitats provided on the GMNF and MIS population trends will be monitored in cooperation with State fish and wildlife agencies, to the extent practicable. Population trends may be determined by a variety of methods considering best available science, including, but not limited to, data and analysis relating to habitat.
SC 32200-1a	TO REPRESENT ALL MAJOR HABITAT TYPES ON THE GMNF
	Response: MIS are not selected merely to represent all major habitat types on a national forest. Rather, MIS are selected to evaluate key aspects of land management decisions contained in Forest Plans. Population trends of selected MIS should be directly influenced by changes in habitat composition, structure, or function due to ecological processes and/or human activities that result from management decisions. Habitat changes may be the result of active management (for example, timber management, trail maintenance or construction, campground improvements, or habitat protection for threatened species), or management decisions that regulate active management (for example, designation of Wilderness, allocation of land to Ecological Special Area, or changes in trail use designations). MIS selected for the GMNF represent forest types or other conditions that are expected to change over time, particularly during the life of a Forest Plan: aspen-birch, oak-pine, early successional habitat, aquatic-riparian habitat, and deer wintering habitat. The Forest Service chose not to select MIS for habitat conditions that will not be subject to active habitat management or those that are not expected to undergo measurable changes during the planning cycle. Chapter 3.6 of the FEIS and Appendix C of the revised Forest Plan present the rationale for selection of these MIS for the revised Forest Plan, as well as rationale for disposition of MIS included in the1987 Forest Plan. Also see the response to

	SC 32200-1g.
SC 32200-1b	BECAUSE THE FIVE PROPOSED MANAGEMENT INDICATOR SPECIES CAN BE LEGALLY HUNTED WHICH MAY HAVE GREATER INFLUENCE OVER SPECIES POPULATIONS THAN FOREST SERVICE MANAGEMENT
SC 32200-1n	TO INCLUDE NON-GAME SPECIES
	Response: The Code of Federal Regulations [36 CFR 219.19(a)(1)] lists several categories of species to consider as MIS, including "species commonly hunted, fished, or trapped." The Forest Service Manual [FSM 2621.1(2)] directs consideration for "those species in demand for recreational, commercial, or subsistence use." The National Forest Management Act (NFMA) and federal regulations (CFR) provide no specific guidance as to the appropriate number of MIS for a National Forest, or from which categories they should be selected. Nor do they specify that game species must be selected, only that they should be considered. A commenter specifically fears that population trends for game species may be influenced more by hunting and angling activity than by Forest habitat manipulation. It is difficult, if not impossible, to identify species that are not affected by activities other than Forest Service habitat management activities and by events beyond the National Forest boundaries, whether they are game or non-game species, migratory or non-migratory, terrestrial or aquatic, high- or low-elevation, mammals, birds, fish, amphibians, or invertebrates. For example, weather affects all wildlife species, either in the form of severe events or as it affects the quality and abundance of cover and forage. Migrant species are subject to loss of winter habitat as well as weather-related effects on wintering grounds or during migration. The Forest Service is not aware of species that would function better as MIS for the habitats of interest, nor did commenters propose alternative species (beyond reinstating all MIS from the 1987 Forest Plan, see responses to PC 32200-1, SC 32200-1d, and SC 32200-1h). The most important criteria for potential MIS are that they are linked to the habitat or condition for which they are selected, they can be surveyed, and population data are available. Separation of Forest Service management effects from effects of hunting, weather, migration, wintering habitat, or any other factors that can influence MIS is among the challenges related to the MIS process, and one to be addressed in protocols applied for surveying and sampling. The Forest Service is developing a more detailed Monitoring Implementation Guide to accompany Chapter 4 of the revised Forest Plan (see responses under PC 22000-43). It will be available soon after the revised Forest Plan is published. Traditional game species do present some major advantages as MIS. In particular, biologists frequently have more extensive historical population data, established survey protocols, and natural-history knowledge for game species than for many non-game species. In addition, public concern and interest frequently are high for these species. Scoping early in the Forest Plan revision process specifically identified white-tailed deer as public concern for the GMNF and for Vermont, in general (FEIS section 3.6). In summary, the Forest Service selected the best available MIS to represent forest types or other conditions that are of primary interest under the revised Forest Plan and that are expected to change over time, particularly during the life of the revised Forest Plan.
SC 32200-1c	BECAUSE THE SELECTED SPECIES DO NOT MEET THE

	REQUIREMENTS IN THE NATIONAL FOREST MANAGEMENT ACT
	Response: Commenters expressed the opinion that MIS selected by the Forest Service for the revised Forest Plan are inadequate. Although only a few commenters described the selected MIS specifically as inadequate to satisfying legal obligations of the National Forest Management Act (NFMA), all of the subconcerns in this section (SC 32200-1a through 32200-1p) address why commenters thought the Forest Service should have chosen more or different MIS. The reader is directed to each of those responses.
SC 32200-1d	BECAUSE DECREASING THE NUMBER OF MIS FROM 25 TO FIVE PROVIDES AN INADEQUATE NUMBER OF MANAGEMENT INDICATOR SPECIES
SC 32200-1h	BECAUSE THE FOREST SERVICE HAS CHANGED FROM A SMALL NUMBER OF MOSTLY COMMON SPECIES THAT ARE FAIRLY WEAK INDICATORS OF HABITAT ALTERATION TO A VERY SMALL NUMBER OF VERY ABUNDANT SPECIES THAT ARE USELESS AS INDICATORS OF HABITAT CHANGE, SHORT OF CATASTROPHIC CIRCUMSTANCES
	Response: The National Forest Management Act (NFMA) and federal regulations (CFR) provide no specific guidance as to the appropriate number of MIS for a National Forest, nor do they specify levels of abundance that are appropriate for individual MIS. The 1987 Forest Plan for the GMNF included 14 MIS for 15 habitat/MIS relationships (the chestnut-sided warbler served as MIS for regenerating northern hardwoods and for regenerating oaks). The Forest Service selected five MIS for the revised Forest Plan: white-tailed deer, gray squirrel, American woodcock, ruffed grouse, and brook trout. Appendix C of the revised Forest Plan and Chapter 3.6 of the FEIS present the rationale for selection of MIS for the revised Forest Plan, as well as rationale for disposition of individual MIS included in the1987 Forest Plan. A commenter noted that the Forest Service determined that 36 CFR 219.19(a)(1) requires the designation of only five MIS in the revised Forest Plan, whereas in the 1987 plan the Forest Service determined that the same regulation required the designation of 14 MIS to adequately assess whether the NFMA species viability requirements were being satisfied. This commenter cited specific court decisions leading to the conclusion that the Forest Service “will be required to show not only that its new policy is reasonable, but also to provide a reasonable rationale supporting its departure from prior practice." A commenter objected to the selected MIS because they changed from “a small number of mostly common species that are fairly weak indicators of habitat alteration, to a very small number of very abundant species (with the exception of naturally reproducing brook trout)” that are “wholly inadequate as sensitive indicators of ecosystem health” and that can only detect habitat change of “catastrophic” proportions. The Forest Service agrees with commenters that the relationship between changes in habitat conditions and population parameters of individual species can be difficult to establish (see other responses in this section). Landres et al. (1988), Niemi et al. (1997), and others have demonstrated that using MIS to evaluate the effectiveness of management activities has limitations (see response to SC 32200-1j). In addition to difficulties identifying or measuring definitive links between changes in habitat and MIS population parameters, detecting population changes or ascertaining the magnitude of changes that a

	population must undergo for changes to be detectable or meaningful also can be problematic. For the revised Forest Plan, the Forest Service selected a smaller number of species to focus on habitats related to key issues, habitats subject to active structural manipulation, and habitats expected to change over time, particularly during the life of the revised Forest Plan (see FEIS section 3.6). The revised Forest Plan does not include MIS for habitats that receive high levels of protection and are subject to little or no active habitat manipulation, such as wetlands, rocky cliffs, or spruce-fir krummholz forest. Each of the five species selected as MIS for the revised Forest Plan also was included as an MIS in the 1987 Plan. FEIS Section 3.6 presents a discussion of population trend information for these selected MIS. The Forest Service considers it unlikely that the adequacy of these five species as MIS has declined appreciably during implementation of the 1987 Plan. MIS are not intended to be indicators of ecosystem health. Rather, MIS are selected because their population changes are believed to indicate the effects of management activities. In summary, and as discussed throughout this section of comments and responses, the Forest Service is confident that it has selected appropriate species as indicators for the habitats to be monitored. Importantly, MIS are only one of several mechanisms available for evaluating changes to wildlife populations. Implementation of the revised Forest Plan will include monitoring of many other species and habitats, including but not limited to tracking the quantity and quality of key habitats; threatened, endangered, and sensitive plants and animals; other species of viability concern; species of local interest; surveys of rare communities; and stream surveys to assess fish and other aquatic species, as well as structural components of perennial streams. The Forest Service also concluded that focusing on a smaller number of MIS and key issues will be more cost effective and lead to a better and more efficient decision-making process.
SC 32200-1e	BECAUSE FOUR OF THE MANAGEMENT INDICATOR SPECIES ARE NEO-TROPICAL SONGBIRDS AND ONE IS A GAME BIRD
SC 32200-1f	BECAUSE NO MAMMALS, NO AQUATIC SPECIES, NO PLANTS AND ONLY ONE RESIDENT SPECIES ARE PROPOSED AS MANAGEMENT INDICATOR SPECIES
	Response: MIS selected by the Forest Service for the revised Forest Plan are white-tailed deer, gray squirrel, American woodcock, ruffed grouse, and brook trout. None of these species is a neo-tropical songbird, two are game birds, two are mammals, and one is aquatic. All except the American woodcock are year-round residents of Vermont. Plant species that would provide the greatest insight and indication regarding effects of management activities under the revised Forest Plan are the forest trees themselves. Qualities of interest include species composition and age distribution of forest types (included as Objectives under Goal 2 of the revised Forest Plan pp. 11-12), as well as retention of suitable and adequate roost, nest, den, and mast-producing species (addressed by Forest-wide standards and guidelines in the revised Forest Plan). The appropriateness and implementation of standards and guidelines and the validity of underlying assumptions will be a major focus of the monitoring and evaluation program (See Chapter 4 of the revised Forest Plan and responses under PC 22000-43

	for greater detail on Monitoring and Evaluation). Uncommon and rare plants or plant communities make poor MIS for the same reasons that extirpated, uncommon, and rare animal species make poor MIS (see responses to PC 32000-2, SC 32200-1o, and SC 32100-2a).
SC 32200-1g	TO REPRESENT MAJOR COMMUNITY TYPES INCLUDING MATURE AND OVER MATURE NORTHERN HARDWOODS, MATURE AND OVERMATURE SOFTWOODS, MARSHY WETLANDS, REMOTE CLIFFS, AND MATURE AND OVERMATURE PIONEERS BECAUSE THE SPECIES THAT RELY ON THESE HABITATS WILL HAVE NO POPULATION ASSESSMENT
SC 32200-1p	TO INCLUDE MORE SPECIFIC HABITAT TYPES SUCH AS HIGH ELEVATION HABITATS, WETLANDS, AND VERNAL POOLS
	Response: See the response to PC 32200-1 for a general discussion of management indicator species (MIS). The National Forest Management Act (NFMA) and federal regulations (CFR) provide no specific guidance as to the appropriate number of MIS for a National Forest, nor do they specify which habitats should be represented, or that all “major community types” should be represented by an MIS. MIS are not intended to be a mechanism for population assessment of species in particular habitat types. Rather, MIS are selected to evaluate key aspects of land management decisions contained in Forest Plans. Population trends of selected MIS should be directly influenced by changes in habitat composition, structure, or function due to ecological processes and/or human activities that result from management decisions. Implementation of the revised Forest Plan will include monitoring of other species and habitats (see response under SC 32200-1d). For the revised Forest Plan, the Forest Service selected a smaller number of species to focus on key habitat issues, and to focus on habitats subject to active structural manipulation. The revised Forest Plan does not include MIS from the 1987 Plan for habitats that receive high levels of protection or are subject to little or no active habitat manipulation, such as wetlands, remote cliffs, or spruce-fir krummholz forest. Similarly, certain habitats, including many of these named by commenters or represented by an MIS in the 1987 Forest Plan, are unlikely to change measurably during the life of the revised Forest Plan. This lack of anticipated change diminishes the value of using MIS for measuring responses to management. For example, high-elevation habitats on the GMNF are in designated Wilderness or allocated to MAs that preclude management activities that would result in substantial alteration of these habitats (for example, Wilderness Study Area, Remote Backcountry Forest, Alpine/Subalpine Special Area, Appalachian Trail, Long Trail). Wetlands, including vernal pools and other seasonal pools, are specifically protected by Goals, standards, and guidelines (see responses to SC 22000-2d, SC 22000-4e, and PC 31100-1). Mature and over-mature northern hardwood forest currently dominates the GMNF, and it will continue to dominate the Forest during the current planning cycle and beyond (see responses to PC 32600-10 and SC 32600-10a). The Forest Service will continue to directly monitor trend in the abundance of these habitats, but will not use a MIS as a surrogate to do so. The 1987 Plan included two MIS for mature and overmature softwoods: blackpoll warbler and white-tailed deer. The blackpoll warbler is primarily a

	species of spruce-fir krummholz habitats on the GMNF. This habitat is subject to minimal management activity and unlikely to change during the life of the revised Forest Plan. In addition, blackpoll warblers will be monitored along with Bicknell's thrush and other high-elevation bird species (the Mountain Birdwatch is a conservation biology program administered by the Vermont Institute of Natural Science; see *http://www.vinsweb.org*). Therefore, the Forest Service determined it unnecessary to retain blackpoll warbler as an MIS in the revised Forest Plan. White-tailed deer are retained as MIS in the revised Forest Plan, although the specific habitat is identified as "deer wintering habitat" instead of "mature and over-mature softwoods." Chapter 3.6 of the FEIS and Appendix C of the revised Forest Plan present the rationale for selection of MIS for the revised Forest Plan, as well as rationale for disposition of MIS included in the1987 Forest Plan.
SC 32200-1i	BECAUSE NONE OF THE SPECIES CHOSEN IN THE DRAFT FOREST PLAN ARE PARTICULARLY SENSITIVE TO HABITAT CHANGE AND WOULD DO LITTLE TO ILLUMINATE THE CHANGE IN POPULATION NUMBERS
	Response: See response to PC 32200-1 and all associated subconcerns.
SC 32200-1j	BECAUSE THE GOAL SHOULD BE TO FIND SPECIES THAT ARE RELATIVELY EASY TO MONITOR AND SAMPLE, AND THAT ARE SENSITIVE TO HABITAT CHANGES AND REPRESENT THE HABITAT VALUES FOR A LARGE NUMBER OF OTHER SPECIES
	Response: Federal regulations (36 CFR 219.19(a)) require that the Forest Service identify management indicator species (MIS) to be used to evaluate the impacts of land and resource management practices in national forests. The Forest Service concurs with the commenter that MIS should be sensitive to habitat changes, represent the habitat values for a large number of other species, and able to be monitored effectively and relatively easily. The Forest Service also recognizes the limitations associated with MIS, as pointed out by Landres et al. (1988), Niemi et al. (1997), Hannon and McCallum (2004), and others. In theory, changes in the populations of MIS are believed to be related to the effects of management activities on the biological community. Unfortunately, there are very few species for which this relationship can be strongly established. Individual species can adapt to and thrive under conditions that may not match their optimal habitat conditions. Identifying population levels and trends also can be problematic. Separation of Forest Service management effects from effects of hunting, weather, migration, wintering habitat, or any other factors that influence MIS presents additional challenges. The Forest Service selected the most appropriate MIS possible that are linked to habitat conditions likely to be affected most by management under the revised Forest Plan. Chapter 3.6 of the FEIS and Appendix C of the revised Forest Plan present the rationale for selection of MIS for the revised Forest Plan, as well as rationale for disposition of MIS included in the1987 Forest Plan.
SC 32200-1o	TO INCLUDE THREATENED, ENDANGERED, OR SENSITIVE SPECIES
	Response: The Forest Service Manual (FSM 2621.1(2)) includes direction that the Service should select federally listed endangered or threatened species as management indicators if the forest or project plan potentially impacts those species, or if opportunities exist to enhance recovery efforts. As described in Chapter 3.8 of the FEIS (Threatened and Endangered Species) and in the Biological Evaluation (Appendix E of the FEIS), the Forest Service analyzed five federally listed, threatened and endangered (T&E) animal species during

	Forest Plan revision: gray wolf, eastern cougar, Canada lynx, Indiana bat, and bald eagle. Of these species, the Indiana bat may be present on the GMNF and may be affected by management actions authorized by the revised Forest Plan. The bald eagle currently is a non-nesting, occasional, seasonal visitor to the GMNF. The other T&E species are not known to occur on the GMNF and are unlikely to do so in the foreseeable future (see responses to PC 32000-1, 32100-1, and associated subconcerns). The Indiana bat would be a poor selection as an MIS for several reasons. Results of recent research demonstrate that Indiana bats are likely to occur in a very limited portion of the GMNF: lower elevations adjacent to the Champlain valley and the Valley of Vermont, as well as around known hibernacula. Forest management, as prescribed in the revised Forest Plan, should result in minimal change to potential Indiana bat habitat on the Forest (see responses to PC 32100-7 and PC 32100-8). Thus Indiana bat are unlikely to occur on most of the GMNF land base, and unlikely to be affected by most management activities conducted on the Forest. In addition, species that do not occur on the GMNF or occur on the Forest rarely or in limited geographical areas of the Forest are not suitable species as MIS, as their numbers may not change measurably regardless of management activity on the Forest. The Biological Evaluation examined potential effects to 78 Regional Forester sensitive species (RFSS), 13 of which are animal species (FEIS Appendix E). The Forest Service determined that the revised Forest Plan and its alternatives will have no impact on the following species: Bicknell's thrush, American peregrine falcon, common loon, boulder beach tiger beetle, two dragonflies (southern pygmy clubtail and harpoon clubtail), and two freshwater mollusks (brook floater and creek heelsplitter). The Biological Evaluation has also concluded that the revised Forest Plan and its alternatives may impact individuals but is not likely to result in a trend to federal listing or loss of viability for the following animal species, as well as all sensitive plant species: eastern small-footed bat, wood turtle, Jefferson salamander, and two dragonflies (forcipate emerald and gray petaltail). Because the Forest Service anticipates no substantial changes in habitat conditions for these RFSS, and no changes in populations or viability as a consequence of management actions, these species do not represent good candidates for MIS as indicators of changing habitats. In addition, abundance, distribution, and trends for rare or uncommon species, which includes all of the T&E and RFSS species, typically are difficult to measure and assess, as these species tend to be widely dispersed across the landscape and easily overlooked. Consequently, these species are not easy or efficient to monitor, when compared to the species selected, and so they are less effective as MIS. Importantly, T&E species and RFSS will not lack for attention because they are not selected as MIS. These species are subject to a high level of management emphasis and planned management programs as mandated by the Endangered Species Act (ESA) and the National Forest Management Act (NFMA). The ESA and CFR 36 219.19 ("*Fish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area.*") provide clear emphasis for appropriate habitat management activities.
PC 32200-2:	**The Forest Service should select management indicator species that**

	have population baseline data available.
SC 32200-2a	BECAUSE POPULATION TRENDS FOR THREE OF THE GMNF SELECTED SPECIES ARE UNCERTAIN
SC 32200-2b	BECAUSE POPULATION WITHOUT BASELINES CANNOT BE PROJECTED AND MONITORED
	Response: Chapter 3.6 of the FEIS (Wildlife and Wildlife Habitat) presents a discussion of available population data for the selected MIS (FEIS section 3.6.1, Existing Condition). Reliable, numerical, population assessment for any species, including MIS selected for the revised Forest Plan, is extremely difficult to obtain. [For example, see Verner (1986, *cited in* Landres et al. 1988), Ladres et al. 1988, Eberhardt and Thomas 1991, Vucetich and Waite 1998, Block et al. 2001, Thompson 2002.] A consideration in selection of MIS for the GMNF was that biologists frequently have more extensive historical population data and natural-history knowledge for game species than for most non-game species. In addition, public concern and interest frequently are high for these species. Rather than attempting to derive precise population estimates, wildlife managers typically resort to various population indices to identify population trends. Even when analyzing trend index data, identification of statistically sound population estimates or trends can be difficult, even with strong data collected consistently over long time series. Chapter 3.6 of the FEIS and Appendix C of the revised Forest Plan present the rationale for selection of MIS for the revised Forest Plan, as well as rationale for disposition of MIS included in the1987 Forest Plan. See also responses to PC 32400-1 and associated subconcerns.
PC 32200-3:	**The Forest Service should report baseline numerical data on population trends or indices in the Final EIS.**
SC 32200-3a	TO ENABLE THE COMPARISON OF FUTURE MANAGEMENT INDICATOR SPECIES MEASUREMENTS ON THE PREFERRED ALTERNATIVE'S ABILITY TO ADDRESS HABITAT NEEDS FOR EARLY SUCCESSIONAL HABITAT ON THE GMNF
SC 32200-3b	BECAUSE INADEQUATE DATABASE WAS USED FOR THE AMERICAN WOODCOCK IN THE FORMULATION OF ALTERNATIVE E'S VEGETATION MANAGEMENT OBJECTIVES
	Response: See response to PC 32200-2. A commenter pointed out errors in citations and additional data that could be used for assessing the current condition of American woodcock. The Forest Service included these revisions in Chapter 3.6 of the FEIS by adding references to the North American singing-ground survey (Kelly and Rau 2005). Additionally, a commenter raised several issues specific to American woodcock and ruffed grouse. The Forest Service recognizes that both of these species occupy a variety of habitats beyond singing grounds used by male woodcock in spring or aspen-dominated habitat, respectively. The Forest Service also decided that these species are linked to habitats that will be foci of management effort under the revised Forest Plan (see responses to SC 32200-6b and SC 32200-7a for additional explanation). The response to SC 32600-3b specifically addresses a request to increase acreage and emphasis on the aspen birch community on the GMNF.
PC 32200-4:	**The Forest Service should collect management indicator species population data.**
SC 32200-4a	TO UNDERSTAND THE EFFECTS OF FOREST SERVICE MANAGEMENT DECISIONS MADE IN THE FOREST PLAN
	Response: The Forest Service will survey and monitor MIS species, as described in Chapter 4 of the revised Forest Plan, and in accordance with the

	National Forest Management Act and associated federal regulations (36 CFR 219.19). Monitoring will include data on individual MIS species, as well as measures of habitat, as appropriate. The expressed purpose of selecting and monitoring MIS is to monitor and understand the effects of management activity. Through application of an adaptive management approach, the Forest Service can adapt management practices, depending on the results of monitoring programs, including the monitoring of MIS.
PC 32200-5:	**The Forest Service should provide a reason and rationale for changing from 14 management indicator species to five management indicator species**
	Response: Chapter 3.6 of the FEIS and Appendix C of the revised Forest Plan present the rationale for selection of management indicator species (MIS) for the revised Forest Plan, as well as rationale for disposition of individual MIS included in the1987 Forest Plan. See also responses under PC 32200-1, particularly SC 32200-1a and SC 32200-1d. In summary, MIS in the revised Forest Plan focus on habitats subject to active structural manipulation, such as creation of temporary openings, regeneration of aspen or oak stands, or enhancement of riparian habitat. Habitat changes that take place through natural processes, like progression through the various seral stages of early successional habitat, will be assessed primarily through the Monitoring and Evaluation program. Similarly, the revised Forest Plan does not carry forward MIS for habitats that receive high levels of protection or are subject to little or no active habitat manipulation, such as wetlands (American bittern, tree swallow) or spruce-fir krummholz forest (described in the 1987 Plan and EIS as mature and over-mature softwoods associated with the blackpoll warbler). These habitats and species will be addressed through the Monitoring and Evaluation Program. See Chapter 4 of the revised Forest Plan and responses under PC 22000-43 for greater detail on Monitoring and Evaluation.
SC 32200-5a	BECAUSE THE FOREST SERVICE IS ABROGATING ITS RESPONSIBILITY TO SELECT AND MONITOR MANAGEMENT INDICATOR SPECIES FOR ALL MAJOR HABITAT TYPES
SC 32200-5b	BECAUSE THE FOREST SERVICE IS SHIFTING TO A HABITAT PROXY APPROACH THAT WILL NOT PROVIDE THE DATA NEEDED TO ASSESS ACTUAL SPECIES VIABILITY AND WHICH VIOLATES THE NATIONAL FOREST MANAGEMENT ACT
	Response: The selection of management indicator species (MIS) for the revised Forest Plan is consistent with rules and regulations pertaining to MIS selection (CFR 36 219.19), with Region 9 direction for identification of MIS, and with MIS selected by other National Forests within Region 9. The commenter states that the Forest Service is abrogating its responsibility to select and monitor MIS for all major habitat types and shifting its species monitoring strategy to a habitat proxy analysis … [that] simply will not provide the data needed to assess actual species viability." MIS are selected because their population changes are believed to indicate the effects of management activities. MIS are not selected to monitor and evaluate viability of individual species or abundance, distribution, or quality of all major habitat types on the National Forest. See also responses in this section for Public Concerns and subconcerns under PC 32200-1 through PC 32200-8.
SC 32200-5c	BECAUSE ONE OF THE REASONS CITED FOR NOT CARRYING SOME

	MANAGEMENT INDICATOR SPECIES FORWARD IS THAT "SOME MANAGEMENT INDICATOR SPECIES ARE INEFFECTIVE AS INDICATORS FOR HABITAT CHANGES IN THEIR REPRESENTED COMMUNITIES" BUT SOME OF THE SELECTED MANAGEMENT INDICATOR SPECIES ALSO SEEM TO FIT THIS DESCRIPTION, PARTICULARLY DEER AND GRAY SQUIRREL
	Response: The Forest Service recognizes the limitations associated with MIS, as pointed out by Landres et al. (1988), Niemi et al. (1997), Hannon and McCallum 2004, and others. In particular, there are few species for which changes in population parameters can be conclusively tied to management effects (see response to SC 32200-1j). The Forest Service selected the most appropriate MIS possible that are linked to habitat conditions likely to be affected most by management under the revised Forest Plan. The Forest Service selected white-tailed deer and gray squirrel as MIS for deer wintering habitat and oak forest habitat, respectively. Early in the Forest Plan revision process, scoping efforts identified white-tailed deer as a major public concern related to wildlife and wildlife habitat. The Forest Service identified deer wintering habitat as one of four indicators to be analyzed for wildlife and wildlife habitat (DEIS pp. 3-96-97). Public comments verified that many Vermonters want the Forest Service to enhance habitat for white-tailed deer (see responses to SC 32500-1b, SC 32500-1l, PC 32500-7, SC 32500-14e, and PC 32500-15). The Forest Service is confident that it can, through specific management actions, enhance the quality of deer wintering habitat on the GMNF. Results of such enhancement may be indicated by increased numbers of deer on and adjacent to the Forest, more frequent occupation of deer wintering areas on the Forest, as well as by the silvicultural characteristics of previously identified, traditional, deer wintering areas. The Forest Service selected the gray squirrel as MIS for oak forest, which is addressed as oak-pine forest type in the vegetation analysis in the FEIS section 3.5. The revised Forest Plan emphasizes the oak-pine forest type and oak in particular, particularly in areas like the Green Mountain Escarpment and in the Taconic Mountains. Accordingly, the Forest Service sought a species that is linked to oak forest. Chapter 3.6 of the FEIS and Appendix C of the revised Forest Plan present the rationale for selection of MIS for the revised Forest Plan, as well as rationale for disposition of MIS included in the1987 Forest Plan.
PC 32200-6:	**The Forest Service should select the American woodcock as a management indicator species for early successional habitat.**
SC 32200-6a	BECAUSE IT IS A GOOD REPRESENTATIVE OF SOUND EARLY SUCCESSIONAL HABITAT MANAGEMENT
SC 32200-6b	WITH A WIDER DESCRIPTION OF SUITABLE HABITAT COMPONENTS INCLUDING THOSE HABITATS NEEDED FOR MALE SINGING GROUNDS, NESTING AND BROODING AREAS AND PROXIMITY TO SOILS WITH EARTHWORMS
SC 32200-6c	BECAUSE IT IS A GOOD MANAGEMENT INDICATOR SPECIES FOR MOIST SOIL UPLAND OPENINGS
SC 32200-6d	WITH THE UNDERSTANDING THAT AN OPENING ALONE DOES NOT GUARANTEE THE BREEDING DISPLAY OF THE MALE
	Response: The Forest Service selected five management indicator species (MIS) for the revised Forest Plan, including American woodcock as MIS for the

	early stages of early successional habitat. Woodcock use permanent and temporary forest openings for courtship display and for night roosting sites. This specific habitat, along with early successional habitat in general, has declined in the Northeast. Hodgman and Rosenberg (2000) identified early successional forest/edge habitat and the American woodcock as a priority habitat-species suite with a stated management objective to reverse or stabilize declining trends in northern New England. Singing male woodcock respond to habitat changes and can be surveyed efficiently. The Forest Service recognizes that the American woodcock occupies a variety of habitats beyond singing grounds used by males in spring. In particular, singing grounds may be effective only if appropriate nesting and brood-rearing habitat is available nearby (Sepik et al. 1993, Dessecker and McAuley 2001). Woodcock should benefit from increased and enhanced early successional habitat on the GMNF. Permanent and temporary upland openings are those areas where monitoring woodcock is easiest and most cost-effective.
PC 32200-7:	**The Forest Service should outline a specific process to determine the baseline population of ruffed grouse as a management indicator species.**
	Response: The FEIS presents discussion of ruffed grouse as an MIS in Chapter 3.6 (Wildlife and Wildlife Habitat) and extensive analysis of the aspen/birch forest community in Chapter 3.5 (Vegetation). In summary, the GMNF does not contain large tracts of inventoried aspen; however, small pockets and inclusions are distributed throughout lower elevations (a majority of the birch communities occur at higher elevations). Because aspen-birch is a short-lived community, it is perhaps more sensitive than other forest communities to MA direction related to vegetation management. About 90 percent of existing aspen-birch stands are mature and older, thus the abundance of aspen-birch is expected to decline by more than 50 percent over the short term. Accordingly, management actions directed at regeneration and enhancement of aspen can potentially have a substantial effect on aspen habitat on the GMNF during the life of the revised Forest Plan. In addition, the Forest Service will seek out inclusions of aspen (aspen clones or groups of aspen trees within another forest stand) during other management activities, map them with GIS, inventory qualifying stands, and prescribe appropriate management to regenerate or enhance them. The above actions should provide substantial benefit for ruffed grouse on the GMNF. Although the Forest Service should realize improved data on abundance, distribution, and quality of aspen stands on the GMNF during this planning cycle, baseline population data for ruffed grouse will be more problematic. Reliable population assessment for any species, including ruffed grouse, is extremely difficult to obtain. Rather than attempting to derive precise population estimates, wildlife managers typically resort to various population indices to identify population trends (see responses to PC 32200-2, PC 32200-3, and associated subconcerns).
SC 32200-7a	BECAUSE THERE IS INSUFFICIENT DATA ON THE PREFERRED HABITAT TYPE OF RUFFED GROUSE
	Response: Ruffed grouse occur in many habitat types, including those with little or no aspen, particularly in the Northeast. However, aspen is a common component of many habitats that are suitable for grouse (Gullion 1984, DeGraaf and Yamasaki 2001). According to the Ruffed Grouse Society, the most productive management of forested lands to benefit ruffed grouse can be

	accomplished where aspen is part of the forest composition. The goal then, is to provide a diversity of age classes of aspen to meet the food and cover requirements of these birds, in a manner consistent with their limited mobility (RGS 2003). This is precisely what the Forest Service proposes to do under the revised Forest Plan.
SC 32200-7b	BECAUSE MEASUREMENT OF RUFFED GROUSE POPULATIONS MAY NOT BE A GOOD INDICATOR OF ASPEN-BIRCH HABITAT MANAGEMENT SINCE DATA ON UN-INVENTORIED ASPEN/BIRCH DOES NOT CURRENTLY EXIST NOR WILL EXIST IN THE FUTURE
	Response: See response to SC 32200-7a. During the current planning cycle, the Forest Service will seek out inclusions of aspen (aspen clones or groups of aspen trees within another forest stand) during other management activities, map them with GIS, inventory qualifying stands, and prescribe appropriate management to regenerate or enhance them.
PC 32200-8:	**The Forest Service should revise the analysis of management effects on habitat available for brook trout, a management indicator species (MIS), because management restrictions will not diminish habitat quality or quantity for this species.**
	Response: Fish and wildlife habitat improvement activities are prohibited in designated Wilderness. Habitat conditions and changes will result from natural processes. Accordingly, stream enhancement, restoration, and protective actions, including recruitment of large woody debris, will not take place in designated Wilderness. The Forest Service agrees with the commenter that the potential negative impact of designated Wilderness on the quantity and quality of brook trout habitat, as presented in the DEIS, may be over-stated and misleading, but only from a long-term perspective. From a short-term perspective (for example, 100 years or less), however, precluding management activities will delay achievement of the desired future condition of these streams and may sacrifice achieving their full potential. Management restrictions in designated Wilderness should not affect the viability and sustainability of natural populations of brook trout on the GMNF or in southern and central Vermont, but these restrictions would prevent management of perennial streams toward their desired future condition, improved habitat capability, and achievement of the full biological potential of these streams in the short-term. The Forest Service revised the analysis in the FEIS (Section 3.6, Wildlife and Wildlife Habitat) to reflect differences between short- and long-term perspectives.

Non-native Invasive Species (NNIS) (32300)

PC 32300-1:	**The Forest Service should add wild chervil, Cryptotaenia Canadensis as an unofficial member of the Non-native Invasive Species list so that it may be considered in project development because it is a problem in Central Vermont**
	Response: The GMNF NNIS list is not part of the revised Forest Plan. Instead, it is a dynamic list that changes in response to changing information. It is posted on our website, at http://www.fs.fed.us/r9/gmfl/green_mountain/resource_management/vegetation/index.htm. On this webpage, there are two lists: the GMNF NNIS List and the Invasive Species Watch List for Vermont. The GMNF NNIS includes one species from the Federal Noxious Weed list that is known to occur in Vermont,

	plus all species listed in the Vermont Quarantine (see FEIS Table 3.5.3-1). The Invasive Species Watch List for Vermont includes all species that the Vermont Invasive Exotic Plant Committee believed had the potential to become invasive in Vermont, but for which information regarding distribution, abundance, and potential to invade natural communities was limited; wild chervil is included on this list. At the present time, all species on the GMNF NNIS list are considered during project implementation, and species on the Watch List may or may not be considered, depending on the best current information for those species.
PC 32300-2:	**The Forest Service should take a pro-active role in preventing and eradicating Non-native Invasive Species.**
SC 32300-2a	BECAUSE OF THE LARGE RELATIVELY UNDISTURBED TRACTS OF LAND ON THE GMNF, NON-NATIVE INVASIVE SPECIES COULD REPRODUCE AND SPREAD QUICKLY
	Response: Generally, relatively undisturbed tracts of land are less susceptible to infestations of NNIS than disturbed land. The Forest Service recognizes the threat posed by NNIS, and the revised Forest Plan includes a section of NNIS standards and guidelines specifically to address this concern (see revised Forest Plan section 2.3.9). In addition, under Goal 2 (p. 13), there is an NNIS objective directing the Forest Service to minimize adverse effects of NNIS on other resources.

Species Viability Evaluation (32400)

PC 32400-1:	**The Forest Service should conduct the necessary surveys and inventories of species and habitats necessary to ensure species viability.**
SC 32400-1a	BECAUSE THE FOREST SERVICE MUST HAVE POPULATION INVENTORY AND MONITORING DATA TO MEET ITS OBLIGATIONS TO MAINTAIN SPECIES VIABILITY AND RECOVER IMPERILED POPULATIONS
SC 32400-1b	BECAUSE WITHOUT ACCURATE INVENTORY DATA THE FOREST SERVICE CANNOT ENSURE THAT IT IS MEETING ITS LEGAL OBLIGATIONS, FOREST PLAN GOALS AND OBJECTIVES
	Response: The Forest Service believes that the necessary surveys and inventories of species and habitat were conducted to meet regulatory requirements and Forest Service mandates and to provide the information needed to revise, implement, and evaluate the revised Forest Plan. Much of this information has been summarized in annual monitoring reports, as well as in the Green Mountain National Forest Retrospective (USDA 2002c). Ecosystems are exceedingly complex, and resources to inventory and analyze them are limited. The Forest Service has adopted a strategic approach, conceptually developed by The Nature Conservancy, to gather needed information. An important part of this approach for management of plant and animal species and their habitats is coarse filter/fine filter management, which is discussed in Section 3.1.4 of the DEIS. In the context of coarse filter management, lands are managed to provide suitable habitat for a variety of species distributed across the landscape. Goal 2 of the Forest Plan (pp. 10-12), with its associated objectives for habitat composition, structure, and age class, was developed taking into account desired conditions for plant and animal species along with restoration of natural communities. Meeting these vegetative goals and objectives would help to provide suitable habitat for a wide variety of species. Site-specific inventories and monitoring of population trends for rare species, which constitutes the fine filter, would be used to alter

	management when necessary to provide for species viability. The coarse filter/fine filter approach may involve sampling or site-specific inventories, but does not necessarily require comprehensive Forest-wide population inventories for plant and animal species and their habitats to ensure viability. The revised Forest Plan is considered "programmatic" in that it allows, but generally does not require, specific actions on the ground. It generally does not mandate projects in a specific location at a specific time. Thus assessment of impacts is more general than for actual site-level projects. Nevertheless, the scope of actions contemplated by the revised Forest Plan can be evaluated in terms of the likely impacts of proposed programs, activities, and practices, and how well these programs, activities, and practices address potential negative impacts or contain measures that might mitigate adverse effects. Consequently, the evaluations and determinations of effects in the FEIS Chapter 3 Sections on Threatened and Endangered Species, and on Species of Potential Viability Concern, as well as the Biological Evaluation (Appendix E), are based on the expected impacts if the proposed actions of the revised Forest Plan are carried out. Analysis and determinations do not rely solely on ecological conditions as an index of population occurrence, size, density or other demographic characteristics. Ecological conditions help to assess coarse filter forest conditions within the National Forest. Occurrence information, nest area or colony persistence, research findings, or other demographic indicators contained in the planning record provide more specific coarse or fine filter management guidance or recommendations from analysis to guide project-level decisions. NFMA regulations are very specific about the use of information in the development of forest plans. 36 CFR 219.12 requires the Forest Service to have access to the best available information when developing plan direction. The Forest Service attempted to incorporate the best and applicable available information on Threatened, Endangered, and Regional Forester's Sensitive Species (TES species), as well as other species of potential viability concern, through literature reviews, interagency reviews, and internal and external expert opinion (see discussion in sections 3.9.1 and Table 3.9-4 of the FEIS). The Forest Service has also conducted surveys for TES species during the last 18 years on the GMNF (see also response to comment PC 32100-4). The Vermont Nongame and Natural Heritage Program and the Agency of Natural Resources have also conducted inventories within the National Forest. Known occurrences of TES species are documented in the planning record and were considered during the Species Viability Evaluation (SVE) panels and process. Inventory and monitoring of the Forest will continue and new occurrences of TES species will likely be discovered. Forest Service Manual direction and Monitoring Plan guidance (see revised Forest Plan Chapter 4), and Monitoring Guide procedures and schedules will be followed on when, where, and how inventory will be conducted for these species.

Wildlife/Fish Management (32500)

PC 32500-1:	**The Forest Service should manage the GMNF in ways that enhance wildlife habitat.**
	Response: Conservation and enhancement of wildlife habitat is an important

	component of the Forest Service's management on the GMNF. The revised Forest Plan includes goals, objectives, standards, and guidelines designed to maintain and restore quality, amount, and distribution of habitats to produce viable and sustainable populations of native and desirable non-native plants and animals. Section 3.6 of the FEIS (Wildlife and Wildlife Habitat) addresses and analyzes potential effects on four indicators for wildlife and wildlife habitat: wintering habitat for white-tailed deer, early successional habitat, habitat for reclusive wildlife species, and habitat for management indicator species (MIS). The FEIS discusses current management direction, proposed changes in management direction, and potential effects that are common to all alternatives or that vary by alternative for each of these indicators. Management decisions are not based exclusively on considerations of wildlife habitat or any other single resource. Many other factors are relevant and must be considered, including social, economic, and political needs of the public, as well as concerns related to other natural resources. The revised Forest Plan provides a mixture of management actions and land allocations designed to provide habitats to support viable populations of plants and animals while providing adequate resources for a wide range of recreation uses, Wilderness, and other social and economic needs.
SC 32500-1a	TO MEET COMMERCIAL NEEDS AND PROVIDE EMPLOYMENT OPPORTUNITIES IN LOCAL COMMUNITIES
	Response: A commenter requests management of the GMNF in ways that protect forest health and enhance wildlife habitat while producing high quality timber and other products that meet commercial needs and provide employment opportunities in local communities. These aspects of forest and natural resource management are expressed as important components of the Role of the Forest (revised Forest Plan p. 9) as well as in the goals and objectives for Forest management (revised Forest Plan pp. 10-18), as are protecting heritage resources and providing opportunities for a wide range of recreational opportunities. Section 3.21 of the FEIS (Social and Economic Factors) addresses and analyzes social and economic costs and benefits associated with the GMNF and Forest Service management actions.
SC 32500-1b	BY ALLOCATING LANDS TO DIVERSE FOREST USE BECAUSE IS IT THE BEST FOR WILDLIFE HABITAT ESPECIALLY DEER
	Response: The Forest Service agrees that the Diverse Forest Use MA (revised Forest Plan pp. 47-48) provides a broad range of opportunities for management of white-tailed deer habitat, both for browse (food) and for wintering areas. Other MAs, particularly Remote Wildlife Habitat, Diverse Backcountry, and Moosalamoo Recreation and Education Area also provide opportunities to manage habitat for deer and other species of wildlife (see revised Forest Plan Chapter 3). Sections 3.6 (Wildlife and Wildlife Habitat), 3.8 (Threatened and Endangered Species), and 3.9 (Species of Potential Viability Concern) of the FEIS and the BE (Appendix E) address and analyze potential management effects on a wide variety of wildlife species and habitats. Many species of wildlife will benefit from management under the Diverse Forest Use MA, but not all. See responses related to wildlife and designated Wilderness (SC 62000-23l, SC 62000-23m) and responses related to the Remote Wildlife Habitat MA (responses PC 62000-20 and PC 62000-21). Management decisions are not based exclusively on management for white-tailed deer, on wildlife habitat in general, or any other single resource. Many other factors are relevant and must be considered,

	including social and economic needs, as well as concerns related to other natural resources.
SC 32500-1c	BY NOT ALLOCATING LANDS TO MANAGEMENT AREAS THAT HAVE LONG ROTATIONS BECAUSE THERE ARE PLENTY OF UNSUITABLE TIMBER LANDS ON THE GMNF THAT SUPPORT RECLUSIVE SPECIES
	Response: The revised Forest Plan includes 17 different management areas, as well as Eligible Wild, Scenic, and Recreational Rivers. Each MA includes specific management direction that is appropriate for its emphasis and desired future condition. Sections 3.6 (Wildlife and Wildlife Habitat), 3.8 (Threatened and Endangered Species), and 3.9 (Species of Potential Viability Concern) of the FEIS and the BE (Appendix E) address and analyze potential management effects on a wide variety of wildlife species and habitats. Some species, such as the Jefferson salamander (BE page E-75) may benefit from longer rotations. Other species benefit from early successional habitat created by timber management (FEIS section 3.6, Wildlife and Wildlife Habitat; also responses under PC 32500-14 and PC 32600-4). Management decisions, including those involving allocation of land to particular MAs and the rotation ages that are appropriate in each MA, are not based exclusively on considerations of wildlife habitat or any other single resource. Many other factors are relevant and must be considered, including social and economic needs, as well as concerns related to other natural resources.
SC 32500-1d	BY DOING SOME FIVE-ACRE WILDLIFE CLEARCUTS AND PUTTING GRASS SEED AND LIME ON THEM
	Response: The Forest Service recognizes the importance of permanent upland openings for wildlife and for other uses. FEIS sections 3.5 (Vegetation) and 3.6 (Wildlife and Wildlife Habitat) address how alternatives affect the Forest Service's opportunity for creation and maintenance of permanent upland openings, such as the habitat referred to in this comment. See responses to SC 22000-5f, SC 22000-5g, SC 22000-7c, SC 22000-18g, SC 22000-23a through 22000-23e, and PC 32600-11. The frequency and types of maintenance and management activities for permanent upland openings will vary, depending on the location and site-specific habitat goals.
SC 32500-1e	BY KEEPING AND ENHANCING ALL OAKS, BEECH, HICKORIES AND WALNUTS WHICH HAVE REACHED MAST-PRODUCING AGE, OR ARE ABOUT TO REACH THAT AGE (ABOUT 50 YEARS FOR BEECH AND OAK)
	Response: The revised Forest Plan includes Forest-wide standards and guidelines that address retention of wildlife reserve trees (revised Forest Plan pp. 27-29). Wildlife reserve trees include mast-producing trees and shrubs, as well as potential roost and den trees, which include many mast-producing species.
SC 32500-1f	BY PLANTING AND/OR ENCOURAGING HAZELNUT BUSHES AS AN UNDERSTORY IN AREAS TO BE LOGGED
	Response: See response to SC 32500-1e. Additionally, Forest-wide standards and guidelines encourage the use of native species when possible when the Forest Service engages in revegetation activities (revised Forest Plan p. 30). Beaked hazel (*Corylus cornuta*) and American hazel (*C. Americana*) are both native species in Vermont. Potential use of these hazels for revegetation on the GMNF will be a site-specific consideration.
SC 32500-1g	BECAUSE HUNTING IS A PERFECT REPRESENTATION OF DISPERSED RECREATION AND HABITAT MANAGEMENT SHORTFALLS CREATE A

	SELF-FULFILLING PROPOSITION REGARDING HUNTING
	Response: The Forest Service does not agree that the revised Forest Plan will discourage hunting and fishing on the GMNF. Within the framework of seasons, limits, and other regulations administered by the Vermont Fish and Wildlife Department, the Forest Service imposes very few restrictions to hunting and fishing on the GMNF. The role of the GMNF, as stated in the revised Forest Plan and FEIS Chapter 1, specifically includes management to "enhance wildlife and plant habitat conditions" (revised Forest Plan p. 9). Other aspects of the Forest's role include, but are not limited to protecting natural and cultural resources, producing high-quality timber and other forest products, and providing a range of recreational uses, including hunting and fishing. The range of recreational opportunities offered in the revised Forest Plan also provides for hunting and fishing in a wide range of settings, including those near roads, those accessed by trails, and those in remote, non-trail areas.
SC 32500-1h	BY MAINTAINING WILDLIFE OPENINGS WITHIN EACH MANAGEMENT AREA EVERY TWO TO FIVE YEARS
	Response: The revised Forest Plan does not specify methods or schedules for maintenance of permanent upland openings. Such details must be appropriate for the site-specific conditions and the MA in which the opening occurs. Several MAs include specific standards and guidelines for creation and maintenance of openings that is consistent with the emphasis and Desired Future Condition of the MA (see responses to SC 22000-23a through 22000-23e). The time interval for maintaining openings may vary depending on budgets (see revised Forest Plan section 1.1.2).
SC 32500-1i	BY CONSERVING LARGE TRACTS OF FOREST LAND
	Response: The Forest Service agrees that conserving small areas of habitat is not sufficient to provide adequate conditions for most species of flora and fauna. The Forest service does not agree that large tracts of undisturbed land are optimal habitat for all species that occur on the GMNF and in central and southern Vermont. Responses to SC 62000-23l and SC 62000-21b address designated Wilderness as it relates to diversity of wildlife habitat, the diversity of plant and animal species, and reclusive species. These responses apply equally to "large tracts of undisturbed land." The revised Forest Plan allocates 140,000 to 160,000 acres of the GMNF (depending on whether White Rocks NRA is included) to MAs in which changes to forest structure will occur primarily through natural ecological processes (see FEIS Vegetation Section 3.5). Other areas of the GMNF will provide active timber and vegetation management. The Selected Alternative provides a mixture of management actions and land allocations designed to provide habitats to support viable populations of plants and animals while providing adequate resources for a wide range of recreation uses, Wilderness, and other social, economic and political needs.
SC 32500-1j	BY LINKING HABITATS TOGETHER TO PROVIDE MIGRATION CORRIDORS, ENSURE GENETIC DIVERSITY AND PROMOTE THE SUCCESS OF KEYSTONE PREDATORS
	Response: In the revised Forest Plan, the GMNF will move towards vegetation composition and age class objectives that will provide forest habitats for diverse array of species, protection for wildlife corridors, and core habitat area that is suitable for various predators. See FEIS Tables 3.5-4 and 3.5-5. See responses to subconcerns under PC 32100-1 (potential habitat for wolves, cougars, and lynx) and PC 32100-5 (fragmentation of

	forest habitat).
SC 32500-1k	BY CONSERVING MATURE FORESTS
	Response: As described in responses to PC 32600-10 and SC 32600-10a, mature and over-mature northern hardwood forest currently dominate the GMNF, and they will continue to dominate the Forest during the current planning cycle and beyond. See FEIS Tables 3.5-4, 3.5-5, and 3.5-6.
SC 32500-1l	BY INCREASING WHITE-TAILED DEER HABITAT
	Response: Scoping early in the Forest Plan revision process and public comments identified declines in both white-tailed deer and early successional habitat as public concerns related to wildlife and wildlife habitat (see responses to SC 22000-21c, SC 32500-1b, PC 32500-14, PC 32500-15, and PC 32600-4). Implementation of the revised Forest Plan should result in improved conditions of deer wintering habitat and improved abundance and condition of early successional habitat (DEIS pp. 3-112-114). Standards and guidelines for deer wintering habitat apply Forest-wide under the revised Forest Plan, rather than primarily in two specific MAs (4.1 and 4.2 Deer Wintering Areas; revised Forest Plan pp. 29-30). White-tailed deer will benefit from permanent upland openings and from temporary openings of regenerating forest stands.
SC 32500-1m	BY NOT INCREASING WILDERNESS
	Response: The response to SC 62000-23l provides discussion of designated Wilderness as it relates to diversity of wildlife habitat and to diversity of plant and animal species.
SC 32500-1n	BY WORKING WITH AREA RESIDENTS TO RELEASE OLD ORCHARDS AND MAINTAIN AND CREATE WOODLAND MEADOWS
	Response: As described in the response to SC 22000-4a, wildlife management activities, including apple tree release and maintenance of permanent upland openings, will be coordinated with the US Fish and Wildlife Service, the Vermont Fish and Wildlife Department, and other agencies or organizations as necessary. This cooperation includes partnerships and work with volunteer groups (revised Forest Plan Goal 18, p. 17). Forest-wide guidelines prescribe retention of mast-producing trees, which including apples, as well as specifically including retention and release of apple trees on the GMNF (revised Forest Plan p. 29).
SC 32500-1o	BY IMPROVING EARLY SUCCESSIONAL HABITAT FOR THE AMERICAN WOODCOCK
	Response: The revised Forest Plan specifically addresses creation and enhancement of early successional habitat (see responses to SC 32500-1q, PC 32500-14, and PC 32600-4). The American woodcock is one of many species that should benefit from management activities under the revised Forest Plan (DEIS p. 3-113 and p. 3-116). In addition, the Forest Service selected American woodcock as one of five management indicator species (MIS) for the revised Forest Plan (see responses under PC 32200-6). Accordingly, the Forest Service will actively monitor woodcock on the Forest.
SC 32500-1p	BY MAINTAINING OPENINGS AT SKI AREAS AS WILDLIFE OPENINGS DURING THE SPRING AND SUMMER
	Response: Management area direction specifically precludes creation or maintenance of permanent upland openings for wildlife in Alpine Ski Areas. Permanent openings located in Alpine Ski Areas are designed, created, and maintained for ski slopes and trails, ski lifts and tows, and for other uses directly related to operation of alpine skiing facilities. Maintained permanent openings in ski areas focus public uses on ski trails and other designated

	and safe areas. Additional openings might confuse skiers or encourage them to stray from trails and other designated areas. Standards and guidelines for the Alpine Ski Area MA do provide for maintenance of habitat for threatened, endangered, and regional Forester sensitive species. Although they are not designated for wildlife, maintained ski trails do provide habitat for many grassland and shrubland species during other seasons. A guideline for the Alpine Ski Area MA directs that mowing or clearing of trails and trail edges should not occur between May 1 and August 1, except where the mowing is used as part of a program to control invasive species (revised Forest Plan p. 64). This guideline provides protection to nesting birds.
SC 32500-1q	BY CREATING AND MAINTAINING EARLY SUCCESSIONAL HABITAT TYPES
	Response: See responses to SC 22000-21c, PC 32500-14, and PC 32600-4.
SC 32500-1r	TO CORRECT A FUNCTIONAL BIAS AGAINST HUNTERS CAUSED BY THE LACK OF VEGETATION MANAGEMENT
	Response: The Forest Service does not agree that the revised Forest Plan creates a “functional bias” against hunters and hunting on the GMNF. See response to SC 32500-1g.
SC 32500-1s	FOR BIRDS THAT REQUIRE EXTENSIVE UNBROKEN MATURE FOREST
	Response: The mature and old age class of forests will continue to dominate on the GMNF (DEIS p. 3-11) (see response to SC 32600-10a). The Selected Alternative allocates approximately 140,000 acres of the GMNF to MAs in which changes to forest structure will occur through natural ecological processes (see Section 3.5 Vegetation of the FEIS). The White Rocks NRA includes an additional 22,700 acres in which vegetation management is limited. Lands in these MAs will slowly move toward old-growth conditions. Unbroken, mature forest habitat is expected to be plentiful on the GMNF for the foreseeable future.
SC 32500-1t	BY DEVELOPING AN EXPECTED ACTIVITY LEVEL TABLE FOR OPENING MAINTENANCE AND ENHANCEMENT
	Response: A commenter suggested that It would be helpful if the Forest Service provided a table displaying an "expected activity level" of maintenance and enhancement for permanent upland openings by alternative. Frequency and types of maintenance and management for permanent upland openings will vary, depending on site-specific habitat goals and the emphasis and desired future condition of the MA in which the opening is located. Management direction does not vary by alternative. Alternative-specific differences relate directly to the relative allocation of the GMNF into MAs, and the specific emphasis and direction for each MA (see response to SC 22000-23a through SC 22000-23e). The Forest Service discusses in the FEIS the influence that each alternative might have on opportunities for maintenance and enhancement of permanent upland openings (see FEIS Sections 3.5, Vegetation, and 3.6, Wildlife and Wildlife Habitat).
SC 32500-1u	BY INCREASING THE ACREAGE THAT IS ACTIVELY MANAGED AS WILDLIFE HABITAT
	Response: The Selected Alternative allocates approximately 235,000 acres (59%) to MAs in which habitat management is allowed, subject to compliance with all applicable standards and guidelines (FEIS Table 3.6-8). The White Rocks NRA includes an additional 22,700 acres (6%) in which limited habitat management is allowed. Another 67,000 acres (17%) is allocated to MAs

	that allow limited habitat management for threatened or endangered species, Regional Forester sensitive species, or other species of concern. Approximately 90,000 acres of the GMNF (22%) are allocated to MAs that do not provide for any active habitat management. Management decisions are not based exclusively on considerations of wildlife habitat or any other single resource. The FEIS analyzed a wide variety of alternatives with different outcomes and with varying management area allocations, addressing Forest Plan revision issues. Each alternative meets the intent of relevant laws, including the Multiple Use Management Act, under which the national forests are managed. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. The Selected Alternative represents what Forest managers believe to be the best balance of outcomes in achieving sustainable ecosystems and meeting the intent of relevant laws, as well as addressing the issues and concerns specific to the GMNF and wildlife habitat.
SC 32500-1v	BY MANAGING SPRING AND SEEP AREAS FOR MAST SPECIES
SC 32500-1w	BY MANAGING SPRINGS AND SEEPS AS A SOURCE OF FORAGE
	Response: See response to SC 22000-4e.
SC 32500-1x	BY ALLOWING VEGETATION MANAGEMENT IN LANDS CONSIDERED UNSUITABLE FOR TIMBER PRODUCTION
	Response: The Forest Service can and does conduct vegetation management for wildlife habitat in lands that are unsuitable for timber production, except where prohibited by management area direction (see revised Forest Plan Chapter 3). These activities must be accomplished through wildlife-related sources or funds, which are limited. Habitat management is allowed on unsuitable lands in some MAs only for the benefit of threatened, endangered, or Regional Forester sensitive species, or to restore structural characteristics of aquatic habitats (for example, Remote Backcountry Forest, Alpine/Subalpine Special Area). Habitat management specifically for wildlife is not allowed in other unsuitable MAs (for example, designated Wilderness, Alpine Ski Areas, Appalachian Trail, or Long Trail).
SC 32500-1y	BY INCREASING MANAGEMENT OF HISTORIC APPLE ORCHARDS
	Response: The revised Forest Plan includes Forest-wide standards and guidelines that address retention of wildlife reserve trees (revised Forest Plan pp. 27-29). In response to this comment and others, the Forest Service revised Forest-wide guidelines to increase the emphasis on retention and release of apple trees on the GMNF.
SC 32500-1z	BY INCREASING AREAS THAT PRODUCE WILD FRUIT
	Response: The revised Forest Plan includes Forest-wide standards and guidelines that address retention of wildlife reserve trees, including trees or shrubs that produce hard mast (acorns and nuts) and soft mast (fruits) (revised Forest Plan pp. 29). Permanent upland openings should provide a mix of fruit-producing plants and shrubs, as will temporary openings, at least during the first several years after cutting.
PC 32500-2:	**The Forest Service should collect and evaluate population data for northern goshawk to assess its current status and potential effects of National Forest management.**
SC 32500-2a	TO BETTER UNDERSTAND THE CURRENT STATUS OF GOSHAWK POPULATIONS AND THE EFFECTS OF NATIONAL FOREST MANAGEMENT ON THEM

	Response: During the Forest Plan revision process, the Forest Service considered and evaluated the potential effects of the revised Forest Plan on many species of wildlife, including the goshawk, primarily with respect to species of potential viability concern or for selection of management indicator species (MIS). This evaluation included analyses of populations, habitats, and potential effects of management activities on threatened, endangered, and Regional Forester sensitive species (Chapters 3.8, 3.9, and Appendix E of the FEIS) and other species of viability concern (Chapter 3.9 of the FEIS). This review included discussion of northern goshawk (SVE Bird Panel 2002, USFS 2003c). See response to SC 22000-18q.
PC 32500-3:	**The Forest Service should strengthen the focus on managing for natural fish populations**
	Response: Management of natural fish populations was the focus of our fisheries management throughout the implementation of the1987 Forest Plan, as described in Amendment 6 (DEIS pp. 3-131-132). The Forest Service will continue this management direction in the revised Forest Plan to promote viable and sustainable populations of native and desirable non-native fish species as stated in Chapter 2, Forest Goal 2, and in the fisheries standard under the Forest-wide standards and guidelines (p. 32). The focus is to maintain and enhance these self-sustaining (natural) fish populations through habitat protection, maintenance, enhancement, and restoration. There are two exceptions to this management direction: trout stocking in some high elevation ponds, and the restoration of Atlantic salmon in the Connecticut River Basin (DEIS p. 3-131). The ponds are stocked because natural reproduction is not possible due to impacts of acid depositions and lack of adequate spawning habitat in the ponds. The Forest Service stocks newly hatched (1 to 2 inch long) fingerling brook trout into these ponds where they grow to provide an excellent recreational fishery. Also, Atlantic salmon fry are stocked annually into tributaries of the West and White Rivers on the Forest as part of the Inter-State, multi-agency effort to restore this native anadromous (sea-run) species to the Connecticut River watershed. The long-term goal of the salmon restoration program is to have natural self-sustaining salmon populations in the Basin.
SC 32500-3a	TO PROVIDE THE OPPORTUNITY TO IDENTIFY STREAMS WITH POPULATIONS OF NATIVE TROUT, OR NATURALIZED POPULATIONS OF TROUT
	Response: The Forest Service has conducted extensive inventory and monitoring of most fish-bearing streams across the entire Forest since the inception of the GMNF fisheries program in 1987. All streams surveyed to date contain native Brook trout and/or naturalized population of Rainbow and Brown trout that are sustained through natural reproduction. Inventory and monitoring is a critical part of the fisheries program that will continue to provide opportunities to identify native and naturalized trout populations on the Forest (revised Forest Plan Chapter 4 and FEIS Fisheries section 3.7.
SC 32500-3b	BECAUSE THE FISHERIES SHOULD BE MANAGED TO MEET BIOLOGICAL SUSTAINABILITY RATHER THAN SIMPLY ALLOWING STOCKING TO MAKE UP FOR OVER-FISHING
	Response: The Vermont Department of Fish and Wildlife (VDFW) is responsible for managing fish populations including determining stocking policies and recommendations in the State of Vermont. The Forest Service is responsible for maintaining, enhancing, and restoring fish habitat in Forest waters. The Forest Service works cooperatively with VDFW to accomplish

	the mutual goals of managing fish population and habitat throughout the GMNF (revised Forest Plan p. 32). Today, due in large part to the VDFW wild trout plan and the excellent stewardship of fish habitat conditions on the Forest by Forest Service professionals, most brooks and streams on the GMNF are not stocked but are managed as wild fisheries. In 2005 only three Forest streams (Roaring Branch, Texas Falls Brook, and Utley Brook) were stocked with trout. To put this in perspective, about ten miles of GMNF are stocked with trout while about 400 miles are not. The exceptions to this are trout stocking in some high elevation ponds on our Manchester Ranger District and salmon stocking in streams in the White River and West River watersheds as described in the response to PC 32500-3. See also FEIS Fisheries section 3.7.
PC 32500-4:	**The Forest Service should take into account the nesting season of wild turkeys and other ground birds when maintaining openings and delay the mowing until August to prevent nest disturbance.**
	Response: Methods employed for maintenance of permanent upland openings, including the schedule for maintenance actions, will be appropriate for the site-specific conditions and the MA in which the opening occurs. Several MAs include specific standards and guidelines for creation and maintenance of openings that are consistent with the emphasis and Desired Future Condition of the MA (see responses to SC 22000-23a through SC 22000-23e). Nesting and brood-rearing are one of the primary considerations for establishing maintenance schedules for openings.
PC 32500-5:	**The Forest Service should revise the EIS to include an accounting of early successional habitat and old growth habitat on surrounding private lands**
SC 32500-5a	BECAUSE THE PROPOSED ALTERNATIVE ASSUMES THAT A FULL RANGE OF HABITATS MUST BE MAINTAINED WITHIN THE FOREST, AND IGNORES THE FACT THAT OUTSIDE THE GREEN MOUNTAIN NATIONAL FOREST IS A RANGE OF HABITATS
	Response: The FEIS emphasizes early successional habitats because they are extremely important to many species of wildlife. As described in the cumulative effects section for Wildlife and Wildlife Habitat, the landscape in Vermont and in New England in general, has undergone dramatic changes since the arrival of European settlers. This applies to Forest Service lands, as well as to non-Forest Service lands (FEIS section 3.6, Wildlife and Wildlife Habitat). Forest land in Vermont declined from about 80 percent of the landscape in 1780 to only 25 to 30 percent by the mid-1800s (Johnson 1998, Klyza and Trombulak 1999, DeGraaf and Yamasaki 2001). Since the 1950s, the trend has been towards reforestation. By 1980, Vermont was at least 75 percent forested (Johnson 1998, DeGraaf et al. 1992, DeGraaf and Yamasaki 2001). This trend of increasing forestation has continued (Wharton et al. 2003). Declines in many early successional species have concerned wildlife biologists, resulting in calls for increasing the availability of early successional habitat across much of northeastern North America. (See reviews and collected papers in Thompson et al. 2001 and Litvaitis 2003.) This concern is not a phenomenon only on the GMNF or only in Vermont; rather it is a concern across much of the eastern North America. Scoping early in the Forest Plan revision process identified insufficient abundance and quality of early successional habitat as public concern. This was a statewide concern, not merely for the GMNF (see responses to SC 22000-21c, PC 32500-14, and PC 32600-4.

	The Forest Service acknowledges that old growth forest, particularly in large tracts, is unlikely to occur in Vermont except on public land. The GMNF is well suited to maintain forest land that will develop into old growth. The Selected Alternative allocates approximately 140,000 acres of the GMNF, which currently is dominated by mature and old forest habitats, to MAs in which changes to forest structure will occur through natural ecological processes. The White Rocks NRA includes an additional 22,700 acres in which vegetation management is limited. In time, these areas will develop into old growth forest (see section 3.5 Vegetation in the FEIS).
PC 32500-6:	**The Forest Service should revise the description of habitat fragmentation.**
SC 32500-6a	BECAUSE THE DESCRIPTION INCLUDES BREAKING CONTIGUOUS, MATURE FOREST WITH TEMPORARY OPENINGS
	Response: The term "forest fragmentation," as it is used in the FEIS and BE, refers to breaking up contiguous tracts of forest land with permanent or long-term changes of forest to non-forest uses (after Rosenberg et al. 1999, 2003). It does not apply to temporary openings created by timber harvest, other vegetation management activities, or natural events that create temporary breaks in the forest canopy. See response to PC 32100-5. Openings created through even-aged management techniques are regenerating forest stands that will advance through seral or successional stages to older forest types. As described elsewhere, mature and over-mature northern hardwood forest currently dominates the GMNF, and it will continue to dominate the Forest during the current planning cycle and beyond (see responses to PC 32600-10 and SC 32600-10a). Additionally, the revised Forest Plan allocates approximately 140,000 acres of the GMNF to MAs in which changes to forest structure will occur through natural ecological processes. The White Rocks NRA includes an additional 22,700 acres in which vegetation management is limited. In time, these areas will develop into old growth forest (see Section 3.5 Vegetation of the FEIS). The revised Forest Plan also provides for creation of permanent and temporary openings, purposefully intended to increase habitat diversity on the GMNF (see response SC 22000-5f, SC 22000-5g, PC 32600-11).
SC 32500-6b	BECAUSE FRAGMENTATION OF EARLY SUCCESSIONAL FOREST HABITAT COMPONENTS BY CONTIGUOUS MATURE FOREST IS A CRITICAL REGIONAL ISSUE, AND WITHOUT ACTIVE MANAGEMENT TO CREATE AND MAINTAIN THESE DISTURBANCE-BASED HABITATS, WE WILL LOSE SOME OF THE MOST INTERESTING AND DIVERSE NATURAL COMMUNITIES IN EASTERN NORTH AMERICA
	Response: The Forest Service acknowledged the importance of early successional habitats by identifying them in the DEIS as one of four indicators to be analyzed for wildlife and wildlife habitat (see responses to SC 22000-5g, SC 22000-21c, PC 32500-14, PC 32600-4, and PC 32600-11). Declines in many of these early successional species have concerned wildlife biologists, resulting in calls for increasing the availability of early successional habitat across much of northeastern North America. This concern is not a phenomenon only on the GMNF or only in Vermont; rather it is a concern across much of the eastern North America. Numerous authors point out that early successional habitat will not be created in sufficient quantity by natural phenomena (windthrow, fire, ice storms, etc.) to provide adequate quantity

	and quality habitat to reverse the population declines for many species. Given the current condition and age structure of forest land in the Northeast, vegetation management is necessary to achieve this. (See reviews and collected papers in Thompson et al. 2001 and Litvaitis 2003). Additionally, scoping early in the Plan revision process identified insufficient abundance and quality of early successional habitat as public concern. This was a statewide concern, not merely for the GMNF. Implementation of the revised Forest Plan should provide increased acreage of early successional habitats, thus improving habitat conditions for these species.
PC 32500-7:	**The Forest Service should remove the bias for white-tailed deer habitat in the Final EIS.**
SC 32500-7a	BECAUSE WHITE-TAIL DEER NUMBERS ARE LIKELY ELEVATED FAR ABOVE PRE-EUROPEAN SETTLEMENT NUMBERS AND CERTAINLY ARE ABUNDANT THROUGHOUT THE U.S.
SC 32500-7b	BECAUSE INCREASING OLD-GROWTH FOREST HABITAT THROUGH ALLOWING GROWTH AND MATURATION OF EXISTING OLDER STANDS COULD BE A PRIORITY
SC 32500-7c	BECAUSE IT IS USED AS A JUSTIFICATION TO HARVEST TIMBER
	Response: A commenter objected to the Forest Service using creation of early successional habitat for white-tailed deer as justification for timber harvest. The commenter believes that white-tailed deer numbers are likely elevated far above those prior to settlement of the region by European; deer are abundant throughout the US to the point of "pest" status in many areas including nearby Massachusetts; that trying to increase white-tailed deer numbers is a questionable goal given other priorities that the USFS could be trying to achieve, such as increasing old-growth forest habitat through allowing growth and maturation of existing older stands (for example, 60 to 100 years); and that the goal of increasing the age and size of deer would be a much more commendable goal and is more reliably achieved by increasing security (that is, habitat less readily accessible to hunters) than it is by increasing forage. White-tailed deer have been important to residents of the Vermont region from prehistory to the present. The deer population certainly has undergone many changes during the last 200 years (Vermont Deer Management Team 1997). The Vermont Fish and Wildlife Department controls management authority for white-tailed deer in the State. The Vermont Fish and Wildlife Board sets population goals, harvest limits, and regulations for deer and other game species in Vermont, in consultation with the Vermont Fish and Wildlife Department, the State Legislature, and other State entities. The Forest Service is not involved in these decisions. Restoring the entire Forest to the historical or natural range of variability, particularly for an individual species, is not an expressed goal of management under the revised Forest Plan. The Forest Service mission and multiple-use mandate require a mixture and balance of management emphases. Often this balance reflects the variety of social values expressed by the public during public meetings and comment periods. The amount and distribution of wildlife habitat in general, and habitat for white-tailed deer in particular, are largely social questions. Management decisions consider social, economic, and ecological uses and values of wildlife on the GMNF. Deer continue to be the most important game species in Vermont, as well as a subject of non-hunting recreational pursuits and interests (Vermont Deer Management Team 1997). Early in the Forest Plan

	revision process, scoping efforts identified white-tailed deer as a major public concern related to wildlife and wildlife habitat. Accordingly, the Forest Service identified deer wintering habitat as one of four indicators to be analyzed for wildlife and wildlife habitat (DEIS p. 3-97). Public comments verified that many Vermonters want the Forest Service to enhance habitat for white-tailed deer (SC 32500-1b, SC 32500-1l, SC 32500-14e, PC 32500-15). The GMNF land base includes deer winter areas, which includee both cover (shelter) of mature softwood stands for protection from winter weather and browse (food) supplied by regenerating forest stands, permanent openings, and other habitats located within range of the shelter areas. The GMNF also can provide suitable browsing habitat for deer wintering areas located near the Forest on non-NFS land, as well as suitable deer habitat during other seasons. Timber management is one of many tools available for habitat management. Frequently it is the most cost-effective tool available, especially for production of browse. In other instances, stewardship contracts or volunteer activities may be most appropriate. Additionally, deer habitat is not the only concern of the Forest Service and the only factor considered in making management decisions. During the course of multi-purpose and multi-resource management decisions, the Forest Service proposes a variety of management activities, including timber harvest. Timber harvests that are conducted for a variety of reasons and can be designed and accomplished to provide habitat improvements for white-tailed deer and many other species of wildlife. Creation of early successional habitat, whether it specifically benefits white-tailed deer or not, is not conducted at the expense of mature forest habitat or forest stands that will, in time, develop into old growth. Mature and over-mature forest currently dominates the GMNF, and it will continue to dominate the Forest during the current planning cycle and beyond (DEIS p. 3-111) (see responses to PC 32600-10 and SC 32600-10a). The revised Forest Plan allocates approximately 140,000 acres of the GMNF to MAs in which changes to forest structure will occur through natural ecological processes. The White Rocks NRA includes an additional 22,700 acres in which vegetation management is limited. In time, these areas will develop into old growth forest (see Vegetation section 3.5 in the FEIS). Finally, increasing the age and size of deer is not a stated goal of the Forest Service. Such goals, frequently referred to as “quality deer management,” are achieved through a variety of management efforts, especially hunting limits, seasons, size restrictions, and area closures or restrictions (Vermont Deer Management Team 1997). This aspect of management is strictly the purview of the Vermont Fish and Wildlife Board and the Vermont Fish and Wildlife Department, not the Forest Service.
PC 32500-8:	**The Forest Service should revise the Final EIS to state that deer wintering habitat is an important factor, but not the primary limiting factor for deer in Vermont.**
	Response: Reay et al. (1990: p. ix), in their “Management Guide for Deer Wintering Areas in Vermont” state that, “The availability of quality wintering habitat is the limiting factor for deer in most of Vermont.” Also (p. 1), “Deer in Vermont live near the northern limit of white-tailed deer range in eastern North America. This forces deer to use very specific winter habitat when severe

	climatic conditions become a threat to the animals' survival." The Forest Service is aware that many factors influence the deer population in Vermont, many of which are related to quality and availability of habitat. In the revised Forest Plan and the FEIS, the Forest Service specifically defined deer wintering areas to include both cover (shelter) and browse (food) (FEIS section 3.6, revised Forest Plan pp. 29-30). In deference to the commenter, the FEIS Wildlife section 3.6 describes deer wintering areas as "an important and potentially limiting factor for deer in Vermont."
PC 32500-9:	**The Forest Service should let nature manage habitats.**
	Response: "Natural habitats," even in seemingly wild areas like the Green Mountain National Forest, have been altered from their "natural" state by human activities, including clearing the land for agricultural uses, subsequent abandonment and reversion to forest, and once again clearing forest land for roads, towns, homes, and other developments. Soils were altered by these changes, and continue to be affected by acid deposition. Influences of fire, flooding, and habitat-altering activities of beavers have been largely removed or minimized, and several species have been eliminated from the landscape. Forces of nature can and do manage habitat, but "natural" management does not account for a population of 600,000 citizens in Vermont, visitors from outside of the State, cities, towns, residential areas, farms, roads, trails, etc. Nor does natural management compensate for the cumulative results of Vermont's land-use history. Letting nature manage habitats on the GMNF or in New England, in general, is not likely to result in thriving populations of diverse wildlife. Rather, because of the age and composition of the forests, historic and current land uses, and the altered flora and fauna, allowing "natural" management of forest lands most likely will lead to more homogenous, less diverse habitats that will support less diverse flora and fauna (DeGraaf et al. 2005). The Selected Alternative allocates approximately 140,000 acres of the GMNF to MAs in which changes to forest structure will occur through natural ecological processes (see Vegetation section 3.5 of the FEIS). "Nature" will manage habitats on these lands, which will slowly move toward old-growth conditions, although this process will take decades or more. The White Rocks NRA includes an additional 22,700 acres in which vegetation management is limited. Most of the White Rocks NRA will also move toward old growth conditions. Analyses in sections 3.6 (Wildlife and Wildlife Habitat), 3.9 (Species of Potential Viability Concern), and Appendix E (the BE) of the FEIS discuss and analyze various effects associated with "unmanaged" habitat, meaning lands on which ecological changes occur through "natural" processes and not through active habitat management. Many species of wildlife are dependent on open, shrubby, and regenerating forest habitats. Declines in many of these early successional species have concerned wildlife biologists. Numerous authors point out that early successional habitat will not be created in sufficient quantity by natural phenomena (for example, windthrow, fire, ice storms) to provide adequate quantity and quality habitat to reverse the population declines for many species. Given the current condition and age structure of forest land in the Northeast, vegetation management is necessary to achieve this (see responses to SC 32500-6b, PC 32600-1, and reviews and collected papers in Thompson et al. 2001 and Litvaitis 2003). The National Forest Management Act and the Forest Service Manual direct the Forest Service to maintain habitat for desirable native and non-native

	species at levels that will provide for viable populations where possible. Allowing "natural management" of the GMNF that precludes important habitat conditions and entire suites of species (early successional habitat and related species, in particular), would be contrary to Forest Service management direction (see response to PC 32600-1). In summary, the revised Forest Plan provides a mixture of management actions and land allocations designed to provide habitats to support viable populations of plants and animals while providing adequate resources for a wide range of recreation uses, Wilderness, and other social, economic and political needs. To accomplish these goals and desired conditions, active vegetation management is necessary on some of the GMNF land base.
PC 32500-10:	**The Forest Service should restore fisheries habitat to pre-settlement conditions.**
	Response: This is a very difficult restoration target, given the current lack of large, intact natural systems. The focus and direction the Forest Service has taken in the revised Forest Plan is to restore critical natural processes that create and maintain fish habitat. This is best exemplified and stated in Goal 6 of the revised Forest Plan: "maintain and restore ecological processes and systems on the GMNF within desired ranges of variability, including a variety of native vegetation and stream channel types, and their patterns and structural components" (p. 14). The Forest Service's intention to continue the restoration of fisheries habitat is embodied in this goal and others (Goals 2 and 4) in the revised Forest Plan (pp. 10, 13). See also FEIS Fisheries section 3.7.
SC 32500-10a	BECAUSE THE LACK OF LARGE WOODY DEBRIS AND NATURAL FISH HABITAT REDUCES THE FISHERIES POPULATION
	Response: Over the long-term, the objective of the Forest Service is to restore the large woody debris (LWD) component to aquatic ecosystems (revised Forest Plan pp. 14, 21). The Forest Service believes the goals, objectives, standards, and guidelines in the revised Forest Plan pertaining to fish resources, water bodies, riparian areas will work toward achieving sufficient quantities of woody debris to create diverse fish habitats in the hundreds of miles of streams and many ponds throughout the Forest, and ultimately improve habitat capabilities and native fish populations. In the near-term, the revised Forest Plan provides direction for enhancement and restoration of stream ecosystems, which includes fish habitat, by implementing projects that add large woody debris in stream channels. For example, an objective under Goal 6 describes managing stream habitat through placement of LWD in quantities up to 230 pieces of wood per mile (revised Forest Plan p. 14). For a perspective on what this means, current GMNF stream LWD inventory data indicates few streams exceed 50 pieces of LWD per mile, and most are well below that. In addition, preliminary data from monitoring LWD habitat restoration projects (GMNF Forest Plan M&E Report 2000) indicate that fish population abundance and stream insect communities respond favorably to these types of projects, and the Forest Service will continue to implement these projects with its many partners. See also FEIS Fisheries section 3.7.
SC 32500-10b	BECAUSE LARGE-SCALE LOGGING AND FARMING DEGRADED MANY OF VERMONT'S STREAMS AND RIVERS
	Response: The Forest Service agrees with the commenter that historical logging and agricultural practices contributed to the degradation of Vermont's

	streams and rivers (DEIS p. 3-130). Dam construction, road development and maintenance, stream channelization particularly after flood events, and other land uses also contributed to habitat degradation. Today, streams on the GMNF have good water quality and improved riparian areas that are functioning to provide canopy over streams, buffer and filtering capabilities, and other resource benefits (DEIS pp. 3-35 and 3-132). There is a conspicuous lack of LWD in stream channel from riparian areas. The goals, objectives, standards, and guidelines pertaining to fisheries, water resources, and riparian areas in the revised Forest Plan (see sections 2.2 and 2.3) would work toward the restoration of this important riparian function, as well as other aquatic ecological processes (sediment and organic matter storage, nutrient enrichment), and reverse some of the stream degradation that has occurred from past land uses.
PC 32500-11	**The Forest Service should incorporate a basic list or table of species considered reclusive along with more detailed citations from juried literature both qualifying their reclusive label and providing additional information on their proven habitat needs and life history details.**
SC 32500-11a	BECAUSE IT WOULD PROVIDE A PLAN-REFERENCED LIST ON THESE SPECIES
SC 32500-11b	BECAUSE IT MIGHT CURTAIL CHALLENGES TO MANAGEMENT ACTIVITIES BY GROUPS AND INDIVIDUALS
	Response: In section 3.6 of the FEIS (Wildlife and Wildlife Habitat), reclusive species comprise one of the four indicators for analyzing effects of alternatives on wildlife and habitat. Several species can potentially benefiting from remote habitats (black bear, bobcat, northern goshawk, and wood turtles), although these species were mentioned as examples. The Forest Service is hesitant to compose lists of species that prefer a particular set of habitat conditions. Many species are versatile and adaptable to different conditions, which complicates assigning them to particular habitats. Subtle changes in situation can change the potential community of species that might occur in a particular habitat type. Further, compiling a comprehensive and exhaustive list is difficult, if not impossible. Some species undoubtedly are left off. Published lists can be easily misinterpreted as complete and accurate when they probably are not. Other responses (especially PCs 62000-20, 62000-21, and 22000-30) discuss various aspects of “remoteness” as it relates to wildlife and wildlife habitat. As these responses explain, many species of wildlife routinely avoid interaction with humans, some are particularly vulnerable at particular times of year, and certain age groups or other population classes may be affected or react differently to human activity. Other responses discuss aspects of remoteness as it affects threatened and endangered species (see subconcerns under PC 32100-1) or fragmentation of forest habitat (under PC 32100-5).
PC 32500-12	**The Forest Service should quantify past, present and future game population trends and game densities per square mile for deer, moose and small game and state goals for increasing populations and densities.**
	Response: See responses to SC 13000-2a and SC 22000-4a, and SC 32500-14e.
SC 32500-12a	TO ADDRESS THE SOCIO-ECONOMIC IMPACTS OF THIS IMPORTANT WILDLIFE ISSUE
	Response: Hunting, fishing, and wildlife watching are included in the

	recreational activities of the economic analysis (DEIS pp. 3-368 and 3-369). See also DEIS Appendix B.
PC 32500-13	**The Forest Service should actively manage the Lamb Brook area for bear habitat.**
	Response: The revised Forest Plan includes Forest-wide that is particularly relevant to management for black bears. Goal 7 in the revised Forest Plan (p. 14) is to "Protect rare or outstanding biological, ecological, or geological areas on the GMNF." Regionally important foraging habitat for black bears, as identified by biologists from the Forest Service and the Vermont Fish and Wildlife Department, are considered outstanding biological and ecological areas. Standards and guidelines in the revised Forest Plan specifically identify bear-clawed beech trees, especially groups of such trees, as mast trees to be retained (revised Forest Plan pp. 27-29). In the Selected Alternative, the Forest Service allocated the Lamb Brook area to two management areas (MAs): Remote Wildlife Habitat (RWH) in the southern portion and Remote Backcountry Forest (RBF) in the northern portion. The emphasis, desired future condition, and MA-specific standards and guidelines for RWH emphasize providing a mix of forest habitats for the primary benefit of diverse wildlife species, while retaining the remote character of the area. Active habitat management will be achieved through application of various tools, ranging from timber harvest to volunteer activities. RWH is well-suited to management of habitat in areas heavily used by black bears, for enhancement of beech stands, other mast trees, and early successional habitat that can provide abundant sources of food while limiting sources of continuing disturbance. The emphasis, desired future condition, standards, and guidelines for RBF provide for vegetation management to "maintain existing unique or important wildlife features." Beech stands where bears are known to congregate, and which contain bear-clawed trees, are important wildlife features that will be retained, and enhanced where possible. RBF does not allow more general wildlife habitat management, such as creation or maintenance of early successional habitat (revised Forest Plan p. 55). Importantly, allocation of MAs on the GMNF, including the Lamb Brook area, are not based exclusively on considerations of black bears, wildlife habitat in general, or any other single resource. Many other factors are relevant and must be considered, including social and economic needs, as well as concerns related to other natural resources.
SC 32500-13a	BECAUSE LAMB BROOK AND THE AREA WEST OF ROUTE 8 HAS THE HIGHEST BEAR USE ON THE GMNF
	Response: See response to PC 32500-13. The Forest Service is aware of concentrated bear use in several areas on the GMNF, including the area west of Route 8 in Searsburg and Readsboro (see response to SC 22000-18h). The Forest Service has, and will continue to work closely with wildlife biologists at the Vermont Fish and Wildlife Department on issues related to bears and other wildlife species in Vermont.
SC 32500-13b	BECAUSE WE ARE LOSING PORTIONS OF BEECH STANDS THAT ARE IMPORTANT FOR BLACK BEARS DUE TO HEAVY USE OF MATURE AND OVER MATURE TREES AND BEECH BARK DISEASE
	Response: The revised Forest Plan includes Forest-wide standards and guidelines that address retention of wildlife reserve trees, which emphasize

	bear-clawed beech trees (revised Forest Plan pp. 27, 29). A variety of silvicultural prescriptions can be applied to perpetuate or enhance beech stands. Such approaches will be considered and applied, as appropriate, on a site-specific basis.
SC 32500-13c	BECAUSE OTHER WILDLIFE WOULD BENEFIT FROM THE CREATION OF EARLY SUCCESSIONAL HABITAT, APPLE TREE MAINTENANCE, AND THINNING TO PROMOTE GROWTH OF REPLACEMENT BEECH TREES
	Response: The revised Forest Plan includes Forest-wide standards and guidelines that address retention of mast-producing trees, which include beech, as well as retention and release of apple trees on the GMNF (revised Forest Plan pp. 27, 29). The revised Forest Plan also recognizes early successional habitat as an important issue for wildlife. See responses to SC 22000-21c, SC 32500-1n, SC 32500-1y, PC 32500-13, PC 32500-14, and PC 32600-4.
PC 32500-14:	**The Forest Service should retain, create, and provide options for future creation of early successional habitat in a variety of conditions.**
SC 32500-14b	BECAUSE THE PARTNERS IN FLIGHT REGIONS HAVE DECLINING POPULATIONS OF EARLY SUCCESSIONAL AVIAN SPECIES INCLUDING THE CHESTNUT SIDED WARBLERS
SC 32500-14c	BECAUSE OTHER SPECIES ASSOCIATED WITH EARLY SUCCESSIONAL FORESTS ARE IN DECLINE IN THE AREA
	Response: Scoping early in the Forest Plan revision process identified insufficient abundance and quality of early successional habitat as public concern. This was identified as a statewide concern, not merely one on the GMNF. The Forest Service acknowledged the importance of early successional habitats by identifying them in the FEIS as one of four indicators to be analyzed for wildlife and wildlife habitat (FEIS Wildlife section 3.6). On the GMNF, early succesional habitat consists primarily of permanent upland openings (including areas such as scrub-old field and shrub habitats, as well as more pasture-like grassland habitats) and temporary openings created through silvicultural actions. Early successional habitat provided on non-National Forest System lands may be distinctly different in character, composed in some measure of agricultural lands, utility rights-of-way, or small parcels in residential areas (see collected papers in Thompson et al. 2001 and Litvaitis 2003). These habitats typically are not set aside explicitly for wildlife, and thus may be subjected to maintenance or other disturbance on a scheduled that is not optimal for wildlife. In contrast, the GMNF can provide early successional specifically for wildlife and can arrange maintenance and disturbance schedules to prevent or minimize adverse effects to wildlife. Public comments demonstrated the diverse opinions regarding wildlife, habitat management, and the course that the GMNF should follow during the next planning cycle and beyond, particularly with respect to early successional habitat. Science, in the form of peer-reviewed literature, provides support for all positions in this debate. It identifies a large number of wildlife species in northern New England that benefit from early successional habitats and documents that populations of many of these species are declining substantially as abundance and quality of early successional habitats decrease. See Hunter et al. (2001), Thompson and DeGraaf (2001), Litvaitis (2001), and other collected papers in Thompson et al. (2001); collected papers in Litvaitis (2003); and Partners in Flight regional reports for northern New England and eastern spruce-hardwood forest (Hodgman and Rosenberg

	2000, Rosenberg and Hodgman 2000). Scientific literature also documents historic disturbance regimes for the habitats that comprise the GMNF, showing that regenerating forest, aspen-birch, and other early successional habitats were naturally uncommon (Lorimer and White 2003, Seymour et al. 2002). Limited habitat availability makes it likely that species needing these habitats also would have been limited in the area. The Forest Service reviewed the range of scientific literature on this topic, evaluated species that prefer more or less of these early successional habitats to determine whether viability is a concern (FEIS section 3.9, Species of Potential Viability Concern), and considered the role of the Forest in the larger regional landscape (see revised Forest Plan section 2.1) while developing the five alternatives presented in the FEIS. The decision to have some amount of even-aged regeneration harvest in all alternatives was based on the value of aspen-birch and regenerating forest habitat to numerous wildlife species and the need for the Forest to provide a diversity of habitat to support all native and desired non-native species (See objectives under Goal 2, revised Forest Plan pp. 10-12, and discussion and analysis in FEIS section 3.6, Wildlife and Wildlife Habitat). The amount of regenerating forest habitat that the Forest Service should provide on the GMNF was based on the need to balance the desire for more of this habitat, which includes the desire to mitigate shortfalls in maintaining this habitat over the past 17 years, with the ability of the forest to maintain this habitat. Constraints on providing this habitat on the Forest include those of budgets and staff, as well as the need to maintain a non-declining yield of timber. The amount of commercially provided regenerating forest habitat cannot be larger than proposed across the alternatives because more regeneration harvesting would not be sustainable (would lead to declining yields of timber), based on the SPECTRUM modeling. The revised Forest Plan (Appendix D) identifies a desire to substantially increase the amount of non-commercial creation of aspen-birch habitat, which will supplement the commercial harvesting for aspen-birch and other early successional habitat. The FEIS describes the effects of the alternatives in providing these non-commercial opportunities, and how each alternative contributes toward the abundance of this habitat (FEIS Vegetation section 3.5. Consequently, the amount of regenerating forest habitat actually created on the Forest will depend greatly on the ability of the Forest Service to work with partners and volunteers to create and sustain this habitat non-commercially. See also response to PC 32600-4.
SC 32500-14a	IN REMOTE WILDLIFE HABITAT IN LINCOLN
SC 32500-14f	IN LINCOLN ALONG A CRITICAL CORRIDOR THAT LEADS TO DEER WINTERING AREAS, BEAR AND MOOSE HABITAT AND IMPORTANT BREEDING GROUNDS
	Response: In order to achieve the desired future conditions of Remote Wildlife Habitat MA (see revised Forest Plan p. 60), the Forest Service anticipates that there will be active vegetation management. The Remote Wildlife Habitat MA is one in which the Forest Service will create and maintain early successional habitat. The revised Forest Plan, however, is a programmatic document, which in most cases does not prescribe site-specific management actions of this nature. Wildlife habitat management in the

	Lincoln area, and in other specific areas of the GMNF, will be accomplished through site-specific projects conducted under the programmatic direction of the revised Forest Plan.
SC 32500-14d	BY CLEARCUTTING AND OTHER PROVEN METHODS
	Response: Analyses in section 3.6 of the FEIS (Wildlife and Wildlife Habitat) address and analyze potential management effects on a wide variety of wildlife species and habitats, including early successional habitats. Regenerating forest stands, a major component of early successional habitat, are created by variations of even-aged prescriptions, including clearcut and shelterwood harvests. The Forest Service will employ even-aged silviculture when and where appropriate to achieve desired goals for management of forest resources and wildlife habitat (see Timber or Vegetation Management standards and guidelines, revised Forest Plan pp. 23-25).
SC 32500-14e	TO IMPROVE GAME SPECIES DENSITIES
	Response: The role of the GMNF, as stated in the revised Forest Plan (section 2.1) and FEIS (Chapter 1), specifically includes management to "enhance wildlife and plant habitat conditions." In the revised Forest Plan, the GMNF will move towards vegetation composition and age class objectives that will provide forest habitats for diverse array of species, including game species. Standards and guidelines address protection of wetlands, deer wintering habitat, wildlife reserve trees, creation and maintenance of permanent and temporary openings, and other more specific aspects of wildlife habitat. Analyses in section 3.6 of the FEIS (Wildlife and Wildlife Habitat) address and analyze potential management effects on a wide variety of wildlife species and habitats. However, specific goals related to desired densities of game species are the purview of the Vermont Agency of Natural Resources and the Vermont Fish and Wildlife Department (see responses to SC 13000-2a).
PC 32500-15:	**The Forest Service should disclose the varied effects among alternatives for wildlife and wildlife habitat based on the number of acres available as habitat for native wild game species.**
SC 32500-15a	BECAUSE THERE ARE INDICATORS TO DISCLOSE EFFECTS FOR RECLUSIVE SPECIES HABITATS AND MANAGEMENT INDICATOR SPECIES BUT NOT GAME SPECIES
SC 32500-15b	BECAUSE ADDING INFORMATION ON WILD TURKEY, MOOSE, BLACK BEAR AND OTHER VERMONT GAME SPECIES WOULD AID IN ASSESSING THE EFFECTS OF THE PREFERRED ALTERNATIVE
	Response: The entire acreage of the GMNF provides a mix of diverse habitats. Not all habitats are suitable for all species. Not all habitats are optimal for all game species. The analyses in the FEIS relative to wildlife and wildlife habitat focus on wintering habitat for white-tailed deer, early successional habitat, habitat for reclusive species, and habitat for management indicator species (MIS). The Forest Service selected white-tailed deer, gray squirrel, American woodcock, ruffed grouse, and brook trout as MIS for the revised Forest Plan. The revised Forest Plan provides a mixture of management actions and land allocations designed to provide habitats to support viable populations of plants and animals, including game species, while providing adequate resources for a wide range of recreation uses, and other social and economic needs. The Forest Service does not agree that the FEIS analysis of wildlife and wildlife habitat needs an additional indicator to evaluate game species

	because this would be redundant with the four existing indicators: wintering habitat for white-tailed deer, early successional habitat, habitat for reclusive species, and habitat for management indicator species (MIS). Each of the four indicators addresses various aspects of habitat for one or more game species, either exclusively or in association with other species (FEIS Wildlife section 3.6).
PC 32500-16	**The Forest Service should incorporate a basic list or table of species finding favorable habitat conditions in designated Wilderness.**
SC 32500-16a	BECAUSE IT WOULD PROVIDE A SOURCE OF JURIED LITERATURE TO THE GENERAL PUBLIC
	Response: The Forest Service is hesitant to compose lists of species that prefer a particular set of habitat conditions. Many species are versatile and adaptable to different conditions, which complicates assigning them to particular habitats. Subtle changes in situation can change the potential community of species that might occur in a particular habitat type. Further, compiling a comprehensive and exhaustive list is difficult, if not impossible. Some species undoubtedly are left off. Published lists can be easily misinterpreted as complete and accurate when they probably are not. The response to SC 62000-23l addresses designated Wilderness as it relates to diversity of wildlife habitat and to diversity of plant and animal species. Designated Wilderness on the GMNF is dominated by mature and older forest, particularly northern hardwood, with spruce-fir forest at higher elevations. Changes to forest structure in designated Wilderness will occur through natural ecological processes. In time, these areas will develop into old growth forest. Any species that inhabits mature and older forest habitats may occur in designated Wilderness on the GMNF. Because openings and regenerating forest habitat would not be abundant in mature, old, and old growth forest, species that occur only or primarily in early successional habitats would be less likely to occur in designated Wilderness. Several published reviews of New England wildlife and wildlife habitat (for example, DeGraaf and Rudis 1986, DeGraaf et al. 1992, and DeGraaf and Yamasaki 2001) identify habitat types in which individual vertebrate wildlife species occur. Although many species occur in mature, old, and old forest habitats, the Forest Service is not aware of any vertebrate species that are obligate to old growth conditions (that is, species that live in, and only in, old growth) that will develop over time in designated Wilderness (Yamasaki 2004). Hagan (2004) and Hagan and Whitman (2004) and co-workers have described *Neckera pennata* , a moss that grows on large, old sugar maples, as a potentially suitable indicator of old growth in New England.
PC 32500-17	**The Forest Service should revise selected indicators for wildlife in the DEIS**
SC 32500-17a	BECAUSE THE SELECTED MANAGEMENT INDICATOR SPECIES ARE BIASED TOWARD EARLY SUCCESSIONAL HABITAT AND DEER MANAGEMENT
	Response: MIS selected by the Forest Service for the revised Forest Plan are white-tailed deer, gray squirrel, American woodcock, ruffed grouse, and brook trout. American woodcock and ruffed grouse do occur in early successional habitats, although ruffed grouse also occur in older stands, as well, particularly where aspen is abundant. White-tailed deer benefit from

	permanent upland openings and from temporary openings of regenerating forest stands. Wintering habitat for white-tailed deer, however, includes mature and older softwood stands that provide shelter and protection from winter temperatures and wind. Brook trout occur in perennial streams that flow through various habitat types, although riparian corridors on the GMNF are primarily forested. The Forest Service does not agree that its selection of MIS or any other aspect of the revised Forest Plan is overly biased toward early successional habitat or white-tailed deer. The Forest Service does acknowledge a regional concern of wildlife biologists, zoologists, ecologists, and resource managers for the low abundance and quality of early successional habitat (see responses to SC 22000-12c, PCs 32500-14, and PC 32600-4). Residents of Vermont are concerned about the status of the white-tailed deer in the State. Early successional habitat and white-tailed deer, however, are not the only issues of concern for the GMNF or in the Northeast. Accordingly, the revised Forest Plan provides a mixture of management actions and land allocations designed to provide habitats to support viable populations of plants and animals while providing adequate resources for a wide range of recreation uses, Wilderness, and other social and economic needs.
SC 32500-17b	TO INCLUDE OLD GROWTH FOREST
	Response: See the response to PC 32200-1 for a general discussion of management indicator species (MIS). The Forest Service did not select an MIS for old growth forest for two primary reasons. First, as explained in several responses in this section, certain habitats are unlikely to change measurably during the life of the revised Forest Plan, which diminishes the value of using MIS to measure responses to management. Mature and over-mature northern hardwood forest currently dominate the GMNF, and they will continue to dominate the Forest during the current planning cycle and beyond (see responses to PC 32600-10 and SC 32600-10a). The revised Forest Plan allocates 140,000 to 160,000 acres of the GMNF (depending on whether White Rocks NRA is included) to MAs in which changes to forest structure will occur primarily through natural ecological processes (see Section 3.5 in the FEIS). Lands in these MAs will slowly move toward old-growth conditions. This process will take decades or more, and change during the next 15 or 20 years is not likely to be measurable, particularly in terms of population status of any species that occurs in these habitats. Second, the Forest Service is unaware of a good animal species that would serve as an MIS for old growth conditions on the GMNF. *Neckera pennata* , a moss that grows on large, old sugar maples, is a potentially suitable indicator of old growth in New England (Hagan 2004, Hagan and Whitman 2004). No vertebrate species is so closely tied to old growth that its presence would signify anything more specific that mature or older forest habitat (Yamasaki 2004). Moreover, ecologists can sample the species composition and the age/size distribution of trees, the soil conditions, and other factors to assess whether a stand qualifies as old growth. Such ecological assessment would be more appropriate than attempting to select a single plant or animal species as an MIS.
SC 32500-17c	TO INCLUDE CONTINUOUS FOREST CANOPY
	Response: See the response to PC 32200-1 for a general discussion of management indicator species (MIS). As explained in several responses in

	this section, certain habitats are unlikely to change measurably during the life of the revised Forest Plan, which diminishes the value of using MIS to measure responses to management. Mature and over-mature northern hardwood forest currently dominate the GMNF and they will continue to dominate the Forest during the current planning cycle and beyond (see responses to PC 32600-10 and SC 32600-10a).

Vegetation Management (32600)

PC 32600-1:	**The Forest Service should remove bias in the Final EIS by correcting how the term biodiversity is utilized as rationale for management activities.**
SC 32600-1a	BECAUSE BIODIVERSITY ACTUALLY ENCOMPASSES SEVERAL LEVELS OF ORGANIZATION AND FUNCTION
SC 32600-1b	BECAUSE THE DRAFT EIS PURPORTS TO INCREASE EARLY SUCCESSIONAL HABITAT TO INCREASE THE NUMBERS OF SPECIES FAVORED BY THIS STAGE
SC 32600-1c	BECAUSE IT IS INACCURATE TO SAY THAT INCREASING SPECIES THAT WERE UNUSUAL PRIOR TO LARGE-SCALE, HUMAN DISTURBANCE IS INCREASING OR ENHANCING BIODIVERSITY
	Response: The Forest Service agrees with how biodiversity was described in this comment, and that is how the term was defined in the DEIS and in the FEIS (see Chapter 3, section 3.1.4, the heading under “What is Biodiversity?”). Biodiversity does encompass several levels of organization and function and is often considered in the context of historical or natural ranges of variation and processes. The Forest Service is also mandated by the National Forest Management Act to “provide for diversity of plant and animal communities and tree species consistent with the overall multiple-use objectives of the planning area” (36 CFR 219.26), and “to maintain viable populations of existing native and desired non-native vertebrate species in the planning area” (36 CFR 219.19). Declines in species associated with grasslands, shrublands, and other early successional habitats are well-documented. The Forest Service agrees that many of these species would have otherwise been considered rare in the presettlement landscape. Under such circumstances, they would be treated similarly to sensitive species and would be protected in the context of Forest Service Manual direction for threatened, endangered, and sensitive (TES) species (FSM 2670) (see also FEIS section 3.9). One objective for management of TES species is to ensure recovery or at least maintenance of viability, which would involve habitat management for species of open or early successional habitat. Consequently, whether or not population numbers of these species were at one time artificially inflated from pre-European settlement conditions by human land use, they were likely rare then, and they are becoming rare now. The agency has a responsibility to maintain habitat for these species at levels that will provide for viable populations where possible. In addition, there is public interest in early successional and open land habitat for other purposes beyond wildlife habitat. As a multiple-use agency, the Forest Service must balance these preferences, and the Regional Forester has decided that the Forest Plan has achieved an adequate balance in this case.
PC 32600-2:	**The Forest Service should balance age class distribution on the GMNF**

SC 32600-2a	TO PROVIDE AN EQUAL CHANCE FOR HABITAT FOR A FULL RANGE OF SPECIES ACROSS THE AGE CLASS SPECTRUM
SC 32600-2b	BY HARVESTING MORE TIMBER
	Response: A commenter recommended establishing a more balanced age class distribution than indicated as a result of plan implementation, suggesting 25 percent in each of the four broad age classes (regenerating, young, mature, and old) to provide equal representation of habitats for the diversity of species using these habitats. A general description of age classes used on the Forest for management and in the analysis can be found in Section 3.5.1.1 of the FEIS. A balanced age class distribution represents a regulated forest, and is one of the goals of silviculture using even-aged methods. A balanced age class distribution requires, for instance, ten percent of lands managed using even-aged methods to be in each ten-year age class under a 100-year rotation (harvest ten percent per year each decade for 100 years). The proportion harvested is reduced in each decade for longer rotations (for instance, five percent under a 200-year rotation), and is increased in each decade for shorter rotations (for instance, 12.5 percent under an 80-year rotation). The Forest Service has grouped the ten-year age classes into age class categories (regenerating, young, mature, old) to represent different structural stages in forest development that are valued differently by forest wildlife. These categories do not have an equal number of decades in them; for instance, the regenerating age class (the age class that follows a harvest) is represented by one decade, while the mature age class is represented by six decades. In order to maintain a sustainable harvest in a regulated forest, the forest would still need to be balanced by 10-year age classes. In other words, under regulation one could not harvest on average a larger proportion of the forest than the maximum proportion allowed in the first decade based on rotation age, or ten percent under a 100-year rotation. If one harvested more than ten percent every decade, for example the 25 percent suggested by the commenter (in order to maintain 25 percent of the forest in the regenerating age class), then one would be required to have a shorter rotation (in this case a 40-year rotation). In this case, one would be harvesting smaller and less valuable trees, and for the northern hardwood forest type, one would no longer be able to achieve objectives for having 25 percent in each of the mature and old age classes. Even across the entire Forest, in order to maintain 25 percent of the Forest in the regenerating age class, all of the Forest would need to be regulated using even-aged methods and would have to be on a 40-year rotation. The age class distribution ranges identified in the revised Forest Plan objectives for Goal 2 represent the agency's attempt to move the Forest toward a balanced distribution by decade across both standard and extended rotation ages, while maintaining a sustainable harvest (revised Forest Plan pp. 11-12). In addition, the entire Forest is not being managed for a balanced age class distribution. Timber harvesting to achieve wildlife values is one of many emphases for which the Green Mountain National Forest is being managed under the revised Forest Plan. The Forest Service mission is "to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations." The Multiple Use Sustained Yield Act of 1960 states: "It is the policy of the Congress that the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes." In order

	to meet the mission as well as multiple-use, some areas are identified for protection and preservation. These areas are not regulated through timber harvest and are expected to continue to age and develop an age class distribution consistent with the natural range of variation expected for the forest types involved, with upwards of 50 to 80 percent in the old age class (Lorimer and White 2003). Other areas are identified for active management for purposes such as ecosystem restoration, production of goods, and maintaining or improving productivity and forest health. Some of these areas will receive silvicultural treatments using even-aged methods, and this is where the opportunities reside to create more balance in the broad age classes. However, an equal balance across the four broad age classes is not achievable or desirable. In part, this is because it is impossible to equalize the regenerating age class which consists of one decade, with other age classes which consist of five or six decades without sacrificing the older age classes. The only way to increase harvesting and work toward balancing the broad age classes Forest-wide would be to place all suitable lands under even-aged management with short rotations, emphasizing the regenerating and young age classes in these areas, while the remainder of the Forest emphasizes the mature and old age classes. Placing almost half of the Forest under short-rotation forestry is not desirable because trees are not allowed to grow to their full potential, leading to both economic and ecological losses.
PC 32600-3:	**The Forest Service should increase declining age classes and forest communities**
SC 32600-3a	BY FULLY IMPLEMENTING ALTERNATIVE E
	Response: It is the intention of the Forest Service to fully implement the Selected Alternative, which is expected to increase declining age classes and forest communities. The composition and age class analysis for the alternatives was prepared under the assumption that alternatives will be fully implemented (see FEIS section 3.5). Funding for full implementation of the Forest Plan has rarely been supplied, however. The funding of the Forest Service is dependent upon several factors, and budgets vary from year to year (see revised Forest Plan section 1.1.2). In addition, emergency events such as wildfires at the national level can affect local funding. The Forest Service tries to achieve a balanced resource program that meets Forest Plan objectives to the greatest extent possible.
SC 32600-3b	BY INCREASING ASPEN BIRCH COMMUNITY ACREAGE
	Response: The commenter notes that in the 1987 Plan, the aspen-birch forest type composition objective was five to ten percent, and would like to see that percentage re-established in the revised Forest Plan; the revised Forest Plan indicates a composition objective for aspen-birch to be one to five percent (see Table 2.2-1). In the 1987 Plan, however, the composition objectives applied only to "…the portion of the Forest where vegetation is managed…" (p. 4.28), which represented management areas considered suitable for timber management (Diverse Forest Use and Diverse Backcountry under Alternative A). These management areas amount to about half the Forest under Alternative A. Under the revised Forest Plan Goal 2 objectives (pp. 10-11), the forest composition objectives are applied to the entire 400,000 acres of the Forest, including lands considered unsuitable for timber management. To account for the areas where management for aspen-birch was either unlikely or prohibited, objectives for aspen and birch were reduced. The lower limit of one percent was recognition that many factors,

	including limited funding, have made it difficult to manage for aspen and birch. Consequently, the Forest Service identified the range for aspen to be between the existing proportion on the Forest (the range minimum) and what the Forest Service hopes to achieve over the next 10 to 15 years (the range maximum) across the entire Forest.
PC 32600-4:	**The Forest Service should remove the bias that existed in the Draft EIS towards early successional habitat.**
SC 32600-4a	BECAUSE THE HABITAT IS AVAILABLE OFF THE GMNF
SC 32600-4b	BECAUSE THEIR CREATION POSES A THREAT TO UNMANIPULATED HABITAT, WIDE-RANGE LARGE PREDATORS, OLD GROWTH CONDITIONS, AND RECOVERED STREAM HABITATS
	Response: The Forest Service does not agree that the revised Forest Plan is biased toward early successional habitat. The revised Forest Plan includes a mix of designated Wilderness and Wilderness Study Areas that the Forest Service recommends as logical and reasonable additions to designated Wilderness on the Forest, as well as acres allocated to many other MAs that preclude or restrict management to create or enhance early successional habitat (see Sections 3.5 Vegetation and 3.6 Wildlife and Wildlife Habitat of the FEIS). The GMNF currently is dominated by mature and older forest; this condition will continue during the foreseeable future (see SC 32600-10a). As described in the FEIS and in a large body of scientific literature (for example, collected papers in Thompson et al. 2001 and Litvaitis 2003), declines in species associated with grasslands, shrublands, and other early successional habitats are well-documented (see Section 3.6 Wildlife and Wildlife Habitat in the FEIS; also see responses to SC 22000-21c, PC 32500-14, and PC 32600-4). The Forest Service agrees with commenters that many early successional habitat and the species associated with them may have been considered rare in the pre-European settlement landscape. Under such circumstances, these species and their habitats would be protected under Forest Service Manual direction for threatened, endangered, and sensitive (TES) species (FSM 2670). One objective for management of TES species is to ensure recovery or at least maintenance of viability, which would involve habitat management for species of open or early successional habitat. Consequently, whether or not population numbers of these species were at one time artificially inflated from pre-European settlement conditions by human land use, they were likely rare then, and they are becoming rare now. The Forest Service has a responsibility to maintain habitat for these species at levels that will provide for viable populations where possible. Scoping early in the Forest Plan revision process identified insufficient abundance and quality of early successional habitat as public concern. This was expressed as a concern statewide, not merely for the GMNF. See response to PCs 32500-14 and 32600-4. Also see responses to other comments that address aspects to this comment relative to large predators (PC 32100-1), to Wilderness, old growth, and “un-manipulated” conditions (PC 62000-23, SC 62000-21b, SC 62000-21c, and SC 62000-21e), to fragmentation of forest habitat (PC 32100-5), and protection and management of riparian zones (PC 31100-1 and PC 31100-5).
SC 32600-4c	BECAUSE NATURALLY REGULATED FORESTS ARE ECOLOGICALLY DIFFERENT THAN THOSE MANAGED FOR COMMERCIAL TIMBER
	Response: The Forest Service agrees that naturally regulated forests are

	likely to be ecologically different than those commercially managed for timber. Recent forestry research identifies techniques for assessing the extent to which forest management approximates naturally regulated conditions, also known as the range of natural variability (see response to SC 32600-5b). For additional detail, see Vegetation section 3.5 of the FEIS. Another aspect of this issue is that "naturally regulated" forests will not return to pre-European settlement conditions, but rather are likely to move towards more homogenous and less diverse habitat conditions (see response to PC 32500-9).
SC 32600-4d	BECAUSE THERE IS NO CLEAR CONNECTION BETWEEN THE LOSS OF EARLY SUCCESSIONAL HABITAT AND THE DECLINE OF MIGRATORY SONGBIRDS
SC 32600-4e	BECAUSE MIGRATORY SONGBIRD POPULATIONS ARE DECLINING DUE TO LOSS AND FRAGMENTATION OF HABITAT
SC 32600-4f	BECAUSE DECLINES IN THIS HABITAT ARE NATURAL
SC 32600-4g	BECAUSE THE HABITAT WAS DUE TO THE DECLINE IN FARMING
SC 32600-4h	BECAUSE NEPA REQUIRES IMPARTIAL DISCLOSURE
	Response: As described in responses to PCs 32500-14 and 32600-4, a substantial body of peer-reviewed literature identifies many wildlife species in northern New England, including migrant songbirds, that occur in and benefit from early successional habitats. Many of these species have undergone population declines. Available literature strongly implicates the decline in abundance and quality of early successional habitats as a significant factor in observed population declines of early successional species. Scoping early in the Forest Plan revision process and public comments identified declines in both white-tailed deer and early successional habitat as public concerns related to wildlife and wildlife habitat (see responses to SC 22000-21c and SC 32500-1b). The FEIS analyzed a wide variety of alternatives with different outcomes and with varying management area allocations, addressing Forest Plan revision issues. Each alternative meets the intent of relevant laws, including the Multiple Use Management Act, under which the national forests are managed. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. The Selected Alternative represents what Forest managers believe to be the best balance of outcomes in achieving sustainable ecosystems and meeting the intent of relevant laws, as well as addressing the issues and concerns specific to the GMNF, wildlife habitat, and timber harvesting. See also responses to PC 32600-1 and PC 32600-4.
PC 32600-5:	**The Forest Service should increase the amount of forest in old growth areas and provide for more than the five percent management objective to represent old growth characteristics in all ecosystem types, as well as in the old age class.**
SC 32600-5a	TO PROTECT BIOLOGICAL AND BIOPHYSICAL RESOURCES
SC 32600-5c	BECAUSE IT TAKES OVER 120 YEARS FOR SOME TREE AND SOIL STRUCTURES TO FORM
SC 32600-5i	TO BENEFIT FUTURE GENERATIONS, PROVIDE HABITAT DIVERSITY, AND RETAIN ALL ECOSYSTEMS AND HABITAT TYPES INTO THE FUTURE

SC 32600-5j	BECAUSE SCIENTISTS HAVE DOCUMENTED MANY ECOLOGICAL VALUES OF OLD FORESTS
SC 32600-5k	BECAUSE OLD GROWTH ONCE COVERED 50 TO 80 PERCENT OF NEW ENGLAND
SC 32600-5m	BECAUSE TODAY'S OLD FORESTS ARE FRAGMENTED
SC 32600-5n	BECAUSE LONG-TERM GENETIC DIVERSITY REQUIRES LARGE BLOCKS OF HABITAT AND CONNECTIVITY BETWEEN BLOCKS
	Response: An analysis of representation of ecosystems and amount of area in designations where old growth characteristics will develop over time was prepared for all of the alternatives (see FEIS section 3.11). These designations include Research Natural Areas, candidate Research Natural Areas, Ecological Special Areas, Wilderness, Remote Backcountry Forest, White Rocks National Recreation Area, Eligible Wild Rivers, Wilderness Study Areas, and lands unsuitable for timber management within Diverse Forest Use, Diverse Backcountry, Escarpment, Moosalamoo, and Remote Wildlife management areas, and constitute the ecological reference area network. The analysis indicates that between 37 and 55 percent of the Forest would occur in areas where old growth will develop across alternatives. The analysis also shows that most ecosystem types are represented at well above the five percent level across all alternatives. Alternatives A, B, and C each have one to two ecosystems that are represented at below the ten percent level, while Alternatives D and E have all ecosystem types represented at above ten percent. The revised Forest Plan allocates approximately 177,000 acres to ecological reference areas.. This represents about 44 percent of the landbase of the National Forest (FEIS, section 3.11.2). These areas will develop old growth characteristics over the long term. An additional 20,000 acres of management areas (Alpine Ski Areas and Expansion Areas, the Appalachian and Long Trails, and Recreation Special Areas) are considered not suitable for timber management, although cutting of trees may occur in limited portions of some areas for ski area management, recreation management, or other purposes. Many portions of these areas will develop old growth characteristics as well. Together, areas that are considered unsuitable for timber management represent approximately half of the available federal ownership of the Green Mountain National Forest. In a publication referenced by one commenter, Huggard (2004) indicates that "Recommendations on the proportion of the landscape that should be unmanaged range from typical administrative objectives of 10 or 12% (stemming from the Brundtland Commission) to conservation biology recommendations exceeding 50%" (p. 4). The land allocated to ecological reference areas, as well as land generally unsuitable for timber management, fall well within this range. See also responses to SC 32600-5b and SC 32600-5f.
SC 32600-5b	BECAUSE IN A NATURAL NORTHERN HARDWOOD FOREST THIS AGE PREDOMINATES
SC 32600-5l	BECAUSE THE GAP BETWEEN PRE-EUROPEAN OLD GROWTH AND OTHER CURRENT FOREST COMMUNITIES IS GREATER
	Response: Concerns were noted by commenters that the Forest should be managed within the range of natural variation, or RNV. Movement toward the range of natural variation (RNV) was not necessarily part of the Purpose and Need for plan revision. Emphasizing biological diversity on a landscape scale to provide for the persistence of all native and desired non-native species,

	however, was part of the purpose of the revision process (DEIS p. 1-5). Estimates of conditions present before pre-European settlement were used to develop alternatives in a number of ways. For example, the ecological reference area network (Research Natural Areas, Ecological Special Areas, Wilderness, Wilderness Study Areas, Remote Backcountry Forest, Eligible Wild Rivers, White Rocks National Recreation Area, and lands unsuitable for timber in certain MAs) all have or will develop a desired landscape structure which is more similar to RNV conditions. Much of the ecological reference area network emphasizes large blocks of contiguous habitat and larger than average vegetation patch sizes. The revised Forest Plan allocates approximately 177,000 acres to this network. The vegetation composition objectives under Goal 2 (revised Forest Plan pp. 10-11) were developed in part through use of RNV information. The vegetative objectives, including the age class objectives, also considered the National Forest's roles in providing for recreation, access, wildlife habitat, timber production and various other multiple-use objectives. Management of the Forest within the range of natural variation could place anywhere from 55 to as much as 90 percent of lands within the old age class, depending upon forest type and disturbance regime (Lorimer and White 2003). One commenter noted a paper by Seymour et al. (2002) which describes how silvicultural systems compare to the RNV for northeastern North America. The Forest Service appreciates the commenter noting this paper because it provided a technique for making this comparison that was useful in responding to this comment. The Forest Service reviewed this paper and has included additional discussion related to this paper in the Vegetation section (3.5) of the FEIS. In essence, the paper provides both a methodology for estimating the departure from RNV for various silvicultural systems, and recommendations for management to be in alignment with RNV. The paper contends that multi-cohort management techniques, such as uneven-aged management, as well as stands with two-cohort stand structures resulting from variable retention management techniques, fall within the RNV for the region. The extent to which two-cohort methods work within the RNV depends on the magnitude of retention of biological legacies (standing live and dead trees, coarse woody debris), on the order of 10 to 15 square meters of basal area per hectare (44 to 65 square feet per acre). The charts the authors use to evaluate techniques also indicate that stands of five acres in size managed on rotations of at least 188 years would also fall within the RNV, with larger stands requiring a longer rotation to stay within the RNV. After reviewing this paper, the Forest Service concluded that a substantial majority of the Forest will be managed within the range of natural variability. Lands unsuited for timber management account for about half of the Forest. These lands, except for developed or regularly disturbed sites (campgrounds, trail corridors, ski areas), will eventually develop structure and composition within the expected natural range of variability. Within the remaining half of the Forest where timber management will occur, at least 20 percent of those lands will be managed using uneven-aged techniques, and the Spectrum model assumed that within Diverse Forest Use and in the Moosalamoo Recreation and Education Area, approximately half of the suitable lands would be managed using uneven age techniques. Consequently, an additional 10 to 15 percent of the Forest will be managed within the RNV

	based on Seymour et al (2002). In addition, stands of two to ten hectares (5 to 25 acres) in size managed under the long rotations proposed for Remote Wildlife Habitat and Diverse Backcountry Forest will also fall within or very near the RNV for the Northeast (Seymour et al. 2002), providing an additional 18 percent of lands managed toward RNV. Even assuming that no uneven-aged management occurs outside of Diverse Forest Use and Moosalamoo (which is unrealistic given that these techniques are allowed in the other management areas), the Forest Service expects that at least 80 percent of the Forest will be managed in a way consistent with RNV, based on Seymour et al. (2002).
SC 32600-5d	BECAUSE THEY SUPPORT LATE SUCCESSIONAL FUNGI, MOSSES, LICHEN AND INVERTEBRATES
	Response: A commenter expressed a concern that the DEIS did not address the effects of the Plan on less well-known organisms and should be conservative in regard to late-successional forests because so little is known about these species, but several are known to be strongly associated with old forests. The Forest Service agrees that old forests are important for many species and are likely to be important to many of the less well-understood species. Forest Service analysis of biodiversity, as described in the introduction the Effects Analysis (Chapter 3 of the DEIS, p. 3-13), consists of a coarse filter/fine filter approach. For species that are poorly understood, the coarse filter approach is used. This approach promotes restoration, maintenance, and protection of a wide variety of habitats, including a diversity of age and size classes. As a result of management area allocations, Forest-wide standards and guidelines, and management area desired future conditions, standards and guidelines direction, species viability on the Forests is predicted to be maintained or enhanced. See also response to SC 32600-5a.
SC 32600-5e	TO RETAIN ALL PATCHES MADE UP OF TREES EXCEEDING 150 YEARS IN AGE
	Response: All currently known patches of trees more than 150 years old have been evaluated, and those determined to represent late successional conditions are reserved in the ecological reference area network in the revised Forest Plan. All stands that were identified as 150 years old or older in the early 1990s were surveyed. Some were found to be old harvests with a few old individuals, generally one or two, but predominantly young or regenerating stands. Others were apparently misidentified in terms of age. Those identified as significant ecological features were protected in the ecological reference area network.
SC 32600-5f	BECAUSE DATA AND RESEARCH DO NOT SUPPORT THE FIVE PERCENT OBJECTIVE
SC 32600-5h	BECAUSE THE NATURE CONSERVANCY CALLS FOR 20 PERCENT AS A MINIMUM TARGET FOR CONSERVING ECOLOGICAL TYPES
	Response: One commenter with this concern referenced a paper by Huggard (2004) in relation to representing ecosystems in unmanaged lands within a managed landscape. The Forest Service thanks the commenter for pointing out this paper. Huggard makes several points relevant to the issue of representation that are important for this discussion. First, he notes two main types of unmanaged lands that should be considered in a representation analysis: reserved lands, and lands considered non-harvestable due to inoperability or low productivity. DEIS analysis of representation only looked at reserved lands, and the FEIS includes the representation of the non-

	harvestable lands as well (FEIS Section 3.11). Second, Huggard (2004) indicates that target values for representation "…can be found in the literature ranging from 1.7% to 97%; which one to adopt is an arbitrary decision based on relative value given to ecological risk versus social and economic values, and assumptions about how the rest of the landscape functions" (p. 11). He also notes that "There are virtually no empirically derived targets to target amounts of unmanaged areas, and therefore none that can be justified with empirical data" (p. 12). The Forest Service identified the desire to manage at least five percent of each ecological type on the Forest for old growth characteristics. This five percent is intended to be a minimum, and represents some of the limitations the Forest has in preserving areas that may comprise a small proportion of the Forest compared to off the Forest, and some of these areas may currently be unsuitable for designation as one of the management areas within the ecological reference area network. Much of the lower elevation lands within both the Green Mountains and the Taconics are more highly developed and fragmented in ownership with small parcels in federal ownership, contain motorized trails, do not have significant natural communities identified by the State, have been substantially been modified by humans, and so are generally unsuitable for designation as any of the ecological reference area network management areas. The Forest Service reviewed the allocation of landtype associations (LTAs) and ecological land unit groups (ELUGs) and made additional adjustments to ensure that at least five percent of these units fell within the ecological reference area network where possible and appropriate. Huggard (2004) also notes that while representation analysis is preferably done in the context of broad regional boundaries, this often is difficult because one needs to know both the status of reserved lands outside of federal ownership, as well as the status of lands considered unsuitable for harvesting due to operability or productivity constraints outside federal ownership. Due to the difficulty in terms of time and funding in acquiring these data for representation analysis during Plan revision, the Forest Service used administrative boundaries for this analysis. In this case, Huggard (2004) recommends two considerations: the proportion of the total extent of an ecosystem type that is officially protected, and the proportion of the total extent of an ecosystem type that falls within the study area. As noted by Huggard (2004), "The latter is an indication of 'responsibility' (Dunn et al. 1999) that the study area has for that type as a whole. Ecosystem types that barely enter a study area are of less concern than ones that have a lot of their extent in the study area" (p. 10). As noted in Table 3.11-3 through 3.11-5 of the FEIS section 3.11, all but one ecological type represented at levels below five percent, or even below 20 percent, individually comprise less than one percent of the Forest land area; some, like the rich transition slope forest ELUG, comprise only 289 acres, or less than one-tenth of one percent of the Forest. Consequently, it is reasonable to expect that in some cases, given conditions in the areas of these poorly represented ecological types, there may be limits to the ability of the Forest to place these ecological types within the ecological reference area network.
SC 32600-5g	TO MAKE 15 PERCENT THE MINIMUM FOR THE OLD AGE CLASS OBJECTIVE FOR NORTHERN HARDWOODS, MIXEDWOODS,

	SOFTWOODS, AND OAKS
	Response: Those who expressed this concern noted that within management areas suitable for timber management, individual stands considered unsuitable for timber management due to low productivity or inoperability would constitute more than the minimum five percent noted for the old age class objective. The Forest Service has noted the fact that the old age class minimum for management areas suitable for timber management does not include these unsuited lands, which would not be harvested. The unsuitable lands were not included as part of the age class analysis in the DEIS because they are not included in the modeling of age class by SPECTRUM (see also FEIS, Appendix B); thus they were treated as if they were reserved lands. The Forest Service agrees that the language for the age class objectives in the proposed Forest Plan did not make it clear whether or not such lands are included. The Forest Service has clarified the guidance in the revised Forest Plan to make it clear that the age class objectives apply only to lands classified as suitable, not simply to management areas considered suitable (revised Forest Plan p. 11; see also Indicator 1 in FEIS Timber section 3.13). Those stands that fall within the old age class simply represent either stands where harvesting is deferred to maintain a sustainable yield, or where stands are managed on long rotations. All stands within the old age class will eventually be harvested, and so do not represent potential or future old growth. Unsuitable lands within suitable management areas will in the future develop old growth characteristics, and are analyzed as part of the ecological reference area network in section 3.11 of the FEIS. See also response to SC 32600-5a and 5b.
SC 32600-5o	BY CONSIDERING ONLY THOSE LANDS THAT WILL BE MANAGED FOR OLD GROWTH FOR LONGER THAN 200 YEARS
	Response: The commenter is concerned that areas like Newly Acquired Lands and White Rocks National Recreation Area (NRA) should not be included in the analysis of areas that will develop old growth characteristics (DEIS Section 3.11) because their management is not expected to be predominantly for old growth purposes. Newly Acquired Lands will only be maintained until it is reallocated to a different management area (through a Plan amendment), and this is discussed in detail as a caveat of the analysis in Section 3.11 of the DEIS. The analysis of effects in the DEIS (p. 3-234) recognizes that while these lands are managed similarly to other lands where old growth will develop, the category is only for the life of the Plan, and so includes an assessment of Alternative A (the only Alternative with this management area (MA)) excluding Newly Acquired Lands. In regard to White Rocks NRA, the commenter is correct that the area allows timber harvesting, but only for recreation, TES species management, or wildlife habitat (revised Forest Plan p. 80). Because the NRA does not allow timber harvesting for forest products, the area is not included in the lands suitable for timber, and so is not managed for timber production or on any harvesting schedule. As discussed on page 3-221 of the DEIS, the result is that very little land actually experiences harvesting in the NRA, and harvests that have occurred have been small in scale and associated with roads. The Forest Service has clarified the Timber Management Guidelines for the White Rocks NRA MA in the revised Forest Plan (p. 80) to more clearly indicate the

	agency's intentions. The rotation ages will still apply to stands that may be managed with timber harvesting within the NRA, but the specific amount of acres where this may occur is not provided in the revised Forest Plan guideline. The acres managed will be determined by an interdisciplinary team in response to wildlife, TES, or recreation needs or opportunities, and will require a site-specific environmental analysis and public involvement.
PC 32600-6:	**The Forest Service should decrease the amount of the regeneration age class in oak and mixedwood.**
	Response: The minimum and maximum regeneration age classes for the oak and mixedwood forest types represent a range which the agency will strive to attain. It does not mean that the Forest Service will manage toward the upper or lower end of the range; it simply provides the agency with some flexibility to adapt to conditions and opportunities on the ground, as well as budgets and other potential constraints on management. The lands suitable for timber management are not currently balanced across 10-year age classes, which is a desired condition for stands managed using even-aged silvicultural systems. The DEIS in Section 3.5.1.1, pp. 3-54-55, described why these lands are not currently balanced. A substantial majority of stands fall within the mature or old age class, with only a small percentage that can be regenerated within any ten-year period to achieve this desired balance in age class distribution (DEIS Table 3.5-7 p. 3-65). Consequently, it will take a long time to bring these suitable stands into balance. By allowing flexibility within the mixedwood and the oak regenerating age class range, these age class objectives provide opportunities to move stands toward desired composition objectives more quickly. Some additional regeneration opportunities in mixedwood stands can facilitate the natural conversion of some of these stands to softwood stands. Also, additional regeneration opportunities in oak stands can facilitate maintenance and enhancement of oak-pine and oak-hickory natural communities. Given the difference between current composition and desired, and between the current age class distribution and the desired, such trade-offs appear reasonable as long as a non-declining yield can be maintained.
PC 32600-7:	**The Forest Service should distribute openings so they are not clustered or causing forest fragmentation.**
	Response: There is no universal or ideal matrix for the size and distribution of permanent and temporary openings in a forested landscape, and no landscape can be optimized for all species simultaneously. In most landscapes, the availability of large patches of early successional habitat may be more limiting to early successional wildlife than that of small patches (Thompson and DeGraaf 2001). Research in New Hampshire has demonstrated that although openings as small as two acres can provide benefits for many early-successional species, openings of 20 to 30 acres support a greater diversity of birds, as well as several species that do not occur in smaller openings (King et al. 1998, Costello et al. 2000, DeGraff and Yamasaki 2003)(see discussion of permanent upland openings in responses to SC 22000-5f and SC 22000-5g). In general, the more isolated the openings, the larger they need to be. Even at full implementation, however, the Selected Alternative allocates approximately 140,000 acres of the GMNF to MAs in which changes to forest structure will occur through natural ecological processes (see Section 3.5 Vegetation in the FEIS). The White Rocks NRA includes an additional 22,700 acres in which vegetation management is limited. Lands in these MAs will slowly move toward old-

	growth conditions. Even in other areas of the GMNF, the Forest will continue to be dominated by mature and older forest habitats for the foreseeable future (see response to SC 32600-10a; see revised Forest Plan Opening standards and guidelines, section 2.3.5). Forest fragmentation is not expected to be a concern on the GMNF. See also the response to PC 32100-5 and PC 32500-6.
PC 32600-8:	**The Forest Service should define a historical benchmark regarding habitat representation and age class distribution on the GMNF.**
	Response: The Forest Service based the vegetation composition objectives in Goal 2 of the revised Forest Plan on an analysis of historical data and ecological tendencies from ecological analysis and mapping on the Forest. The Forest Service believes that, with the exception of aspen-birch and permanent openings, these composition objectives represent an historical benchmark based on the best ecological information available (see DEIS section 3.5.1.1). Age class objectives only apply to management areas defined as suitable for timber management. Suitable lands are required to be managed for a sustained yield. Under those circumstances, stands have to be regulated, which requires a rotation age and a schedule for regeneration harvests and entries for intermediate treatments. The age class distribution under those circumstances is not likely to reflect a natural pattern. More than half of the Forest that is considered unsuitable for timber harvesting will likely succeed under natural disturbance processes toward a more natural age class distribution similar to that as predicted by Lorimer and White (2003) for pre-European settlement conditions. See also responses to PC 32600-1 and PC 32600-11.
PC 32600-9:	**The Forest Service should increase the amount of the regenerating age class.**
	Response: See responses to PC 32600-3 and PC 32600-2.
SC 32600-9a	BECAUSE THE GMNF IS LIKELY TO BECOME AN INCREASINGLY IMPORTANT SOURCE OF REGENERATING COMMUNITIES
SC 32600-9b	DUE TO PRIVATE FOREST OWNERSHIP PATTERNS AND MANAGEMENT
	Response: The Forest Service agrees that the GMNF will become an increasingly important source for regenerating forest communities related to changes in private forest ownership patterns and management, which is why The Forest Service identified age class objectives for the regenerating age class, as well as composition objectives for aspen-birch and permanent openings, to be higher than would be expected under natural disturbance regimes. There are, however, limits to the proportional representation the Forest Service can physically establish for the regenerating age class as described for PC 32600-2.
PC 32600-10:	**The Forest Service should maintain the level of mature forest on the GMNF.**
SC 32600-10a	BECAUSE A REDUCTION WOULD HAVE A NEGATIVE IMPACT ON NATIVE BIRD POPULATIONS THAT DEPEND ON THIS TYPE OF FOREST
	Response: The mature forest age class described in the revised Forest Plan (p. 11) and in the age class analysis in the FEIS (section 3.5, Indicator 2) represents ages ranging from 40 to 120 years, depending upon habitat type. For the late-successional forest types like northern hardwoods, oaks,

	mixedwoods and softwoods, this age class represents 50 to 60 years. Once a forest type surpasses the maximum age for this age class, it becomes part of the old age class and is subtracted from the mature age class. Likewise, as forest stands in the young age class age, they pass into the mature age class. If forests are allowed to age and are not regenerated, eventually most succeed out of the mature age class into the old age class, and very little will be regenerating to become the young and then mature age classes. In order to create and maintain the young and regenerating age classes, one needs to harvest the mature and old age classes. The analysis in the FEIS (Section 3.5, Existing Condition for Indicator 2) points out that the vast majority of the Forest is currently in the mature age class. Regardless of whether any of the Forest is harvested or not, this age class will inevitably decline because trees will be aging out of it into the old age class. The FEIS discussed the effects of age class distribution objectives on wildlife and wildlife habitat in Section 3.6. Most native bird species associated with mature forests will use mature or old forest conditions, which will continue to occur on the Forest at close to the levels they are now. With declines in songbirds associated with early successional habitats, and with the regenerating age class well below the desired objective to meet the habitat needs of these native birds, the creation of this habitat will require harvesting in the mature and old age class. This harvesting will lead to a small decrease over the long term in mature and old forest habitats from current conditions. The mature and old age class will continue to dominate on the Forest, and habitat for songbirds associated with this habitat is expected to be plentiful.
PC 32600-11:	**The Forest Service should create temporary upland openings instead of permanent openings.**
SC 32600-11a	BECAUSE THIS IS NOT A NATURAL HABITAT WITHIN THIS ECOREGION
	Response: The Forest Service recognizes that permanent upland openings are not a natural community recognized in Vermont outside of alpine meadows, and understand the contention that using temporary upland openings created through harvesting activities would be a better fit with the natural disturbance patterns and ecological tendencies in the GMNF region. There are, however, several practical reasons for maintaining permanent openings. Restoring the entire Forest to the historical or natural range of variability is not the expressed goal of future management under the revised Forest Plan. The Forest Service mission and multiple-use mandate require a balance in management emphases. Often this balance reflects the variety of social values expressed by the public during public meetings and comment periods. The amount and distribution of wildlife habitat is largely a social question, in that it needs to address the issue of what species habitats should be emphasized to provide for the many social, economic, and ecological uses and values of wildlife. So long as the Forest is able to ensure viable populations of species well-distributed within their range in the planning area, and management actions do not lead to species becoming threatened or endangered, the amount and distribution of wildlife habitat then influences social values. Early successional habitat helps to ensure the viability of some species of wildlife dependent on that habitat (see also Chapter 3, Section 3.6, Wildlife and Wildlife Habitat in the FEIS) The social values associated with permanent upland openings for wildlife in the mountains are varied. These types of openings are the most cost

	effective to maintain, in that they are often closest to roads and easiest to access, and often provide vistas which can be maintained cooperatively with the recreation program.. Many were created by hill farmers more than a century ago and can be simply maintained through burning or mowing, providing a remnant of the pastoral hill farm landscape that is important both for its scenic as well as its wildlife values (DEIS p. 3-62). These types of openings offer a level of permanence and stability to opening habitat that is quickly being lost through development of former agricultural lands. If all permanent openings on the Forest were allowed to revert to forest, it is highly unlikely that the Forest Service would be able to create new temporary openings through clearcutting existing forest at a frequency and amount needed to compensate for the loss of this more permanent habitat (DEIS p. 3-99). The public has indicated that it is much more tolerant of maintaining existing openings than creating new permanent openings through clearcutting. The larger grassy openings that are remnants of hill farms are also larger in size and different in composition than smaller temporary openings created through harvesting trees. Research in grassier openings has indicated that they may provide for greater insect diversity than smaller openings (L. Prout, personal communication). Permanent openings offer walking, sightseeing, wildlife viewing, and hunting opportunities that are stable and reliable, while the temporary openings are more dynamic, shifting across the landscape as regenerating stands quickly become dominated by vigorously growing trees. Both types of habitat are provided under the revised Forest Plan.
PC 32600-12:	**The Forest Service should allow the use of herbicides and integrated vegetation management.**
SC 32600-12a	TO MAINTAIN TRANSMISSION LINES, RIGHTS OF WAY, CONTROL OF NATIVE AND NON-NATIVE INVASIVE SPECIES, TO IMPROVE WILDLIFE HABITAT, FOR SITE PREPARATION AND RELEASE OF DESIRABLE SEEDLINGS
SC 32600-12b	WHERE IT IS THE MOST EFFECTIVE AND ECONOMICAL MEANS
	Response: Herbicide use is not precluded by the revised Forest Plan (pp. 25 and 33). The appropriate environmental analyses would be completed before herbicides could be used for site-specific project work.

Fire and Fuels Management (33000)

PC 33000-1:	**The Forest Service should include a fire management plan in the Draft Plan.**
	Response: The Fire Management Plan is an implementation document that is tiered and reflective of the direction and guidance outlined in the revised Forest Plan. The Forest Service's current Fire Management Plan is updated annually and is based on direction from the 1987 Forest Plan. A revised Fire Management Plan will be developed as soon as the revised Forest Plan is finalized that will tier and reflect direction in the revised Forest Plan.
PC 33000-2:	**The Forest Service should use prescribed fire management.**
SC 33000-2a	TO CREATE, RESTORE AND ENHANCE FIRE DEPENDENT AND ENHANCED SUCCESSIONAL HABITAT
	Response: The Forest Services agrees, and the use of prescribed fire in meeting management objectives is described in the DEIS (pp. 3-315-316). Prescribed fire can be used in all management areas except for Wilderness, Wilderness Study Areas, and Alpine/Subalpine Special Areas (DEIS Table

	3.17-3).
PC 33000-3:	**The Forest Service should ban the use of prescribed fire.**
SC 33000-3a	BECAUSE IT POLLUTES AIR, AND CAUSES HEART ATTACKS, STROKES, ASTHMA AND LUNG CANCER
	Response: Fire is an important tool in managing hazardous fuel loadings near urban interface areas and for maintaining open areas. Forest-wide standards and guidelines in the revised Forest Plan state that best available smoke management practices should be used to ensure that prescribed fire will not result in adverse effects on public health and safety (p. 34). An objective under Goal 5 of the revised Forest Plan states "Continue to manage prescribed fire in a manner that minimizes smoke impacts on air quality and visibility" (revised Forest Plan, p. 14). Prescribed fire is expected to have minimal impacts to local and regional air quality (DEIS pp. 3-44-45). In the planning phase, smoke outputs are modeled and estimates of particulate matter and carbon monoxide are made to ensure that EPA air quality standards are not exceeded. Burn plans are developed to account for sufficient smoke column lift to dissipate quickly into the atmosphere, and wind direction limits are established to avoid smoke-sensitive areas.
PC 33000-4:	**The Forest Service should include a detailed plan on hazardous fuels reduction in the Forest Plan.**
	Response: The revised Forest Plan is a programmatic document. Site-specific implementation of hazardous fuels reduction projects will be based on actual on-the-ground conditions and guidance contained in the Fire Management Plan. Goal 21 of the revised Forest Plan states "Protect human life, property, and facilities from wildland fire hazards" (p. 18). An objective under Goal 21 states "Reduce hazardous fuels through Fire Use, mechanical treatments, and harvest treatments" (p. 18).
PC 33000-5:	**The Forest Service should improve their ability to conduct burns to maintain openings.**
	Response: The Forest Service recognizes the shortcomings of relying solely on prescribed burning to maintain openings and relies on multiple techniques such as mowing and hand tools to meet this objective (DEIS p. 3-316). In addition, new technologies are incorporated into our prescribed burning projects. The revised Forest Plan broadens the ability to use prescribed burning to meet resource objectives and restore ecosystems. Forest-wide guidelines state that fire planning should be incorporated into resource management plans (p. 34). Prescribed burns will be tiered to revised Forest Plan goals and objectives, and management area Desired Future Conditions written under specific conditions with adequate resources.

Timber Resource Management (34000)

PC 34000-1:	**The Forest Service should focus the timber program on restoration, uneven-aged management, or long-rotation harvest practices.**
SC 34000-1e	BECAUSE WE SHOULD NOT CUT ALL THE TREES
SC 34000-1j	FOR ECOLOGICAL AND ENVIRONMENTAL REASONS
SC 34000-1p	TO PROTECT PRISTINE FORESTS AND OLD GROWTH
SC 34000-1r	FOR NON-TIMBER MANAGEMENT USES
SC 34000-1t	FOR BIODIVERSITY
SC 34000-1bb	BECAUSE FORESTS ARE NOT TREE FARMS
SC 34000-1jj	BECAUSE THIS MEETS THE NEEDS OF THE GREATEST NUMBER OF PEOPLE

	Response: The Multiple-Use Sustained-Yield Act of 1960 states that "It is the policy of the Congress that the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed and wildlife and fish purposes." This means that the National Forest will be managed to provide for the use of all the various renewable resources in a combination that best meets the needs of the American people. One of the reasons that the Congress established the National Forest System is to provide a sustainable source of timber products (DEIS p. 3-267). Production of timber on a sustainable basis has been included in congressional direction from the inception of the Forest Service through recent legislation, such as the National Forest Management Act of 1976. Harvesting is done on the GMNF to accomplish a variety of objectives, including habitat management, fuels reduction, and enhancement of forest health, as well as commodity production (see Forest-wide goals and objectives in the revised Forest Plan). Alternatives that included no harvesting and greatly expanded harvesting were considered, but eliminated from detailed study, and was discussed in Chapter 2 of the DEIS. Extended rotations will occur in the Diverse Backcountry and the Remote Wildlife Habitat management areas to meet recreation and habitat objectives (see the Desired Future Condition for those management areas in the revised Forest Plan, as well as the Wildlife (3.6) and Recreation (3.10) sections of the FEIS). A total of 66,254 acres of land suitable for timber production occur in the DBC and RWH management areas where extended rotations will predominate (FEIS Table 3.13-9). The SPECTRUM model predicted that a total of 66,124 acres (40%) of the total suitable land base will consist of extended rotations (see DEIS, Table 3.19-9 Lands Suitable for Timber Production p. 3-290). An objective under Goal 2 of the revised Forest Plan will provide for an increase of late successional and old forest habitats within lands not suitable for timber production and through the use of extended rotations for lands suitable for timber production (revised Forest Plan p. 10). Natural processes will occur on lands not managed for timber and older stands will occur overtime. Known old growth areas are protected through Forest-wide standards and guidelines and have been allocated to Ecological Special Areas MAs (see DEIS p. 3-236). The SPECTRUM model predicts that at least 20 percent of the harvesting will consist of uneven-aged management. The Diverse Forest Use Management Area was constrained to 50 percent of the harvests to be uneven-aged. This constraint was imposed in the SPECTRUM modeling to reflect the amount of uneven-aged management in the current Forest Plan MA's 2.1, 3.1, 4.1 and 4.2. The Diverse Forest Use Management Area is a combination of MAs 2.1, 3.1, 4.1, and 4.2. The revised Forest Plan Goal 2 (p. 10) was changed to provide a minimum of 20 percent of land suitable for timber management to use the uneven-aged silvicultural system. Monitoring of the 1987 Forest Plan showed that far more uneven-aged management was conducted than predicted. As a result, early successional habitat created through even-aged management was lacking. A balanced mix of all silvicultural methods is deemed necessary to meet wildlife habitat objectives. The Diverse Forest Use MA was designed to provide flexibility in the use of a variety of silvicultural methods to meet desired future conditions for vegetation. The Timber section of the FEIS (p. 3-278) discusses the amount of harvesting

	predicted. See Appendix B of the FEIS for further discussion of SPECTRUM and the analysis process.
SC 34000-1a	TO PROTECT WILDERNESS AND ROADLESS CHARACTERISTICS AND THE OPPORTUNITY FOR MORE WILDERNESS
SC 34000-1d	TO MINIMIZE ROAD BUILDING
	Response: A road system already exists across the majority of GMNF lands on which harvest activities are planned. Road construction associated with timber harvesting is expected to be minimal (revised Forest Plan Appendix D). Within the inventoried roadless areas, a total of 73,954 acres are tentatively suitable (appropriate) for timber production. The 1987 Forest Plan allocated 62,878 acres of the tentatively suitable land within the inventoried roadless areas to management areas that are appropriate for timber production.
SC 34000-1b	BECAUSE THERE ARE ENOUGH FORESTS ON PRIVATE LAND
SC 34000-1h	BECAUSE WE NEED A STEADY SUPPLY OF TIMBER AND SUSTAINABLE TIMBER HARVESTING
SC 34000-1n	FOR LONG TERM USE OF NATURAL RESOURCES
SC 34000-1s	FOR FOREST GROWTH
	Response: National forests are managed for multiple resources including the production of timber for society's needs. Timber is one of the Forest Service's emphases for land management (Multiple-Use Sustained Yield Act of 1960, NFMA). Goal 8 of the revised Forest Plan states, "Provide for a sustainable supply of forest products" (revised Forest Plan p. 14). Timber harvesting is a tool to accomplish revised Forest Plan resource objectives (revised Forest Plan Goal 10, p. 15). The Forest Service is in compliance with NFMA requirements for ASQ (DEIS p. 3-268, revised Forest Plan p. D-2). The US is a net importer of wood products, indicating a domestic market large enough to accommodate all interested domestic producers. Numerous publications state that demand for wood products will increase in the future. The Forest Products Laboratory Research Note (FPL-RN-0287), dated December 2002, suggests the that low interest rates will continue the current strength in the housing sector, which is creating demand for softwood sawtimber, plywood, and oriented strandboard. In the next 50 years the demand for wood and wood fiber in the United States is expected to increase by 40 percent, primarily due to increased population, not increased per capita consumption (USDA-FS, NC-228, May 2002).
SC 34000-1c	BECAUSE CUTTING TIMBER TO SHIP OVERSEAS IS NOT A REASON TO CLEARCUT
	Response: Clearcutting will only be conducted for specific objectives such as salvaging damaged stands, regenerating aspen and paper birch, releasing conifers to improve wildlife habitat, or creating permanent upland openings or vistas (revised Forest Plan p. 23). See also response to SC 34000-1s.
SC 34000-1f	TO PREVENT EROSION AND PROTECT SOILS
SC 34000-1g	TO PROTECT SURFACE & GROUND WATER QUALITY AND WATERSHEDS
SC 34000-1i	TO PROTECT WILDLIFE AND WILDLIFE HABITAT
SC 34000-1q	FOR CLEAN AIR
SC 34000-1v	TO PROTECT VANISHING SPECIES AND THREATENED, ENDANGERED, OR SENSITIVE SPECIES
SC 34000-1z	TO PROVIDE FOR RECREATIONAL USES
SC 34000-1aa	TO PROTECT SCENIC QUALITY AND AESTHETICS

SC 34000-1mm	FOR TOURISM AND BECAUSE VERMONT IS ONE OF ONLY NINE PLACES IN NORTH AMERICA TO RECEIVE NATIONAL GEOGRAPHIC TRAVELER MAGAZINE'S WORLD'S 50 GREATEST DESTINATIONS
	Response: Forest-wide standards and guidelines provide direction in protecting soil and water quality from ground-disturbing activities, such as timber harvesting (revised Forest Plan pp. 20-22). There is only a small amount of suitable timber land that is not already adequately roaded. Many of these lands have a long history of logging, which continued into the late 1990s. Logging is rarely conducted on steep ground or excessively wet soils that are prone to erosion. Overall risks of reduction in water and soil quality would be low because standards and guidelines and other protection measures would minimize impacts (DEIS sections 3.2.2, 3.3.2, and 3.6.2). Maintaining recreation and scenic values has been and will continue to be an important element in conducting timber harvesting on the GMNF. The revised Forest Plan has identified this as Goal 10 (p. 15) and in the Visual standards and guidelines (pp. 38-39). It is not intended that harvest activities be undetectable from all recreation facilities; rather it is intended that they be reasonably compatible with those recreation activities in the limited amount of the Forest where harvest activities are planned.
SC 34000-1k	BECAUSE SCIENCE AND RESEARCH SUPPORT THIS METHOD
	Response: The Forest Service agrees with the commenter. That is why the Forest Service has integrated restoration, long rotation, and uneven-aged management into revised Forest Plan direction to achieve multi-resource goals and objectives. The Forest Service utilized the best science available from a variety of Forest Service and university research sources in developing alternatives. (See the Literature Cited chapters in the revised Forest Plan and FEIS for references.)
SC 34000-1l	BECAUSE TIMBER IS A SMALL PERCENT OF THE ECONOMIC VALUE OF THE GMNF
	Response: The revised Forest Plan includes desired conditions and objectives to supply a consistent level of timber harvest for industry (see Goal 1 and the first objective under Goal 8 in the revised Forest Plan, pp. 10 and 14). If the Forest Service does not approach the sell volumes identified in the revised Forest Plan, the vegetation resource objectives will not be achieved. The DEIS noted the contributions of high-quality sawtimber from the GMNF to regional timber markets (pp. 3-268 and 3-279). See response to PC 34000-1. Also see response to PC 70000-3 and PC 70000-9 for socio-economic concerns, and refer to Socio-Economic section (3.21) of the FEIS for a discussion of GMNF contributions to local economies.
SC 34000-1m	TO ENHANCE FOREST HEALTH
SC 34000-1x	TO PREVENT INVASIVE SPECIES
	Response: Native and non-native invasive species have the ability to cause substantial effects, although ecosystems are usually able to withstand periodic infestations of native species because they have evolved together with associated checks and balances. Ecosystem conditions can be rapidly degraded by non-native invasive species, which are not kept in check by co-evolved competitors or predators. The Forest Service has a responsibility to manage for self-sustaining ecosystems (see DEIS, Chapter 1, Desired Future Condition). Even-aged and uneven-aged timber management work together to enhance forest health by creating a variety of vegetative conditions. Forest-wide standards and guidelines allow for insect and disease control

	(revised Forest Plan p. 33). The use of even-aged and uneven-aged management provides a diverse range of habitats for wildlife and other vegetation (revised Forest Plan p. 23-24). A variety of silvicultural treatments are essential tools to provide a healthy and sustainable forest (DEIS pp. 3-80 and 3-84). See FEIS section 3.5.3 Non-Native Invasive Species and revised Forest Plan pp. 33-34 for Forest-wide standards and guidelines.
SC 34000-1o	BECAUSE IT PRODUCES HIGHER QUALITY WOOD
SC 34000-1ff	BECAUSE SUSTAINABLY HARVESTED WOOD HAS A HIGHER MARKET VALUE
	Response: The Forest Service has used longer rotations on the GMNF than is common on private lands in Vermont. Large diameter sawtimber of 18 to 24 inches DBH is not common on private tracts of timber. Large diameter sawtimber is a common component of GMNF timber sales. Subsequently, timber products are above-average quality and are important to local industry. As timber rotations are extended, timber quality will decline as a result of heart-rot in over-mature trees. The Selected Alternative provides a means to provide timber to the local economies while satisfying other resource concerns in a manner in balance with many other uses on the Forest (see DEIS p. 3-279.)
SC 34000-1u	TO PROMOTE SHADE TOLERANT SPECIES
SC 34000-1cc	BECAUSE SELECTIVE HARVESTING IS PREFERABLE TO CLEARCUTTING
	Response: Maintaining species diversity is an important aspect of Forest Plan implementation (revised Forest Plan pp. 12). Maintaining long-term species diversity and long term composition and age class objectives (p. 11) is most often achieved by applying a variety of silvicultural treatments to ensure that a range of site conditions are available for regeneration of a variety of species. For that reason, even-aged treatments are generally used to regenerate species that are intolerant of shade, such as aspen. Tolerant species, such as American beech, will respond well to uneven-aged treatments (also known as selection harvests) that retain a fairly closed canopy. Both even-aged and uneven-aged silvicultural methods are recognized for achieving management objectives. Application of both methods are described in the Forest-wide standards and guidelines and (revised Forest Plan pp. 23-24)
SC 34000-1w	BECAUSE WE ARE USING MORE ARTIFICIAL PRODUCTS FOR BUILDING
	Response: Artificial products will not replace wood products in the market place. Numerous publications state that demand for wood products will increase in the future. The Forest Products Laboratory Research Note (FPL-RN-0287), dated December 2002, suggests that low interest rates will continue the current strength in the housing sector, which is creating demand for softwood sawtimber, plywood, and oriented strandboard. In the next 50 years the demand for wood and wood fiber in the United States is expected to increase by 40 percent, primarily due to increasing population, not increased per capita consumption (Shifley and Sullivan 2002).
SC 34000-1y	BECAUSE TIMBER HARVESTING IS NOT COST BENEFICIAL COMPARED TO OTHER USES OR COMPARED TO NON-MARKET BENEFITS
SC 34000-1ll	BECAUSE WE SHOULD NOT SUBSIDIZE LOGGERS AND TIMBER COMPANIES
	Response: In recent years, the value of timber sold from the GMNF annually is substantially higher than the annual cost of the timber program, including

	overhead. See GMNF Monitoring and Evaluation Reports 1998-2004. The costs used in the SPECTRUM analysis are direct costs associated with the program. Direct costs were used as they permit the most appropriate means of comparing alternatives. The concern about the costs of mitigation measures not being considered in setting stumpage value is accounted for due to the fact that the stumpage prices from the GMNF timber sales reflect the "average conditions." Bidders are required to incur numerous costs such as seeding, slash disposal, road improvements including construction, reconstruction, and bridging, and erosion control measures such as water barring and other drainage features. They are aware of the work required on sale and adjust their bids accordingly. Therefore, the costs of doing this work are taken into account in the form of reduced stumpage prices. Timber is harvested to maximize long-term net benefits (many of which are difficult to assign a monetary value) in an environmentally sound manner, rather than to achieve the lowest cost-benefit ratio. These benefits were calculated using the SPECTRUM and IMPLAN models (DEIS Appendix B, pp. 9-14). See also response to PC 70000-3.
SC 34000-1dd	TO PROMOTE DIVERSITY IN STAND STRUCTURE
	Response: The revised Forest Plan uses a mix of even-aged management on standard rotations, even-aged management on long rotations, and uneven-aged management to promote diversity in stand structure. Restoration activities in the Escarpment MA will help to restore oak and add variety to stand structure there as well. In Section 3.5.1.2 of the DEIS, the effects of each alternative on stand structure is discussed (pp. 3-78-80). Looking at age class as one aspect of stand structure, the Forest is currently low in diversity, being predominantly of one age class (mature). See the DEIS for further discussion of how the alternatives alter the age class diversity on the Forest (pp. 3-76-78).
SC 34000-1ee	BECAUSE IT FOSTERS AND DEMONSTRATES PROGRESSIVE MANAGEMENT
SC 34000-1kk	FOR DEMONSTRATION
	Response: Goal 9 of the revised Forest Plan states that the Forest Service shall demonstrate innovative, scientifically, and ecologically sound management practices that can be applied to other lands (p. 15). A related objective encourages developing demonstration forestry areas where state-of-the-art silvicultural practices are applied.
SC 34000-1gg	BECAUSE IT RESEMBLES NATURAL DISTURBANCE
	Response: The types of harvest identified in the revised Forest Plan and DEIS provide conditions similar to various types of natural disturbance (see Vegetation section 3.5 in the FEIS for a discussion of natural disturbance patterns). The GMNF is managed for multiple resource objectives. The revised Forest Plan is concerned with achieving the desired goals, objectives, and resource conditions in an environmentally acceptable manner. See also response to SC 32600-5b for further discussion of how management using long rotations and uneven-aged systems on the Forest lead to conditions similar to those found under natural disturbance regimes.
SC 34000-1hh	TO MAINTAIN A MATURE FOREST COVER
	Response: Timber harvesting is closely tied to establishing desired wildlife habitat. While habitat is not the exclusive reason for harvesting, it plays an important role in the development of integrated prescriptions for harvest treatments. Even-aged regeneration harvests and both single-tree and group selection treatments are used to achieve wildlife habitat objectives.

	Responses to PC 32100-5 and PC 32500-6 address vegetation management and forest fragmentation, particularly as they relate to wildlife and wildlife habitat. As described in responses to PC 32600-10 and SC 32600-10a, mature and over-mature northern hardwood forest currently dominate the GMNF, and they will continue to dominate the Forest during the current planning cycle and beyond. Fragmentation is not a concern on the GMNF. (See responses to PC 32100-5 and PC 32500-6 and DEIS Wildlife and Wildlife Habitat p. 3-96.) Although small acreages may be changed to non-forest use (for example, campgrounds or parking facilities), large scale permanent or long-term removal of NFS lands from forest uses is unlikely. Mature or older stands dominate on the GMNF, accounting for almost 90 percent of the forested lands (DEIS p. 3-106).
SC 34000-1ii	BECAUSE THE US DEMANDS THIS OF THIRD WORLD COUNTRIES
	Response: The application of uneven-aged or even-aged timber management associated with the revised Forest Plan is based on site-specific conditions of tree species native to the Northeast or Vermont. This has no relation to practices implemented in other countries.
PC 34000-2:	**The Forest Service should designate fewer areas that utilize long rotation timber management practices.**
SC 34000-2a	BECAUSE TIMBER YIELD IS BEING LOST
SC 34000-2c	BECAUSE OVER 38 PERCENT OF THE SUITABLE LANDS ARE IN EXTENDED ROTATIONS AND IT DOES NOT MAKE SENSE
	Response The Forest Service operates under the multiple-use mission, which dictates that the Forest be managed for a much broader purpose than commodity values. The revised Forest Plan is outcome based, meaning the desired future conditions, objectives, and goals are centered on the Forest's condition after the management actions take place. Outcomes will be based on such things as: short- and long-term species composition; age class distribution; spatial arrangement and patterns; variety of habitat types and conditions; variety of recreation settings; general vigor and health of the forest and ecosystems; sustainability of ecosystems overtime to provide a variety of use values; and products and services for present and future generations. These outcomes are not necessarily at odds with improved growth and yield, but represent a broader purpose than the commodity value alone. Forest productivity is given consideration within the context of the overall mission of the Forest Service. Elevating increased growth and yield objectives to stand-alone goals would be at odds with an outcome-based plan. Information on stand attributes (such as ages, diameters, species, canopy height, and number of snags) was obtained from "Information About Old Growth for Selected Forest Types in the Eastern United States" (Tyrrell et al. 1998). Stand attributes were obtained for old growth stands in New Hampshire and Vermont. The suitable timber land base identified in the DEIS can support a higher timber output purely in biological potential. The maximum timber benchmark (Forest Plan Table A-7) is 43.6 MMCF per decade. In designing the management areas, the Forest Service looked at several additional factors which were outcome based and not necessarily output based. The Forest Service used this analysis along with a variety of other considerations to determine management area designations and ultimately alternatives.
SC 34000-2b	BECAUSE THE FINAL HARVEST WILL NOT OCCUR
	Response: Final harvest cuts are prescribed for all even-aged regeneration

	harvests including those areas where extended rotation age objectives would occur. See DEIS p. 3-278 and revised Forest Plan Appendix D, pp. D-2-5.
SC 34000-2d	BECAUSE IT DOES NOT MAKE SENSE IN DIVERSE BACKCOUNTRY
	Response: The emphasis of Diverse Backcountry MA is a predominately natural or natural-appearing environment (revised Forest Plan p. 58). It will provide a mix of wildlife habitats supplied by more mature forests, early successional forests, and openings. Longer rotations will provide a more mature-appearing forest than standard rotations.
PC 34000-3:	**The Forest Service should use methods that resemble natural disturbance regimes.**
SC 34000-3a	SUCH AS SINGLE TREE AND SMALL GROUP
	Response: The type of harvest identified in the revised Forest Plan and DEIS provide conditions similar to various types of natural disturbance. See response to SC 34000-1gg. See also response to SC 32600-5b for further discussion of how management using long rotations and uneven-age systems on the Forest may lead to conditions similar to those found under natural disturbance regimes. Chapter 3 of the DEIS displays the positive and negative effects of even-aged and uneven-aged harvesting on all analyzed resources. Maintaining long-term species diversity is most often achieved by applying a variety of silvicultural treatments to ensure that a range of site conditions are available for regeneration of a variety of species. For that reason, even-aged treatments are generally used to regenerate species, such as aspen, that are intolerant of shade. Tolerant species, such as American beech, will respond well to uneven-aged treatments that retain a fairly closed canopy. Section 2.3.4 of the revised Forest Plan provides the Forest-wide standards and guidelines for uneven-aged vegetation management (p. 25).
SC 34000-3b	TO PROVIDE AN ALTERNATIVE TO MANAGEMENT ON PRIVATE LANDS
	Response: The Forest Service agrees with the commenter. Owners of private forest lands do not have the same objectives as public forest lands. (Birch 2000). The revised Forest Plan is concerned with achieving the goals, objectives, and resource conditions in an environmentally acceptable manner. The National Forests are managed for multiple resources including the production of timber for society's needs.
SC 34000-3c	TO PROTECT SOIL PRODUCTIVITY
	Response: Forest-wide standards and guidelines provide direction in the protection of soils (revised Forest Plan section 2.3.2). Logging is rarely conducted on steep ground or excessively wet soils that are prone to erosion. Soil productivity is addressed in the DEIS for each alternative considered in detail (DEIS section 3.2). Specific direction on soil productivity is provided in the revised Forest Plan. Monitoring of soil productivity will continue.
SC 34000-3d	FOR DEMONSTRATION TO PRIVATE LANDOWNERS
	Response: See response to SC 34000-1ee.
SC 34000-3e	TO BUFFER AGAINST ACID RAIN
	Response: The FEIS soil productivity section covers this response in detail. See response to SC 34000-3c and Soil Section responses.
PC 34000-4:	**The Forest Service should provide more guidance on the silvicultural techniques to be used.**
SC 34000-4a	TO PROVIDE INFORMATION ON THE TECHNIQUES TO BE USED ON DIFFERENT FOREST TYPES
SC 34000-4b	TO PROVIDE INFORMATION ON HOW STAND CONDITIONS WILL

	DETERMINE THE USE OF EVEN-AGED OR UNEVEN-AGED METHODS
	Response: Forest Service Manuals and Handbooks that relate to silvicultural techniques will be used to develop site-specific silvicultural prescriptions. The revised Forest Plan is designed to supplement, not replace, direction from these sources. Forest Service managers have the flexibility to select the most appropriate silviculture for an area that best fulfills the objective overtime. State-of-the-art methods will be used based on Forest Service Research in selecting the silvicultural technique (see Goal 9 and its first objective in the revised Forest Plan, p. 15). The vegetation management strategy of the Selected Alternative is built upon maintaining biological diversity. In order to do this, the Forest Service evaluates forestry practices based on land capabilities based on land type associations, ecological land types, and management area direction. The specific conditions under which silvicultural treatments may take place are to be evaluated in a site-specific analysis, depending upon a number of factors including overall forest health issues, the value of the timber, and overall resource objectives, including wildlife habitat objectives that can be enhanced through the use of silviculture. The revised Forest Plan has provided the latitude to select the most appropriate silvicultural system that best fulfills the objectives over time. Forest-wide and management area standards and guidelines provide general direction in the selection of appropriate silvicultural techniques, and Forest-wide Timber and Vegetation standards and guidelines in the revised Plan provide further direction.
SC 34000-4c	BECAUSE THE DRAFT EIS GIVES SPECIFIC FIGURES ON THE MIX OF EVEN-AGED AND UNEVEN-AGED MANAGEMENT
	Response: The SPECTRUM model was used as a tool to help develop programmatic timber harvest sale schedules for each alternative. It was not intended to be used to develop a site-specific harvest plan for future timber sales. The model results are particularly useful in a comparison analysis among the alternatives used in the selection of the Selected Alternative. By applying a consistent modeling approach and varying the inputs consistent with the design of each alternative, decision makers can see the impacts expressed in a broad range of outputs. The acres treated by various harvest methods, mix of management strategies, and the potential to support other related management objectives, such as wildlife habitat management, are some of the outputs that were compared across the alternatives and evaluated in the selection of the Selected Alternative. (See also the Timber section (3.13) in the FEIS, and FEIS Appendix B.)
SC 34000-4d	TO PROVIDE INFORMATION ON THE STAND GOALS WHEN USING UNEVEN-AGED MANAGEMENT
	Response: The vegetation management strategy is built upon maintaining biological diversity. In order to do this, the Forest Service evaluates forestry practices based on land capabilities based on land type associations, ecological land types and management area direction. The specific conditions on which stand goals are established during silvicultural prescriptions are based on site-specific analysis unique to each stand. See also response to SC 34000-4b.
PC 34000-5:	**The Forest Service should use selective cutting for commercial harvesting.**
SC 34000-5a	IN SMALL AREAS WITHOUT NEGATIVE IMPACTS SUCH AS EROSION
SC 34000-5b	TO BENEFIT BIODIVERSITY

SC 34000-5d	FOR RECREATION
SC 34000-5e	FOR FIRE PREVENTION
SC 34000-5f	FOR ECONOMIC BENEFITS
SC 34000-5g	BECAUSE CLEARCUTS SUBSIDIZE THE TIMBER COMPANIES
SC 34000-5h	TO PROTECT OLD GROWTH AREAS
	Response: See PC 34000-1 and related subconcerns.
SC 34000-5c	TO CREATE GLADES FOR SKIERS
	Response: Within the Alpine Ski Area Management Area, timber management including uneven-aged management can be used to meet ski area desired future conditions, which includes creating glades (revised Forest Plan p. 64). A use-cycle approach will be used to protect vegetation (see definition in revised Forest Plan Glossary, p. 159).
SC 34000-5i	BECAUSE THE WHITE MOUNTAIN NATIONAL FOREST INCREASED SELECTIVE CUTTING AND DECREASED EVEN-AGED MANAGEMENT
	Response: Vegetation management direction in the revised Forest Plan was specifically designed to achieve GMNF vegetation objectives (Forest Plan pp. 10-13.). See response to PC 34000-1.
PC 34000-6:	**The Forest Service should ban whole tree harvesting.**
	Response: Over the last 15 years, whole tree harvesting (removal of the entire tree except the roots) has been uncommon on the GMNF. This is due to several reasons including Forest Service direction to maintain soil productivity, and the desire to increase the amount of downed woody debris in the Forest. The Forest Service expects that whole tree harvesting will continue to be uncommon under the revised Forest Plan. There a few circumstances under which whole tree logging may be appropriate in the future. For example, it may be desirable to use whole tree logging to remove entire trees to stop the spread of non-native forest diseases, since bole-only logging could enable further spread of the disease. This situation was encountered in 2004 on the Patterson Brook Sale, where balsam wooly adelgid killed 10 acres within a deer wintering area near Granville, Vermont. The whole tree harvesting removed infested trees and stopped the threat of the infectation. Since there are occasionally situations where whole tree harvesting may be beneficial to the forest, the Forest Service does not want to prohibit whole tree harvesting. See also the Soils section (3.2) in the FEIS.
SC 34000-6a	ON TILL SOILS SUBJECT TO LOSS OF NUTRIENTS
	Response: See response to PC 31000-1 and SC 31000-1k.
PC 34000-7	**The Forest Service should use smaller patch cuts and clearcuts.**
SC 34000-7a	BECAUSE ENOUGH LIGHT IS ADMITTED TO REGENERATE SHADE INTOLERANT SPECIES
SC 34000-7b	BECAUSE THERE IS LITTLE ECOLOGICAL JUSTIFICATION FOR LARGER CUTS
SC 34000-7c	BY LIMITING THE SIZE TO LESS THAN ONE-HALF ACRE
	Response: The Selected Alternative permits even-aged regeneration harvests as large as 30 acres to be implemented. Some wildlife prefer larger forest openings, and the 30-acre limit allows a range of sizes to meet a variety of resource objectives. Research in New Hampshire has demonstrated that although openings as small as two acres can provide benefits for many early successional species, openings of 20 to 30 acres support a greater diversity of birds, as well as several species that do not occur in smaller openings (King et al. 1998, Costello et al. 2000, DeGraff and Yamasaki 2003). (See responses to SC 22000-5f and SC 22000-5g.) Scenery management has

	been, and will continue to be, an important part of managing the GMNF. In the 1987 Forest Plan, monitoring has shown that clearcut sizes have been less than the maximum in order to meet other resource objectives. The types of harvest identified in the revised Forest Plan and FEIS provide conditions similar to various types of natural disturbance (see also response to SC 32600-5b). Revised Forest Plan direction provides for group selection that results in openings of less than one acre (p. 25). This provides flexibility based on on-the-ground conditions.
PC 34000-8:	**The Forest Service should do more commercial thinning to maintain timber stands.**
	Response: The NE-TWIGS variant of the FOREST VEGETATIVE SIMULATOR (FVS) growth model was used to develop yield tables that included both regeneration and intermediate harvests. Thinning harvest parameters used in the model were based on existing yields from recent timber sales and NE-TWIGS predictions for 150 years. A variety of materials were used to calibrate the model and are described in DEIS Appendix B – Timber Harvest Schedule Analysis. The FVS yield tables were then loaded into the SPECTRUM model to develop programmatic timber harvest sale schedules for each alternative. By applying a consistent modeling approach and varying the inputs with the design for each alternative, decision makers could see the impacts expressed in a broad range of outputs. The acres treated by various harvest methods, mix of management strategies, and the potential to support other related management objectives, such as wildlife habitat management, are some of the outputs that were compared across the alternatives. The SPECTRUM model provides an estimate of the amount of timber harvesting, including commercial thinning harvest. The Forest Service found that the amount of thinning harvest predicted by the SPECTRUM model to be reasonable based on actual and predicted harvest trends. Commercial thinning will be considered where appropriate to best meet objectives during site-specific analysis.
PC 34000-9:	**The Forest Service should limit the use of even-aged management.**
SC 34000-9a	BECAUSE IT IS INCONSISTENT WITH THE GOAL TO INCREASE ECOSYSTEM BASED MANAGEMENT
SC 34000-9b	TO MAINTAIN EARLY SUCCESSIONAL HABITAT
SC 34000-9c	TO MAINTAIN SOME FOREST COMMUNITIES SUCH AS ASPEN AND BIRCH
SC 34000-9d	TO REGENERATE LOW QUALITY, DEGRADED, OR DISEASED STANDS
SC 34000-9e	BECAUSE NORTHERN HARDWOOD FORESTS NATURAL DISTURBANCE REGIME IS MORE LIKE UNEVEN-AGED MANAGEMENT
	Response: One of the reasons that the Congress established the National Forest system is to provide a sustainable source of timber products (DEIS p. 3-267). Production of timber on a sustainable basis has been included in congressional direction from the inception of the Forest Service through recent legislation, such as the National Forest Management Act of 1976. Harvesting is done on the GMNF to accomplish a variety of objectives, including habitat management, fuels reduction, and enhancement of forest health, as well as commodity production. An alternative with no harvesting was considered, but eliminated from detailed study, and was discussed in Chapter 2 of the DEIS. Extended rotations will occur in the Diverse Backcountry (DB) and the Remote Wildlife Habitat (RWH) management areas. A total of 66,254 acres

	of land suitable for timber production occur in the DB and RWH management areas where extended rotations will predominate. The SPECTRUM model predicts that a total of 66,124 acres (40%) of the total suitable land base will consist of extended rotations (see DEIS table 3.19-9 Lands Suitable for Timber Production p. 3-280). Goal 2 of the revised Forest Plan provides for an increase of late successional and old forest habitats within lands not suitable for timber production and through the use of extended rotations for lands suitable for timber production (revised Forest Plan p. 10). Natural processes will occur on lands not managed for timber and older stands will occur overtime. Known old growth area have been allocated to Ecological Special Areas and are protected through Forest-wide standards and guidelines. The SPECTRUM model predicts that at least 20 percent of the harvesting will consist of uneven-aged management. The Diverse Forest Use Management Area was constrained to 50 percent of the harvests to be uneven-aged. Goal 2 of the revised Forest Plan was changed to provide a minimum of 20 percent of land suitable for timber management to use the uneven-aged silvicultural system (revised Forest Plan p. 10). Monitoring of the 1987 Forest Plan showed that far more uneven-aged management was conducted than predicted. As a result, early successional habitat created through even-aged management was lacking. A balanced mix of all silvicultural methods is deemed necessary to meet wildlife habitat objectives. The Diverse Forest Use MA is a combination of the 1987 Forest Plan management areas 2.1, 3.1, and 4.1. The Diverse Forest Use MA was designed to provide the use of a variety of silvicultural methods to meet desired future conditions for vegetation. The Timber section (3.13) of the FEIS discusses the amount of harvesting predicted. Responses to PC 32500-9, SC 32600-4c, and SC 32600-5b address natural disturbance regimes, “letting nature manage the GMNF,” particularly with respect to wildlife and wildlife habitat, and management of forest types and within the range of natural variation.
PC 34000-10:	**The Forest Service should use more uneven-aged management.**
SC 34000-10a	TO PREVENT EROSION
SC 34000-10b	TO PREVENT NUTRIENT LOSS
SC 34000-10c	BECAUSE IT IS BEST FOR MAINTAINING FOREST SPECIES AND FUNCTIONS
SC 34000-10d	TO PROTECT WILDLIFE AND WILDLIFE HABITAT
SC 34000-10e	FOR ECOLOGICAL AND ENVIRONMENTAL REASONS
SC 34000-10f	BECAUSE SCIENCE AND RESEARCH SUPPORT THIS METHOD
SC 34000-10g	ON 40 TO 50 PERCENT OF THE LANDS RATHER THAN 10 TO 15 PERCENT
SC 34000-10h	WITH EVEN-AGED MANAGEMENT WHERE APPROPRIATE FOR HABITAT AND RESTORATION
SC 34000-10i	FOR BIOLOGICAL DIVERSITY
SC 34000-10j	BECAUSE IT RESEMBLES NATURAL DISTURBANCE
SC 34000-10k	TO PROTECT SCENIC QUALITY AND AESTHETICS
	Response: Generally, high-quality timber can be produced using either even-aged or uneven-aged silvicultural treatments. The growth projections for each of the alternatives were developed using the NE-TWIGS growth model. The SPECTRUM model predicts that at least 20 percent of the harvesting will

	consist of uneven-aged management (see Indicator 3, FEIS Timber section 3.13). The Diverse Forest Use Management Area was constrained to 50 percent of the harvests to be uneven-aged management. In the Selected Alternative, both even-aged and uneven-aged treatments will be applied. While patch clearcuts will be part of this, the intent is to use some larger-sized clearcuts and shelterwoods, particularly for the purpose of attaining habitat diversity. Any such treatments will be guided by the standards and guidelines contained in the revised Forest Plan to ensure that a variety of resource concerns are taken into account when projects are designed. The Selected Alternative balances wildlife habitat needs with visual concerns in designating the proportion of even-aged and uneven-aged harvest. See also response to PC 34000-1 and related subconcerns.
PC 34000-11:	**The Forest Service should use modern accepted methods or the newest technologies for timber harvesting.**
SC 34000-11a	BECAUSE TREES ARE A RENEWABLE RESOURCE
SC 34000-11b	TO SUPPORT THE LOCAL ECONOMY
SC 34000-11c	TO ENSURE AN ADEQUATE SUPPLY OF TIMBER
SC 34000-11d	TO BE IN THE FOREFRONT OF MODERN SUSTAINABLE LOGGING RESEARCH
SC 34000-11e	TO LESSEN THE ENVIRONMENTAL IMPACTS OF HARVESTING
SC 34000-11f	TO PROVIDE FOR INCREASED QUALITY AND QUANTITY OF TIMBER
	Response: The Forest Service agrees with the commenters. Timber harvesting on the GMNF uses either skidder or forwarding equipment that is capable of operating on suitable timberlands. Steep slopes or excessively wet areas are generally not included in timber sales (see Forest-wide standards and guidelines, section 2.3.2). There is no evidence of significant variation in logging efficiencies with existing technologies. The existing Forest road network provides sufficient access for forestry activities. The combination of reasonable skidding distances, modern harvest equipment, and good timber values indicate economic efficiencies for the current harvest methods and logging technologies. Goal 9 of the revised Forest Plan (p. 15) states that the GMNF will demonstrate innovative, scientifically, and ecologically sound forest management practices that can be applied to other lands. The Forest Service will develop demonstration project areas where state-of-the art silvicultural practices are applied. As an example, helicopter logging was used on the Lincoln Brook timber sale in 2000, and the Forest Service was impressed with the low impact that occurred from that operation. The use of helicopter and cable yarding will be considered as alternative logging systems. About 80 percent of the harvesting on the GMNF occurs during frozen ground conditions. Winter logging mitigates the impacts of using rubber-tired or tracked skidders on wet soils. Alternative logging systems allow four-season logging, where appropriate. The Vermont Acceptable Management Practices for Logging (AMPs) were used in the development of standards and guidelines in the revision process. The effects of harvesting are addressed in the FEIS Soils section (3.2) for each alternative considered in detail. Specific direction on protection of soil resources is provided in the revised Forest Plan. Monitoring of harvest activities is routinely conducted by certified Forest Service timber sale administrators. Long-term effects of harvesting will continue to be monitored

	by Forest Service resource specialists. The Northeastern Forest Experimental Station has a forest engineering research staff in Morgantown, WV. Logging research for the northeastern US including Vermont is conducted by Chris LeDoux, PhD. Dr. LeDoux is the primary research scientist for Research Work Unit #4751-System Analysis to Evaluate Alternative Harvesting Strategies. Research Work Unit #4751, was tasked to provide advice for sustainable logging methods to landowners in the Northeast, including the GMNF. Information from RWU#4751 was incorporated in the analysis for lands suitable for timber production, harvesting systems, and socio-economic sections.
PC 34000-12:	**The Forest Service should not allow commercial, for profit, timber harvesting.**
SC 34000-12b	TO PROVIDE OTHER THINGS SUCH AS WILDERNESS, BIODIVERSITY CONSERVATION, RESTORATION OF ECOLOGICAL PROCESSES AND REMOTE BACKCOUNTRY RECREATION
	Response: One of the reasons that the Congress established a National System is to provide a sustainable source of timber products (DEIS p. 3-267). Production of timber on a sustainable basis has been included in congressional direction from the inception of the Forest Service through more recent legislation such as the National Forest Management Act of 1976 (see Laws, Regulations, and Policies section 3.1.5 in the FEIS). Timber sales are used to provide treatments to meet revised Forest Plan objectives, and the Forest Service is required to sell stumpage to the highest bidder using timber sale contracts that require the trees to be harvested and removed. Timber management is one of the Forest Service uses and is integrated into revised Forest Plan goals and objectives and the role of Forest to meet management objectives. Goal 2 of the revised Forest Plan (p. 10) is to maintain and restore quality, amount, and distribution of habitats to produce viable and sustainable populations of native and desirable non-native plants and animals. Goal 8 and its objectives of the revised Forest Plan (p. 14) are to provide for a sustainable supply of forest products, including high-quality sawtimber and other wood products for local economies. The management of timber resources under the revised Forest Plan is intended to be essentially the same as it was under the 1987 Forest Plan. Forest management intensity will vary between management areas. Unsuitable timber lands tend to be high elevation with few roads and the goal is reflected with an emphasis on backcountry recreation. Refinements in the boundaries of management areas to reflect suitable and unsuitable timberlands were made as part of the Plan revision process to reflect better site-specific information. Several management areas are designed as unsuitable for timber harvesting in order to provide values that are not compatible with timber harvest. See FEIS Table 3.13-9, Lands Suitable for Timber Production. The Multiple-Use Sustained Yield Act of 1960 states that, “It is the policy of the Congress that the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes.” This means that the National Forests will be managed to provide for the use of all the various renewable surface resources in a

	combination that best meets the needs of the American people. The Selected Alternative and revised Forest Plan provide a balance between competing concerns while managing for biological diversity, off-road vehicles, timber harvest, and non-motorized recreation.
SC 34000-12a	BECAUSE PRIVATE LANDS CAN MEET THE DEMAND FOR TIMBER
	Response: See response to SC 34000-1b.
SC 34000-12c	TO PROVIDE PERSONAL USE OPPORTUNITIES SUCH AS CHRISTMAS TREES AND CORD WOOD
	Response: Goal 8 of the revised Forest Plan is to provide for a sustainable supply of forest products. The goal has objectives to provide high-quality sawtimber and sustainable opportunities for special forest products. Permits are required for commercial gathering of special forest products, as well as for Christmas trees, firewood, boughs, and maple tapping. Other products considered foods, herbs, medicinals, decoratives, and specialty products may require a permit if the Forest Service determines that collection of these products may be at or tending toward unsustainable levels.
PC 34000-13:	**The Forest Service should limit or cease clearcutting.**
SC 34000-13a	TO PROTECT SCENIC QUALITY AND AESTHETICS
SC 34000-13b	FOR THE LOCAL ECONOMY AND TOURISM OPPORTUNITIES
SC 34000-13c	TO WHAT IS REQUIRED FOR HABITAT CREATION
SC 34000-13d	TO SMALLER CLEARCUTS
SC 34000-13e	BY USING UNEVEN-AGED MANAGEMENT
SC 34000-13f	BECAUSE IT SHOULD NOT BE DONE FOR ECONOMIC REASONS
SC 34000-13g	FOR ECOLOGICAL OR ENVIRONMENTAL REASONS
SC 34000-13h	TO PREVENT EROSION
SC 34000-13i	TO PROTECT WILDLIFE AND WILDLIFE HABITAT
SC 34000-13j	TO PROTECT SURFACE AND GROUND WATER QUALITY AND WATERSHEDS
SC 34000-13k	TO PROTECT RECREATIONAL OPPORTUNITIES
SC 34000-13l	BECAUSE IT IS NOT SUSTAINABLE MANAGEMENT
SC 34000-13m	TO CONSERVE AND MAINTAIN BIODIVERSITY
SC 34000-13n	TO PREVENT NON-NATIVE INVASIVE SPECIES
SC 34000-13o	TO IMPROVE STAND COMPOSITION AND STRUCTURE
SC 34000-13p	BECAUSE CLEARCUTTING DOES NOT RESEMBLE NATURAL DISTURBANCE REGIMES
	Response: Generally, high-quality timber can be produced using either the even-aged or uneven-aged silvicultural treatments. The growth projections for each of the alternatives were developed using the NE-TWIGS growth model. The SPECTRUM model predicts that at least 20 percent of the harvesting will consist of uneven-aged management. The Diverse Forest Use Management Area was constrained to 50 percent of the harvests to be uneven-aged management. The constraint was imposed in the SPECTRUM modeling to duplicate the amount of uneven-aged management being conducted in the current Forest Plan MAs 2.1, 3.1, 4.1, and 4.2. The Diverse Forest Use Management Area is a combination of MAs 2.1, 3.1, 4.1, and 4.2. In the Selected Alternative, both even-aged and uneven-aged treatments will be applied. While patch clearcuts will be part of this, the intent is to use some larger-sized clearcuts and shelterwoods, particularly for the purpose of attaining habitat diversity. Any such treatments will be guided by the standards and guidelines contained in the revised Forest Plan to ensure that a variety of resource concerns are taken into account when projects are

	designed. The Selected Alternative balances wildlife habitat needs with visual concerns in designating the proportion of even-aged and uneven-aged harvest. The revised Forest Plan provides for clearcutting only when it is optimal to meet the following Forest-wide standard (p. 24): Clearcutting shall only be used when it is found to be the optimum method of regeneration, or type conversion, to achieve the following resource objectives: • Salvage stands damaged by insect, disease, or climatic catastrophe, or to stop the spread of an insect or disease outbreak • Improve the condition of stands which have a high risk of dying within the next ten years or which are sparsely stocked and will be unable to fully utilize the site within ten years • Regenerate aspen and paper birch stands that are intolerant of shade and valuable for wildlife habitat and vegetative diversity • Convert hardwood stands to softwood or aspen stands to enhance vegetative diversity and habitat for deer, grouse, beaver, and other wildlife • Create or convert woodland to permanent upland openings for better vegetative diversity and improved wildlife habitat • Create or convert woodland to vistas and parking areas to enhance public use and enjoyment of the National Forest Actual annual harvests by this method are projected to be 319 acres (8%) of all harvest treatments. This is less than one percent of the total suitable acres across the GMNF (FEIS Table 3.13.8). See responses to PC 34000-3, PC 34000-9, and PC 34000-10.
PC 34000-14:	**The Forest Service should revise management practices to reflect the sensitive nature of watersheds.**
SC 34000-14a	BY NOT HARVESTING OVER 2500 FEET IN ELEVATION
	Response: The Forest Service usually does not harvest above 2,500 feet due to resource limitations, such as lack of productive forest lands and high erosion potential. The exact elevation at which the resource limitations change ranges from about 2,300 to 2,650 feet. There are only approximately 21,000 acres (5%) on the Forest that are considered suitable timber lands in management prescriptions that allow harvesting and are at an elevation over 2,500 feet. The Forest Service considers harvesting above 2,500 feet only if a site-specific investigation reveals that productive forest lands exist, soil productivity will not be reduced, and all standards and guidelines for resource protection can be followed. See also FEIS Soils section 3.2.
SC 34000-14b	BY NOT DOING WHOLE TREE HARVESTING
	Response: See response to PC 34000-6.
SC 34000-14c	BY NOT HARVESTING IN WATERSHEDS UPSTREAM OF REMOTE HIGH ELEVATION PONDS
	Response: The Forest Service assumes that “high elevation ponds” are those that occur at an elevation of over 2,500 feet. The Forest Service normally does not harvest trees at an elevation above 2,500 feet, and in those infrequent cases when the Forest Service does, S&Gs protecting water bodies would be in effect. Also see response to SC34000-14a, SC 34000-14d, and SC 34000-14h.

SC 34000-14d	TO ELIMINATE HARVESTING UPSTREAM OF IMPAIRED WATERSHEDS
	Response: Impaired waters in or near the GMNF are listed in the Water Resource Assessment – GMNF Plan Revision (Donna 2004, p. C-23-24). By far the most common reason for impairment is acid deposition. Other reasons are road, urban or agricultural runoff, pathogens, erosion, low dissolved oxygen, iron, manganese, and PCBs. The Forest Service does not believe it is necessary to prohibit all harvesting in watersheds above impaired waters, except if directed by the management area designation, or to implement S&Gs. Many impaired waters are in management areas with limited-to-no harvest, or are at an elevation over 2,500 feet (where harvesting is uncommon – see response to SC 34000-14c). If harvesting is proposed that could affect impaired waters, the effects will be disclosed in a site-specific environmental analysis. Revised Forest Plan Forest-wide standards and guidelines and mitigation measures would be implemented to minimize the effects on water resources.
SC 34000-14e	TO DETERMINE THE SUITABILITY FOR TIMBER HARVESTING OF THE WATERSHED LANDS OF THE 48 SIGNIFICANT STREAMS IN THE 1987 PLAN
	Response: These watersheds were included in the Forest-wide analysis of land suitability for timber harvest. All streams are protected through Forest-wide standards and guidelines for riparian areas in the revised Forest Plan (see section 2.3.2). See also the Eligible Wild, Scenic, and Recreation Rivers section 3.12.2 section of the FEIS.
SC 34000-14f	TO DEVELOP A LONG TERM SOIL, STREAM AND VEGETATION MONITORING PLAN AND METHODOLOGY
	Response: The Forest Service agrees this should be done, and a Monitoring Guide containing this information is being developed. It will address the short-term (10 to15 year) monitoring needs based on revised Forest Plan goals and objectives. In the meantime, the Forest Service will continue to monitor water quality, fish populations and habitats, and macroinvertebrate communities in selected streams on an annual basis. The Forest Service also monitors the effects of timber harvest and recreation projects on the soil and water resources, and the effectiveness of watershed improvement projects. All monitoring results are summarized each year in the Forest Plan Monitoring and Evaluation Report for the GMNF. See Chapter 4 Monitoring and Evaluation in the revised Forest Plan.
SC 34000-14g	TO RE-EVALUATE WATERSHED LANDS EVERY 5 YEARS FOR TIMBER SUITABILITY BASED ON MONITORING RESULTS
	Response: Changes in watershed condition that affect the suitability of lands for timber production (for example, soil productivity or water quality) usually occur very slowly. Commensurate with Forest Service regulations (revised Forest Plan p. 118), the suitability of lands for timber production will be evaluated every 10 years.
SC 34000-14h	TO ELIMINATE HARVESTING IN WATERSHEDS UPSTREAM OF PONDS IDENTIFIED AS CRONICALLY ACIDIC IN THE 1987 GMNF PLAN
	Response: The rationale provided in the response to SC 34000-14d also applies to the waters cited by the commenter here. In addition, harvesting in the watersheds above ponds listed in the 1987 Plan would be very limited, but not prohibited. In the Selected Alternative, ponds listed by the commenter would be allocated to the following management areas, with the corresponding level of allowed harvest:

Wilderness – No harvesting - Bourn Pond, Skylight Pond, Big and Little Mud Ponds
Other ponds above 2,500 feet – Harvesting is not generally done above 2,500 feet – Griffith Lake (in the National Recreation Area Management Area), Haystack Pond (Diverse Forest Use), Little Pond in Woodford (Remote Backcountry)
White Rocks NRA – Limited harvesting allowed (see revised Forest Plan, pp. 74-75) - Wallingford Pond, Fifield Pond, Little Rock Pond
Ecological Special Area (ESA) – Limited-to-no harvesting in ESAs (revised Forest Plan p. 89). Harvesting could be done in the watershed above some ponds, as shown in the following table, because the upper part of the watershed is in different management areas. Such harvesting would be limited, and would be conducted in compliance with revised Forest Plan S&Gs so as to eliminate or minimize the resource impacts to the ESA
Harvesting near specific Ecological Special Areas:

ESA/Pond	**Other management area designations in the watershed above the pond**	**Is harvesting allowed above the pond?**
Grout Pond	None	Limited-to-no harvesting.
Beebe Pond	Diverse Backcountry (revised Forest Plan p. 58)	Yes, however the pond elevation is approximately 2,350 feet, and harvesting is not normally done above 2,500 feet, so only a narrow piece of land (with limited acres) would be considered for harvest. Where harvest is allowed, rotations of over 150 years are emphasized.
Abbey Pond	Diverse Forest Use (revised Forest Plan p. 47)	Harvesting allowed. However, the resource impacts of harvesting would be minor due to implementation of S&Gs.
Branch Pond	Wilderness, Remote Backcountry (revised Forest Plan pp. 48 and 54)	No harvesting in Wilderness; vegetation management is typically not permitted in Remote Backcountry

PC 34000-15:	**The Forest Service should continue to allow visitors to collect various forest products.**
SC 34000-15a	BECAUSE THESE PRODUCTS CAN NOT BE FOUND ON OTHER LANDS
	Response: Goal 8 of the revised Forest Plan is to provide for a sustainable supply of forest products. The goal has objectives to provide high-quality sawtimber and sustainable opportunities for special forest products. Permits are required for commercial gathering of special forest products, as well as for Christmas trees, firewood, boughs, and maple tapping. Other products considered foods, herbs, medicinals, decoratives, and specialty products may require a permit if the Forest Service determines that collection of these products may be at or tending. Given the low level of current and historical use, it is likely that all alternatives would supply an adequate amount of land for personal use gathering. Commercial use gathering is even less prevalent on the GMNF than personal use gathering, and so it is likely that all alternatives would supply an adequate number of acres available for commercial gathering (DEIS p. 3-326).

PC 34000-16:	**The Forest Service should use both even-aged and uneven-aged silvicultural systems.**
SC 34000-16a	TO PROVIDE A BALANCE OF OVERALL DIVERSITY AND HABITATS
SC 34000-16b	TO PROVIDE MANAGEMENT FLEXIBILITY
	Response: The Forest Service agrees with the commenter that both even-aged and uneven-aged silvicultural systems should be used. The acres treated by various harvest methods, mix of management strategies, and the potential to support other related management objectives, such as wildlife habitat management, are some of the outputs that were compared across the alternatives (see FEIS Wildlife section 3.6.2). See also responses to SC 34000-4b, PC 34000-9, PC 34000-10, and PC 34000-13.
SC 34000-16c	TO DETERMINE THEIR RESPECTIVE EFFECTS ON PROVIDING WILDLIFE CLUMP, SNAG AND DEN TREES
	Response: The GMNF is managed for multiple resource objectives. The revised Forest Plan is concerned with achieving the desired goals, objectives, and resource conditions in an environmentally acceptable manner. Maintaining wildlife reserve trees has been and will continue to be an important element in conducting timber harvesting on the GMNF. The effects of the planned treatments were disclosed in FEIS Wildlife section 3.6.2 and determined in the ROD to be acceptable with the direction given in the revised Forest Plan. The Forest Service revised the GMNF standards and guidelines (S&Gs) for wildlife reserve trees to emphasize retention of uncut patches of trees during even-aged management, to clarify language describing trees and snags to be retained, and to enhance protection of potential roost trees and potential habitat for Indiana bats (see responses to SC 22000-18p and SC 22000-21e). Important aspects of the Monitoring and Evaluation (M&E) process are verifying that standards and guidelines are being implemented properly and assessing whether or not implementation of standards and guidelines is contributing to the desired result. Accordingly, continuing M&E will assess how well wildlife reserve tree management direction works during even-aged and uneven-aged applications, and what changes, if any, are appropriate.
PC 34000-17:	**The Forest Service should not use industrial-type logging practices.**
SC 34000-17c	TO STRENGTHEN LOCAL ECONOMIES
SC 34000-17d	AS MODEL OF SUSTAINABLE ACTIVITIES
	Response: See responses to PC 34000-1, PC 34000-9, and PC 34000-11.
SC 34000-17a	TO PROTECT SOILS FROM ACID DEPOSITION
	Response: See response to SC 34000-14d, and refer to the Soils section of the FEIS for a discussion of acid deposition.
SC 34000-17b	BECAUSE TIMBER IS A SMALL PERCENT OF THE ECONOMIC VALUE OF THE GMNF
	Response: See response to PC 34000-12, and refer to the Socio-Economic section of the FEIS for a discussion of GMNF contributions to local economies.
PC 34000-18:	**The Forest Service should use and retain native hard and soft mast trees when doing artificial regeneration.**
SC 34000-18a	TO INCREASE FOOD FOR WILDLIFE
SC 34000-18b	TO PROVIDE TIMBER
	Response: Natural regeneration is the preferred method of reforestation. Artificial regeneration will be considered when sources of natural regeneration

	are not sufficient or where forest-type conversions are prescribed (revised Forest Plan p. 25). On the GMNF, reforestation activities are generally associated with timber harvesting. When conducting timber harvesting, snags, nest trees, and mast trees shall be reserved in sufficient quality, quantity, and distribution to maintain well dispersed, self-sustaining populations of all snag, den, nest, and mast-dependent wildlife indigenous to the GMNF. These wildlife reserve trees will be retained during reforestation activities. The Forest-wide guideline for mast trees is to retain large mast trees because they fill several functions by providing mast and potentially den and snag habitats simultaneously (revised Forest Plan p. 29). Species to be considered will be oaks, bear-clawed beech, hop hornbeam, hickories, and black cherry. After a site-specific analysis has been conducted, large mast trees such as red oak, white oak, chestnut oak, and black cherry have the potential to be removed through commercial timber harvesting to meet multiple-use objectives. The revised Forest Plan includes Forest-wide standards and guidelines that address retention of wildlife reserve trees, including trees that produce hard mast (for example, acorns and nuts) and soft mast (fruits) (revised Forest Plan p. 29). Additionally, Forest-wide standards and guidelines encourage the use of native species when possible when the Forest Service engages in revegetation activities (see response to SC 32500-1f). Forest-wide wildlife reserve tree guidelines also specifically include retention and release of apple trees (revised Forest Plan p. 29). Although apples are not a native species, most of the apples on the GMNF are a heritage legacy of previous land use on the Forest.
PC 34000-19:	**The Forest Service should do more timber harvesting or timber management.**
SC 34000-19a	USING SUSTAINABLE PRACTICES
SC 34000-19b	TO IMPROVE THE LOCAL ECONOMY
SC 34000-19c	FOR ECOLOGICAL AND ENVIRONMENTAL REASONS, SUCH AS MANAGING DISEASE OUTBREAKS
SC 34000-19e	FOR WILDLIFE AND WILDLIFE HABITAT
SC 34000-19g	TO MEET ACCEPTABLE PRACTICES OF GOOD FOREST MANAGEMENT
SC 34000-19i	FOR A STEADY SUPPLY OF TIMBER
SC 34000-19j	TO IMPROVE RECREATION AND HUNTING OPPORTUNITIES
SC 34000-19k	AS PART OF A MULTIPLE-USE PROGRAM
SC 34000-19n	TO PROMOTE BIODIVERSITY
	Response: The ability to implement timber sales is influenced by timber harvesting appeals, litigation, budget, and staffing levels. Many of these factors are interrelated since budgets and staffing levels are dependent on the ability to implement the timber sales program. The Forest Service has found that unanticipated changes in the level of complexity required for environmental analysis affected the timber management program, as well as challenges to site-specific analyses, such as public appeals and litigation. The ability to implement a timber sales program in the future will be primarily dependent upon budget. The budget process supplements the Forest Plan and makes annual adjustments and changes to reflect current priorities and overall management direction in the Forest Plan. The funding distribution between program components and intensity or level of activities in those

	programs is a reflection of the Forest Plan as well as the will of the Congress. The final determining factor in carrying out the intent of the revised Forest Plan is the level of funding, which dictates the rate of implementation. See also section 1.1.2 Implementing the Forest Plan in the revised Forest Plan. The Forest Service operates under the multiple-use mission, which dictates that the Forest be managed for much broader purpose than commodity values (see FEIS section 3.1.5). The revised Forest Plan is outcome based, meaning the desired future conditions, objectives, and goals are centered on the Forest's condition after the management takes place. Outcomes are based on such things as: short and long-term species composition; age class distribution; spatial arrangement and patterns; variety of habitat types and conditions; variety of recreation setting; general vigor and health of the forest and ecosystems; sustainability of ecosystems overtime to provide a variety of use values; and products and services for present and future generations. These parameters were considered and the allowable sales quantity was calculated using these outcome based objectives over volume production. These outcomes are not necessarily at odds with timber production, but represent a broader purpose than the commodity value alone.
SC 34000-19d	BECAUSE TREES ARE OVERMATURE
SC 34000-19p	TO PROVIDE MORE HIGH QUALITY, LARGE DIAMETER SAW LOGS
	Response: The concern is that the GMNF is not maximizing timber production. From the 1940s to the 1970s, timber management objectives were to improve growing stock conditions, to promote optimum growth of high-quality sawtimber and to provide timber for the local economies. The Forest Service has been very successful in accomplishing these objectives and today GMNF timber is in great demand by the forest products industry. The Forest Service's timber program operates under the multiple-use mission, which dictates a much broader purpose than commodity values. The revised Forest Plan is outcome based, meaning the desired future conditions, objectives and goals are centered on the Forest's condition after the management actions take place. These outcomes are not necessarily at odds with timber production, but represent a broader purpose than the commodity value alone. The GMNF has made a substantial investment in a road system and decades of improvement harvest. The Forest Service has used longer rotations than is not common on private lands in Vermont. Large diameter sawtimber of 18 to 24 inches at diameter breast height (DBH) is not common on private tracts of timber. Large diameter sawtimber is a common component of GMNF timber sales. Subsequently, timber products are above average quality and are important to local industry. As timber rotations are extended, timber quality will decline as a result of heart-rot in overmature trees. The Selected Alternative provides a means to provide timber to the local economies while satisfying other resource concerns in a manner in balance with many other uses on the Forest. See the FEIS Timber section 3.13 for a discussion of effects across alternatives.
SC 34000-19f	BECAUSE OF THE NO LOGGING TREND ON PRIVATE LAND
	Response: See the Cumulative Effects discussion in Timber section 3.13 of the FEIS. Vermont has experienced a rapid expansion and growth of residential developments on private timberlands. In 1996, the Vermont Legislature formed an advisory council to address a public concern about large scale liquidation harvesting. Liquidation clearcuts in the Northeast Kingdom (removing all timber value for short-term gain) was occurring on a

	large scale. The Council found that liquidation harvesting was occurring throughout Vermont and a law was enacted to stop the large-scale liquidation harvesting. Half of the private forest-landowners hold fewer than 10 acres, which are primarily sites for homes. The number of owners with fewer than 50 acres of timberland has nearly doubled since 1983. Many of these new landowners do not have an objective of managing their land for long-term timber objectives. There is concern that liquidation or unsustainable harvesting will increase on private land in Vermont. Around the GMNF, this has resulted in an increased concern expressed over timber harvesting on the Forest and consequently increased the time spent by Forest Service employees to explain and educate the public on these projects. Revised Forest Plan Goal 9 and its second objective (p. 15) direct the Forest Service to demonstrate innovative, scientifically, and ecologically sound management practices that can be applied to other lands, and to provide opportunities for public education on Forest Service management practices.
SC 34000-19h	BECAUSE THE GMNF HAS FAILED TO MEET ITS PAST HARVEST LEVELS
	Response: The concern originates from the frustration that the timber harvesting predicted in the 1987 Forest Plan and the resulting wildlife habitat was not achieved. The Allowable Sales Quantity (ASQ) was not achieved for a variety of reasons, as described in the DEIS (p. 3-274). Pulpwood markets did not improve as expected and have been traditionally been poor in southern Vermont. The ability to implement timber sales was a large factor due to timber harvesting appeals, litigation, budgets and staffing levels. Many of these factors are interrelated since budgets and staffing levels are dependent on the ability to implement the timber sale program. The fact that harvest levels dropped through the planning period was reviewed during Forest Plan revision. The Forest Service found that unanticipated changes in the level of complexity required for environmental analysis affected the timber resource management program. ASQ is calculated using a given set of constraints that meet Forest Plan direction. The ASQ determined with the Selected Alternative is intended to be compatible with other revised Forest Plan goals and objectives. The intensity of the timber management program permits manageable impacts to other users of the GMNF, primarily recreation users. Furthermore, harvest operations are frequently scheduled during periods of the year when recreation use is at a minimum. The impacts upon other resources, such as scenic integrity, are also evaluated prior to harvest. The ability to implement a timber sales program in the future will be primarily dependent upon budget. The budget process supplements the Forest Plan and makes annual adjustments and changes to reflect current priorities and overall management direction in the Forest Plan. The funding distribution between program components and the intensity or level of activities in those programs is a reflection of the Forest Plan as well as the will of Congress. The final determining factor in carrying out the intent of the revised Forest Plan is the level of funding, which dictates the rate of implementation of the Plan (revised Forest Plan p. 6). Congress reviews and allocates Forest budgets on an annual basis, which may or may not be sufficient to implement proposed annual activities.
SC 34000-19l	TO IMPROVE FOREST HEALTH, SUCH AS IN SPRUCE, FIR, AND RED PINE STANDS
	Response: The Forest Service agrees with the commenter and the revised Forest Plan addresses this issue in the Forest-wide standards and guidelines

	for regeneration cuts on page 24. The Forest Service is concerned with all forest types and not specifically to spruce, fir, or red pine. Insects and diseases are integral components of healthy ecosystems. Usually, the level of insect and diseases is relatively limited on the GMNF. Insects and diseases can become a problem when they are out of balance with other resources or when non-native species are introduced. The Forest Service works closely with the Forest Service State and Private branch to monitor forest health conditions on the Forest. The Forest Service also works closely with the Vermont Department of Forests, Parks and Recreation to respond to outbreaks or natural disturbances.
SC 34000-19m	AT SMALL SCALES FOR CORD WOOD
	Response: Goal 8 of the revised Forest Plan is to provide for a sustainable supply of forest products. The goal has objectives to provide high-quality sawtimber and sustainable opportunities for other forest products, including cordwood. Personal use permits will be required for the gathering of dead and down trees for home firewood. The Forest Service sells stumpage, which includes sawtimber, pulpwood, and firewood, to the highest bidder using timber sale contracts that require the trees to be harvested and removed. The Forest Service does not determine which industry will utilize the wood harvested or the actual end product manufactured.
SC 34000-19o	BECAUSE NEWLY ACQUIRED LANDS PROVIDE OPPORTUNITIES FOR MORE TIMBER HARVESTING
	Response: The Selected Alternative includes 55,058 acres of suitable timberlands that have been acquired since 1982 (FEIS Timber section 3.13.2). In the 1987 Forest Plan, these lands were not considered suitable lands. The ASQ of the Selected Alternative was calculated at 16.4 MMBF. The newly acquired lands were modeled for timber production and its suitability (appropriate) for timber production varied among alternatives.
PC 34000-20:	**The Forest Service should limit, do less, or cease timber harvesting and timber management.**
SC 34000-20a	TO PREVENT EROSION
SC 34000-20b	TO PROTECT WILDLIFE AND WILDLIFE HABITAT
SC 34000-20c	TO PROTECT SURFACE & GROUND WATER QUALITY AND WATERSHEDS
SC 34000-20d	TO PREVENT AIR POLLUTION
SC 34000-20f	BECAUSE TIMBER IS A SMALL PERCENT OF THE ECONOMIC VALUE OF THE GMNF
SC 34000-20i	BECAUSE THERE ARE ENOUGH FORESTS ON PRIVATE LAND TO SUPPLY TIMBER
SC 34000-20k	FOR THE LOCAL ECONOMY – TOURISM
SC 34000-20m	TO PROTECT AREAS WHERE LOGGING HAS NOT ALREADY OCCURRED AND WILDERNESS
SC 34000-20n	TO ONLY WHEN NEEDED TO PREVENT FOREST FIRES OR REMOVE DISEASED TREES
SC 34000-20p	TO PREVENT MORE ROAD BUILDING
SC 34000-20r	TO PROTECT SCENIC QUALITY AND AESTHETICS
SC 34000-20s	TO SMALL SCALE PROJECTS FOR DEMONSTRATION PURPOSES
SC 34000-20u	TO PROTECT RECREATIONAL OPPORTUNITIES
SC 34000-20w	TO PROVIDE HIGHER QUALITY TIMBER WHEN HARVESTING DOES OCCUR
	Response: See response to PC 34000-1 and associated subconcerns, as

	well as responses to PC 34000-12 and PC 34000-13.
SC 34000-20e	TO AREAS WHERE ROADS ALREADY EXIST
	Response: There is only a small amount of suitable timber land that is not already adequately roaded. The Selected Alternative focuses management areas that allow timber harvesting in roaded areas. See FEIS Timber section 3.13 and Road Management section 3.20.
SC 34000-20g	IN SOMERSET
	Response: The Selected Alternative has allocated the land west of the Somerset Reservoir to the Diverse Forest Use Management Area since the Corridor 7 snowmobile trail is located in the area. Substantial activity such as motorized recreation, snowmobiling, and timber harvesting can occur in this management area (revised Forest Plan p. 47). The area east of the Somerset Reservoir is primarily allocated to the Remote Wildlife Habitat management area. The intensity of management activities will be less in this management area (revised Forest Plan p. 60).
SC 34000-20h	BY HARVESTING OUTER AREAS OF THE FOREST AND KEEPING INNER AREAS FOR WILDLIFE AND RECREATION
	Response: The Forest Service agrees with the commenter. There is only a small amount of suitable timber land that is not already adequately roaded. The Selected Alternative focuses management areas that allow timber harvesting in roaded areas. The revised Forest Plan allocates approximately 160,000 acres of the GMNF to MAs in which changes to forest structure will occur primarily through natural ecological processes, not through active timber or vegetation management (see FEIS Table 2.1-6 and revised Forest Plan for designated Wilderness, Wilderness Study Areas, Remote Backcountry Forest, White Rocks NRA, Appalachian Trail, Long Trail, Alpine/Subalpine Special Area, Mount Horrid Candidate Research Natural Area, Branch pond Ecological Special Area management areas). Virtually all of the lands in these MAs are located in core areas along the backbone of the Green Mountains.
SC 34000-20j	BY HAVING LARGE BUFFER ZONES AROUND STREAMS AND PONDS
	Response: Timber harvesting is rarely conducted on steep ground or excessively wet soils that are prone to erosion. The effects of the planned treatments are disclosed in the FEIS and determined in the ROD to be acceptable with the direction given in the revised Forest Plan. The Forest Service has established a standard in the revised Forest Plan to protect water quality around streams and ponds (p. 20). The standard states that “a protective strip of predominantly undisturbed soil (having plant and/or organic material) shall separate soil-disturbing activities from all water sources (streams, lakes, ponds, wetlands, and vernal or seasonal pools).”
SC 34000-20l	TO AREAS THAT ARE LOW ELEVATION AND WELL BUFFERED FROM THE EFFECTS OF ACID DEPOSITION
	Response: See responses to PC 31000-1 and related SCs, PC 31100-1 and related SCs, PC 34000-14 and related SCs, and refer to the Soils section (3.2) of the FEIS for a discussion of acid deposition.
SC 34000-20o	TO PROTECT THREATENED, ENDANGERED, AND SENSITIVE SPECIES AND THEIR HABITATS
	Response: Ecological safeguards and protection for threatened, endangered, and sensitive species are included in the revised Forest Plan as objectives, standards, and guidelines (revised Forest Plan pp. 12, 27-32). The Forest Service does not agree that limiting or ceasing timber management and

	timber harvest is necessarily the best management regime for threatened, endangered, and sensitive species (see response to SC 34000-1v). See FEIS section 3.8 Threatened and Endangered Species.
SC 34000-20q	IN GLASTENBURY
	Response: The Selected Alternative has allocated most of the Glastenbury area to the Wilderness Study Area and Remote Backcountry management areas. Timber harvesting is not appropriate in these management areas. The majority of roaded areas within Glastenbury are allocated to the Diverse Backcountry Management Area (see FEIS Table 2.1.6 and revised Forest Plan p. 58). Timber management in the Diverse Backcountry MA is designed for longer rotations and infrequent entries.
SC 34000-20t	TO PROJECTS THAT ARE ABOVE COST
	Response: See response to SC 34000-1ll. Timber may be cut where financial revenues fall below financial costs when the Forest Service determines the resulting non-priced benefits are needed, or desirable, to meet the goals of Forest stewardship (revised Forest Plan p. 23). See also responses to PC 70000-7 and related SCs, and PC 70000-9 and related SCs.
SC 34000-20v	TO ALLOW THE GMNF TO AGE BECAUSE IT IS MID-SUCCESSIONAL, LARGELY EVEN-AGED, AND RELATIVELY YOUNG ECOLOGICALLY
	Response: Ecological safeguards and protection for biodiversity and old growth are included in the revised Forest Plan as objectives, standards, and guidelines. The effects of the planned treatments are disclosed in the FEIS and determined in the ROD to be acceptable with the direction given in the revised Forest Plan. While the Forest Service recognizes the current mid-successional, even-age condition of the Forest, and describes it in detail in section 3.7 of the FEIS, the revised Forest Plan has greatly increased allocations to management areas specifically designed for protection, preservation, and restoration, including Ecological Special Areas, Remote Backcountry Forest, and Wilderness Study Areas (see also Table 3.11-7 of FEIS). These areas, among others where natural processes will dominate and where extractive or disruptive uses, such as timber harvesting, are limited or prohibited, constitute the ecological reference area network (see section 3.11 of FEIS), and represent 44 percent of the Forest. Consequently, in almost half of the Forest, ecosystems will become more complex over time and will lose their even-age, mid-successional characteristics. While some of the remaining lands will be managed using even-aged techniques, some will also be managed using uneven-age techniques or long rotations, which may contribute to the development of forest characteristics similar to those found under natural disturbance regimes (Seymour et al. 2002). Section 3.5 of the FEIS indicates that for the Selected Alternative, over both the short and long-term, between 60 and 80 percent of the Forest will be in a mature or old condition, with an over twofold increase in old forest; this section also describes how age class diversity (hence ecological complexity) will be enhanced compared to the current condition (Tables 3.5-7 and 3.5-20). The Forest Service believes that the combination of protection with sustainable forest management practices provided in the revised Forest Plan will provide for more complex ecological systems over time.
SC 34000-20x	TO ONLY HARVESTING IN THE WINTER WHEN THE GROUND IS FROZEN
	Response: The revised Forest Plan is a programmatic document and does not address site-specific needs for winter harvesting to protect resources. Use of winter harvesting is specified under certain conditions such as

	protection of wetlands and follows direction provided in Forest-wide standards and guidelines (p. 22). Currently the majority of harvesting on the GMNF is limited to frozen ground conditions. This mitigates erosion potential of logging in wet soils. There are some soils on which summer logging is acceptable and soil scarification is desired to promote natural regeneration of desirable tree species, such as oak and hemlock.
SC 34000-20y	BECAUSE ONLY A SMALL NUMBER OF COMPANIES BENEFIT FROM LOGGING ON THE GMNF
	Response: An objective under Goal 17 in revised Forest Plan calls for varying the range of project sizes for contracts (p. 17). The Forest Service has a number of options available to use for varying contract sizes. See FEIS Table 3.21-8, Income from Wood Products and Processing.
PC 34000-21:	**The Forest Service should disclose the impacts of timber harvesting projects and allow for public input before implementing these projects.**
	Response: Site-specific analysis for forest management projects in compliance with the National Environmental Policy Act (NEPA) and Forest Service policy will be required to implement timber harvesting. The level of public involvement varies with the scope of the project and the issues identified that are associated with proposed management activities. See page 5 of the revised Forest Plan.
SC 34000-21a	TO CLARIFY IMPACTS ON HERBACEOUS AND SHRUB UNDERSTORY FLORAL COMPOSITION
	Response: The effects of site-specific actions on the environment, including any effects on the area's flora, are documented in environmental analyses in compliance with the National Environmental Policy Act (NEPA), and are not within the scope of the programmatic analysis associated with the revision of the Forest Plan. Forestry practices in general are guided by broad ecological objectives included in the management area descriptions and standards and guidelines. Practices are designed to have effects well within the natural range of ecological processes. Soil information reflected in mapped Ecological Land Types helps guide harvest objectives. The Wildlife and Vegetation sections (FEIS, Chapter 3) discuss this in more detail. Prior to harvest activity, sites are reviewed for the presence of threatened, endangered, or sensitive species, including plant species. Mitigation measures for these species (usually avoidance) are often implemented to ensure that their viability on the Forest is protected. For the remaining herbaceous plant and shrub species on the Forest, most of which are considered stable, general management practices as well as management allocation in the revised Forest Plan help to mitigate negative effects. The commenter notes concerns related to logging effects on herbs discussed in Meier et al. 1996 (chapter 4 of Davis 1996). A review of this publication indicates that the greatest level of concern is focused on areas of intense disturbance, particularly associated with clearcutting, presumably on bare ground, as well as in areas that have had an agricultural history. Most if not all of the research conducted and cited by the authors is associated with clearcutting. In many of these situations, recovery of herbs strongly associated with primary forests is often slow, delayed, or non-existent. The authors note that

	recovery is also a function of life-history characteristics of these species (for example, slow growth and slow or limited dispersal, low reproductive rates), which would be of concern in association with any disturbance, including natural disturbances. It is presumed by the authors that natural levels and types of disturbance are not threatening to these species in the way that clearcutting threatens them. The authors suggest that disturbances that create canopy gaps and tip-up mounds, as opposed to large cleared openings, may be of less concern, noting that "…canopy gaps are partially shaded, they are not as desiccating as open clearcuts, nor are they as likely to be invaded by r-selected species or exotics" (p. 58). In their discussion of management implications of their findings, the authors also indicate that "…logging methods that mimic natural gap-phase dynamics may be less damaging than clearcutting" (p. 58). As discussed under Affected Environment in section 3.5 of the FEIS, the Forest has a long history of land use prior to inclusion within the National Forest System, including one to two cycles of harvesting (sometimes more), as well as agriculture in all but the roughest terrain. Very little primary forest remains, and all that the Forest Service is aware of on the GMNF has been placed in protected management areas. Consequently, it is likely that the flora of the region is in a state of recovery, while loss of or harvesting in current primary forest on the GMNF is not a concern. As noted in section 3.5 of the FEIS, very little clearcutting is expected to occur on the GMNF over the planning period (Table 3.5-21). In addition, given many resource-related concerns, much of the timber harvesting that does occur on the Forest occurs on frozen ground during the winter, when effects on the flora tend to be minimal. Most of the harvesting practices used on the Forest, including uneven-age methods and shelterwood with reserves, create gaps in the canopy, leaving varying amounts of the canopy intact. In addition, long rotations associated with Diverse Backcountry and Remote Wildlife management areas will allow forests to develop higher levels of structural complexity that may facilitate recovery of forest herbs from historical management as well as future harvests. Researchers in New England have indicated that selection harvesting and long rotations may lead to forest conditions similar to those found under natural disturbance regimes (Seymour et al. 2002), to which the flora is presumably adapted. The management implications suggested by the publication noted above also include reserving large as well as small parcels of primary forest to help protect the flora of concern and provide a source of propagules for recovering forests. As noted previously, all known areas of old growth have been placed into protective management area designations. In addition, lands unsuited for timber management account for about half of the Forest under the revised Forest Plan. These lands, except for developed or regularly disturbed sites (campgrounds, trail corridors, ski areas), will eventually develop structure and composition within the expected natural range of variability, and so with time are expected to provide opportunities for refuge and recovery of the herb and shrub flora of the GMNF.
PC 34000-22:	**The Forest Service should not subsidize the timber industry.**
	Response: See response to SC 34000-1y and SC 34000-1ll.
SC 34000-22a	BECAUSE THERE ARE ENOUGH FORESTS ON PRIVATE LAND

	Response: See response to SC 34000-1b
SC 34000-22b	BY BUILDING ROADS
	Response: See response to PC 34000-1 and associated subconcerns.
SC 34000-22c	BECAUSE IT LOWERS WOOD QUALITY
	Response: See response to SC 34000-1o and SC 34000-1ff.
PC 34000-23:	**The Forest Service should utilize methods other than pre-emptive and salvage timber harvesting to control insects.**
	Response: The existence of insects and diseases within the forest is not inherently undesirable or pose a threat to ecosystem health. Native insects and diseases are integral components of healthy ecosystems. Usually, the level of insect and disease infestations is relatively limited on the GMNF. Insects and diseases can become a problem when they are out of balance with other resources or when non-native species are introduced. The Forest Service works closely with the State and Private Forestry branch of the Forest Service to monitor insect and disease occurrences on the Forest. The Forest Service also works closely with the Vermont Department of Forests, Parks and Recreation to respond to outbreaks or natural disturbances. Native and non-native insects and diseases have the ability to cause substantial effects, although ecosystems are usually able to withstand periodic infestations of native species that have evolved together with associated checks and balances. Ecosystem conditions can be rapidly degraded by non-native insects and diseases, which are not kept in check by co-evolved competitors or predators. The Forest Service has the responsibility to manage for self-sustaining ecosystems. The President's Healthy Forest Initiative (HFI) and Healthy Forest Restoration Initiative (HFRI) have been incorporated in the revised Forest Plan (pp. 33-34). Forest-wide standards and guidelines include the use of biological, silvicultural, or chemical controls for NNIS (revised Forest Plan p. 34), and further mitigation of the effects of NNIS may be included in project designs. Timber harvest is a necessary silvicultural tool often used to address forest health concerns.
SC 34000-23a	BECAUSE IT CONTRIBUTES TO FOREST DECLINE WHEN COMBINED WITH CLIMATE CHANGE EFFECTS
	Response: Carbon dioxide has been identified as a "greenhouse gas" that could contribute to climate change when out of balance. There is no evidence that timber harvesting alone results in a net increase in atmospheric carbon. In general, as long as a harvested area remains forested and is not converted to another land use, there would be no net increase in carbon dioxide over time. Forests and wood products are a temporary storage area for carbon. Whether trees die and decay, are harvested and made into products, or burned, the carbon returns to the atmosphere. If the forest regenerates, the trees and vegetation will absorb carbon dioxide from the atmosphere as they grow and thus complete the carbon cycle. Also see response to PC 31000-5. The Forest Service is actively involved in research related to climate change. Its Northern Global Change Research Program is located in Newtown Square, Pennsylvania (www.fs.fed.us/ne/global). See also FEIS Air section 3.4.2.
PC 34000-24:	**The Forest Service should only sell lumber within our own country.**
SC 34000-24a	BECAUSE MUCH OF OUR FOREST PRODUCTS ARE BEING SENT TO THE FAR EAST
SC 34000-24b	BECAUSE THE NEGATIVE PUBLICITY OF SELLING OVERSEAS DOES

	THE FOREST HARM
	Response: Establishing controls on the processing of forest products from national forest timber sales and log exports outside of the US is outside the scope of decisions to be made in the planning process. The Forest Service sells stumpage to the highest bidder using timber sale contracts that require the trees to be harvested and removed. The Forest Service does not have control on how the wood will be utilized or the actual end product manufactured.
PC 34000-25:	**The Forest Service should disclose methods for achieving forest management, wildlife, and age class diversity goals.**
SC 34000-25a	BECAUSE CURRENT DIRECTION CATERS TO RECREATION
SC 34000-25b	BECAUSE THE 1987 PLAN'S MANAGEMENT OBJECTIVES WERE GROSSLY UNDERACHIEVED
	Response: Revised Forest Plan direction assumes full implementation to meet desired future conditions. The major inhibiting factor in meeting these conditions is budget constraints (revised Forest Plan p. 6). See PC 34000-19. The Selected Alternative provides a sustainable and balanced approach to managing timber and wildlife habitat, allows for a continued tending of forest stand to develop high-quality sawtimber, provides a source of forest products to local industry, and permits the harvest of high-quality timber that has developed from decades of investment in stand improvement activities. The Selected Alternative provides the best balance of products, services, and experiences, while maintaining the core ecological processes of the Forest for the future. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. The Selected Alternative represents what Forest managers believe to be the best balance of outcomes in achieving sustainable ecosystems and meeting the intent of relevant laws.
SC 34000-25c	BECAUSE NOT MEETING THESE OBJECTIVES HAS HAD ECONOMIC IMPACTS
	Response: The FEIS Socio-Economic section discloses the contributions of timber harvesting on local communities. Tables 3.21-20 through 3.21-23 in the FEIS show the difference between the current condition and the alternatives in respect to economic contribution to local communities. See also responses to PC 70000-8, PC 70000-9, and their subconcerns.
PC 34000-26:	**The Forest Service should manage the GMNF in ways that produce high quality saw timber while meeting commercial needs and providing employment for local communities.**
	Response: The Forest Service agrees with the commenter. The revised Forest Plan includes Goals 8 and 17 which provide for a supply of sustainable forest products and support regional and local economies through resource use and protection (revised Forest Plan pp. 14 and 17). The National Forest Management Act (NFMA) states that "the resulting plans shall provide for multiple-use and sustained yield of goods and services from the National Forest System in a way that maximizes long term public benefits in an environmentally sound manner." The amount of sawtimber estimated for each alternative is identified in Table 3.13-7 of the FEIS. Quality of sawtimber and veneer is represented to some extent by the age of a stand that is harvested. Stands harvested at older ages will normally have more, higher-quality sawtimber. Overmature stands will reach an age when sawtimber volume and quality will decline. Older stands managed for extended rotations may decline in timber quality but will produce wildlife structure and habitat unique

	to public lands. The revised Forest Plan included goals, desired conditions, objectives, standards and guidelines related to all resources, including timber harvest levels. The Record of Decision (ROD) includes the rationale for selection of the Selected Alternative.
PC 34000-27:	**The Forest Service should recalculate the Allowable Sale Quantity (ASQ) and rerun the SPECTRUM model.**
SC 34000-27a	BECAUSE THE TIMBER SUITABILITY ANALYSIS IS FLAWED
	Response: The commenters are concerned with the cost-efficiency of tentatively suitable lands. The process used to determine the suitable base was in compliance with NFMA. Analysis has shown that the cost efficiency of the lands identified as tentatively suitable is dependent upon the silvicultural technique applied to the land. The Forest Service recognizes the non-priced benefits that the Forest provides to the ecosystem values, as well as to recreational users. Taking these non-priced benefits into consideration, the Forest Service often applies silvicultural treatments that are not necessarily designed to produce the greatest net value. The suitable base identified in the FEIS can support a higher timber output based purely on biological potential. The long-term sustained yield for the Selected Alternative is calculated to be approximately 16.4 MMBF/Year. In designing the alternatives, the Forest Service looked at several additional factors not accounted for in the timber harvest schedule modeling in order to arrive at the ASQ, including the design intent of the alternatives. Refer to Appendix B in the FEIS for further discussion on SPECTRUM and ASQ. See also the Timber section 3.13 in the FEIS.
SC 34000-27b	BECAUSE COSTS AND REVENUES ARE REPORTED INACCURATELY
	Response: The economic analysis that was conducted provided a comparison of alternatives. Values for timber products were based on timber values obtained from *Northern Woodlands* magazine. Although the timber values published in *Northern Woodlands* reflect mill prices, they reflect GMNF stumpage prices from 1995 to 1998. Recent bidding patterns and long-term timber demand studies would indicate that the values used are probably conservative. Timber values relate closely to the quality of the products being sold, and the Forest Service is in a position to sell a high percentage of high-quality material in future timber sales, so the most likely scenario is that returns from future sales could be considerably higher than the returns projected in the SPECTRUM model. The Forest Service was unable to obtain long-range forecasts of market price trends suitable for applying to this analysis. The costs of timber outputs were based on the sale preparation time (average days per acre) by forest type and silvicultural treatment. Other direct costs such as sale administration, resource specialist support, and road maintenance were constant between silvicultural treatments. Indirect costs such as overhead, silvicultural examination, and general administration were not included in the SPECTRUM economic analysis. The Forest Service develops its budget requests consistent with the parameters identified in the revised Forest Plan. The Forest Service allocates resources to the timber program to support multiple resource objectives including habitat management, forest health, recreation, and scenery objectives. Not all of these objectives result in sales that are above costs, but

	they are necessary to meet other resource objectives.
SC 34000-27c	BECAUSE THE STAGE II AND III STRATIFICATIONS WERE DONE INCORRECTLY
	Response: NFMA's 219.14 states "suitable lands on National Forests will be determined in part, whether or not a unit of land will generate a financial profit." The cited regulation identifies the process used to determine land suitability. The regulation requires that lands that are not cost-efficient over the planning horizon in meeting Forest objectives, including timber production, shall be tentatively identified as not appropriate for timber production. Lands that fell into the unsuitable category because they are not cost-efficient were identified and removed from the tentatively suitable land base, as required by the regulation. These determinations resulted from site-specific surveys and land suitability classifications. The most productive timber lands on the GMNF are generally found at the lower elevations. A total of 85,226 acres of lands suitable for timber production (45%) are considered highly productive in the Selected Alternative (FEIS Table 3.13-6). Most of the highly productive timber lands were allocated to the Diverse Forest Use, Escarpment and Moosalamoo Recreation and Education management areas which are extensively roaded. The moderately productive lands were generally allocated to the Diverse Backcountry and Remote Wildlife Habitat management areas which are less accessible.
SC 34000-27d	BECAUSE STANDARDS AND GUIDELINES WERE NOT FACTORED INTO THE ANALYSIS
	Response: Explicit constraints were built into SPECTRUM to directly emulate standards and guidelines, policy requirements, regulations, or monetary limitations. These are elements in the revised Forest Plan that are expected to affect the acres of suitable land that will be available, affect when it will be available, or affect the relationship between and among activities and outputs. Revised Forest Plan standards and guidelines such as retention of mast trees, temporary opening height size restrictions (spacing of even-aged regeneration harvests), and wildlife reserve trees were incorporated in the Forest Vegetation Simulator (FVS) analysis. Seeps, vernal pools, rock outcrops, and small wetlands are too small to be mapped during silvicultural inventory. Small inclusions of unsuitable timberlands were mapped within tentatively suitable timberlands. The volumes per acres used in the analysis reflect the effects of these inclusions and effects of standards and guidelines. This analysis determined the volume/acre for each analysis group from which yield tables were developed. The yield tables were imported into the SPECTRUM model for a 150-year evaluation period. The FVS results were intensively reviewed by the Forest Silviculturist and later determined by the interdisciplinary team to be acceptable. In addition, standards and guidelines were incorporated in SPECTRUM through yield tables, analysis areas, management area prescriptions, scheduling options, and other constraints. See FEIS Appendix B for a discussion of the analysis process. The SPECTRUM model was used as a tool to help develop programmatic timber harvest schedules for each alternative. It was not intended to be used to develop a site-specific harvest plan for future timber sales. The model results are particularly useful in a comparison analysis between the alternatives used in the selection of the Selected Alternative. By applying a

	consistent modeling approach and varying the inputs consistent with the design of each alternative, decision makers can see the impacts expressed in a broad range of outputs. Acres treated, mix of treatment strategies, and the potential to support other related management objectives, such as wildlife habitat management, are some of the outputs that were compared across the alternatives and evaluated in the selection of the Selected Alternative.
SC 34000-27e	BECAUSE SIZE AND ADJACENCY REQUIREMENTS FOR HARVEST BLOCKS WERE NOT FACTORED INTO THE ANALYSIS
	Response: A spatial model to determine the effect of size and adjacency requirements for harvest block was not used for the GMNF. The GMNF used the experience of land managers to address the size and adjacency requirements. The Forest Service pioneered the use of spatial analysis about 25 years ago. Since that time, the Forest Service has had the capacity to evaluate its adjacency. The Chequamegon-Nicolet National Forest in Wisconsin used the North-Central Research Station's (NCRS) Harvest model in 2001. They found the model to be very time consuming, and in scattered private/public land ownership patterns, the Harvest model did not provide reliable information. They found that experienced land managers could provide more reliable information. The Hiawatha National Forest in Michigan recently applied the Harvest model with similar results. The University of Minnesota GIS spatial model was used for the Governor's Advisory Task Force for the Timber Resources of Minnesota, 2003. This model was available to the Chippewa and Superior National Forests in Minnesota for Forest Plan ASQ analysis. The analysis was valuable for evaluating the relationship of national forest lands to other land ownerships in Minnesota. The Forest Service was advised not to use the Harvest model or the Minnesota GIS spatial model for the GMNF and instead rely upon the expertise of GMNF land managers to evaluate the SPECTRUM results. See also response to SC 34000-27d.
SC 34000-27f	BECAUSE LANDS THAT MAY NOT BE COST EFFECTIVE TO HARVEST MAY HAVE BEEN CONSIDERED SUITABLE
	Response: NFMA's 219.14 says "suitable lands on National Forests will be determined in part, whether or not a unit of land will generate a financial profit." The cited regulation identifies the process used to determine land suitability. The regulation requires that lands that are not cost-efficient over the planning horizon in meeting Forest objectives, including timber production, shall be tentatively identified as not appropriate for timber production. Lands that fell in the unsuitable category because they are not cost-efficient were identified and removed from the tentatively suitable land base, as required by the regulation. These determinations resulted from site-specific surveys and land suitability classifications.
SC 34000-27g	BECAUSE THE EFFECTS OF SOIL NUTRIENT DEPLETION WERE NOT FACTORED INTO THE GROWTH AND YIELD TABLES
	Response: Long-term monitoring at permanent plots on National Forest System lands and at Mt. Mansfield by the Vermont Monitoring Cooperative will be used to evaluate trends in biomass accumulation. Soil chemistry change sites are being established in a range of locations in order to establish trends. Because there is no known metric that captures the current status of the soil with respect to cumulative impact of acid deposition, repeated measurements over time is fundamental to keeping abreast of the possible

	impacts to forest productivity, health, and composition. See also Soils section 3.2 in the FEIS.
SC 34000-27h	BECAUSE THE ANALYSIS USES MILL PRICES INSTEAD OF STUMPAGE PRICES
SC 34000-27l	BECAUSE STUMPAGE PRICES ARE OVER ESTIMATED
	Response: The economic analysis that was conducted provided a comparison of alternatives. Values for timber products were based on timber values obtained from *Northern Woodlands* magazine. There were no timber sales from 1999 through 2002 while the Forest Service updated its management direction for threatened and endangered species. This resulted in a period of more than 40 months in which no bidding transactions took place to help establish a market value on the GMNF. The point in time when market values were determined was in 1998, before the hiatus of the timber program ended. The commenter suggested adjusting stumpage prices from 1988 to 1998 using consumer price indices to current year. Research studies have shown that stumpage prices have risen above the consumer price indices during this period (see LeDoux and Sendak 2001, Skog and Haynes 2002, Ireland 2003). Using this approach would under-estimate stumpages for Vermont, especially GMNF stumpage. Although the timber values published in *Northern Woodlands* reflect mill prices, they closely reflect GMNF stumpage prices from 1995 to 1998. Recent bidding patterns and long-term timber demand studies would indicate that the values used are probably conservative (Sendak 1991). Timber values relate closely to the quality of the products being sold, and the Forest Service is in a position to sell a high percentage of high-quality material in future timber sales, so the most likely scenario is that returns from future sales could be considerably higher than the returns projected in the SPECTRUM model. The Forest Service was unable to obtain long-range forecasts of market price trends suitable for applying to this analysis. The Forest Service did an overall cost-efficiency analysis in the Economics section (FEIS Table 3.21-24).
SC 34000-27i	BECAUSE FACTORS EFFECTING COSTS AND REVENUES, SUCH AS DIFFERENCES BETWEEN LOGGING SYSTEMS, WERE NOT INCLUDED
	Response: Even within the “inventoried roadless areas” there is only a small amount of suitable timber land that is not already adequately roaded. Many of these lands have a long harvest history, which continued into the late 1990s. Roads are rarely built on steep ground, as skidding is the typical method for bringing forest products down to roads at lower elevations. Timber harvesting on the GMNF uses either skidder or forwarding equipment that is capable of operating on lands not excluded due to inoperable terrain. There is no evidence of significant variation in logging efficiencies. With few exceptions, the existing Forest road network provides sufficient access for forestry activities. The combination of reasonable skidding distances, modern harvest equipment, and good timber values indicate that cost efficiency would not be useful in the suitability analysis. See Appendix B of the DEIS for a full description of the suitability analysis.
SC 34000-27j	BECAUSE THE COST OF TRANSPORTATION WAS NOT INCLUDED
	Response: It is anticipated that road construction on the Forest will not exceed five miles and reconstruction will not exceed ten miles per decade (DEIS Appendix B). Although road construction or reconstruction is expected to be limited, it will be necessary in some locations to accomplish resource

	objectives. See response to SC 34000-1y.
SC 34000-27k	BECAUSE SOILS WERE NOT ANALYZED
	Response: Slope was used to identify inoperable terrain, generally above 2,500 feet in elevation. These areas were eliminated from further consideration in Stage I of the suitability determination. Soils were also considered because the suitability analysis excluded areas in the forest database that are inoperable due to wet or shallow soils. Acid deposition was not used in the suitability analysis because nutrient depletion from acid deposition is not of sufficient magnitude to decrease soil productivity and cause tree decline, on middle to lower elevations. Thus, the cumulative effects of acid deposition and harvesting on soil productivity are minor (see FEIS Soils section 3.2).
SC 34000-27m	BECAUSE THE COST PER ACRE OF GMNF TIMBER IS INACCURATE AND DOES NOT INCLUDE ALL THE COSTS
	Response: See responses to SC 34000-1y, SC 34000-27a, and SC 34000-27b.
SC 34000-27n	BECAUSE SPECTRUM CONSTRAINTS ARE NOT CLEARLY DELINEATED
	Response: The interdisciplinary team reviewed the model's results using various objective functions, including maximizing present net value, maximizing volume, maximizing age class distribution, and maximizing aspen-paper birch regeneration to satisfy habitat composition objectives. The results of using present net value as an objective function showed how aggressively the model would pursue intermediate harvests at the expense of achieving even-aged regeneration harvests to meet habitat composition objectives. It became apparent that the most cost-efficient treatments, initially selected by SPECTRUM, were contrary to the desired future condition and goals and objectives of the GMNF. The Forest Service is obligated to consider both priced and non-priced benefits in the course of arriving at management decisions. There are occasions where the non-priced benefits outweigh the priced benefits in the course of timber management, which results in the selection of less cost-efficient timber management treatments.
SC 34000-27o	BECAUSE SPECTRUM'S DELINEATION OF MANAGEMENT AREA BOUNDARIES IS NOT EXPLAINED
	Response: The Forest Service's policy is to assign lands to management areas before the acres are entered into SPECTRUM. This is very fundamental to how the Forest Service developed the alternatives. The acres treated using various prescriptions within a management area is often constrained by prescription, but SPECTRUM still assigns the acres by prescription. Otherwise, the Forest Service would not be meeting the optimality requirement. In 1984, the Forest Service assigned monetary values to commodities and non-priced benefits, such as recreation visitor days. The FORPLAN model used at that time then assigned the best mix of management areas to maximize "overall best values." Forest Plan monitoring has shown that management area delineation often did not align with ecological boundaries. During public meetings, most people agreed that delineation of management areas needed to be improved (see Appendix A of the DEIS). It was not prudent to have SPECTRUM assign the acreage mix of management areas on the GMNF. A series of public meetings was held to obtain public input on

	management area delineation. Small groups of various public interests mapped management areas at each meeting. An interdisciplinary team then reviewed the results of the mapping exercise and delineated management areas based on public issues and ecological considerations. The results were then used as constraints in the SPECTRUM analysis. See revised Forest Plan Appendix A – Analysis of the Management Situation and DEIS Appendix A – Public Involvement.
SC 34000-27p	BECAUSE THE OBJECTIVE FUNCTION USED IN SPECTRUM VIOLATES 36 CFR 219.14
	Response: The cited regulation identifies the process used to determine land suitability. The regulation requires that lands that are not cost-efficient over the planning horizon in meeting Forest objectives, including timber production, shall be tentatively identified as not appropriate for timber production. The lands fall in the unsuitable category because they are not cost-efficient were identified and removed from the tentatively suitable land base, as required by the regulation. These determinations resulted from site-specific surveys and land suitability classifications and are accounted for in Appendix B of the DEIS. Analysis determined that the cost-efficiency of the tentatively suitable base was dependent on which timber management treatment strategy was applied on the ground. All analysis units can be cost-efficient if the Forest Service uses the most cost-efficient harvesting techniques. There are other non-priced benefits associated with these lands that ultimately will have to be considered at the project scale. Some of these non-priced benefits, such as maintaining healthy ecosystems and preserving scenic integrity, result in the selection of harvesting techniques that are not always the most cost-efficient from a purely financial perspective. The modeling was not designed to provide site-specific management prescriptions; rather, it is a programmatic evaluation of the Forest at the forest scale. If an analysis unit in the model's solution has a negative net value (NPV), it is a result of a management prescription that is less cost-efficient, which is not a result of the suitability of the land. These cost-efficient treatments strategies result from constraints in the model that are designed to achieve objectives that meet regulatory guidance and provide non-priced benefits. If these constraints were lifted, the same analysis unit could be assigned a management prescription that would have resulted in a positive NPV. In multiple-use management, cost efficiency is a relative measure used to find the least-cost path to a desired condition. Keeping multiple-use objectives in mind, this least-cost path may not be a positive cash flow, but may be the most cost-efficient solution.
SC 34000-27q	BECAUSE THE MODEL USED THE FIRST OBJECTIVE – MAXIMIZING TIMBER HARVEST VOLUME
	Response: This assumption is incorrect. Three objective functions were created, and maximizing timber was the first listed. SPECTRUM solved all three objective functions, including maximizing present net value. The order in which they are displayed in the matrix files is immaterial. The concern takes exception with the selection of the objective function used in the timber schedule modeling. As described in the FEIS (see Appendix B; also Timber section 3.13), the Forest Service developed the harvest levels for each alternative using criteria that extended beyond just the maximum biological potential of the land. The Forest Service reviewed the harvest history and experience since the inception of the 1987 Forest Plan in light of various

	social and operational conditions that influence timber management on the Forest. In light of these conditions, as well as acknowledging the conceptual design of the alternatives, the Selected Alternative annual allowable sale quality (ASQ) was calculated to be 16.4 MMBF/Year. The model results reflected a biological capacity of 24.4 MMBF in the first decade of implementation without any adjustment for some of the model's design limitations, and 20.5 MMBF with an adjustment for non-declining, even-flow requirements. An additional adjustment was made for maximizing economic efficiency. These results provided the assurance that the suitable lands identified for timber management would support the ASQ of 16.4 MMBF/Year. Following the decision to establish modified Alternative E's ASQ of 16.4 MMBF/Year, it was necessary to run the timber harvest schedule model again, this time using the ASQ as a constraint in order to develop the harvest schedule data. The interdisciplinary team reviewed the results of running the model using various objective functions, including maximizing present net value, maximizing volume, maximizing aspen-paper birch regeneration, and maximizing even-aged regeneration harvesting to satisfy habitat objectives. It became apparent that the most cost-efficient treatments were contrary to the desired future condition and goals and objectives of the Forest.
SC 34000-27r	BECAUSE THE FOREST SERVICE DID NOT USE THE TIMBER BENCHMARKS TO DEFINE A RANGE OF ALTERNATIVES
	Response: National forests are managed for multiple resources including the production of timber for society's needs. The Selected Alternative calls for harvesting 16.4 MMBF per year. The alternatives were based on a variety of desired outcomes, and timber output levels alone were not considered for alternative selection criteria. The timber benchmarks in the proposed Forest Plan (Table A-7, p. A-15) showed a range of 0 to a maximum biological volume of 43.6 MMCF/decade. The no timber harvest alternative was considered but eliminated from detailed analysis because it would not accomplish management goals and objectives included in the revised Forest Plan. The greatly increased timber harvest alternative was also considered but eliminated from detailed analysis. While there was much public interest in greatly increasing the amount of timber harvest, the alternative was eliminated because it emphasized timber production to such an extent that the management and protection of other resources would fall below acceptable levels (see FEIS section 2.1.6). The Selected Alternative is based on achieving specific wildlife habitat objectives and also having a harvest program that has scenic, social, and resource impacts described in the FEIS. Based on available information, the Forest Service considers this a reasonable ceiling for the timber program in the next 10 to 15 years Objectives and outputs will be monitored over the life of the revised Forest Plan, and if projections are substantially off, the ASQ could be adjusted through a revision or an amendment to the revised Forest Plan. See also response to PC 23000-1.
SC 34000-27s	BECAUSE THE NON-CHARGE VOLUMES OF TIMBER IS NOT INCLUDED IN THE ANALYSIS
	Response: Suitable lands are those lands that include timber harvesting as an identified and scheduled management practice. Personal-use firewood and hazard trees removed from campgrounds and other administrative sites are considered "non-chargeable" volume and do not contribute to the ASQ (FSH 2409.13). Only volume harvested from lands suitable for timber

	production can contribute to the ASQ. The non-chargeable timber volume was considered in the effects analysis of the FEIS (Timber section 3.13). Forest Plan analysis was not designed to provide site-specific management prescriptions; rather, it is a programmatic evaluation of the Forest at the landscape scale.
SC 34000-27t	BECAUSE BASED ON THE SUITABLE LAND BASE THE ALLOWABLE SALE QUANTITY IS TOO LOW
SC 34000-27u	BECAUSE THE AVERAGE GROWTH AND YIELD PER ACRE IS TOO LOW
	Response: The concern is that the GMNF is not maximizing timber production. From the 1940s to the 1970s, timber management objectives were to improve growing stock conditions, to promote optimum growth of high-quality sawtimber, and to provide timber for the local economies (1977 GMNF Timber Management Plan). The Forest Service has been very successful in accomplishing these objectives and today GMNF timber is in great demand by the forest products industry (see FEIS Timber section 3.13.1). The Forest Service's timber program operates under the multiple-use mission, which dictates a much broader purpose than commodity values. The revised Forest Plan is outcome based, meaning the desired future conditions, objectives and goals are centered on the Forest's condition after the management actions take place. These outcomes are not necessarily at odds with timber production, but represent a broader purpose than the commodity value alone. The revised Forest Plan is concerned with achieving the desired goals, objectives, and resource conditions in an environmentally acceptable manner. The revised Plan uses an ecological approach to determine harvest volumes. The desired ecological conditions for each alternative were set and the FVS growth and yield model was used to identify the resulting timber volumes. The Forest Service operates under a multiple-use mission, which dictates that the forest be managed for much broader purposes than its commodity values. The revised Forest Plan is outcome-based rather than output-based, meaning that the desired future conditions, objectives, and goals are centered on the Forest's condition after management actions take place. Outcomes will be based on such things as: short- and long-term species composition; age-class distribution; spatial arrangement and patterns; variety of habitat types and conditions; variety of recreation settings; general vigor and health of the forest and ecosystems; and sustainability of ecosystems over time to provide a variety of uses, values, products and services for present and future generations. These outcomes are not necessarily at odds with improved growth and yield, but represent a broader purpose than the commodity values alone. Forest productivity is given consideration within the context of the overall mission of the agency. Elevating increased growth and yield objectives to stand-alone goals would be at odds with an outcome-based plan.
SC 34000-27v	BECAUSE THE WHITE ROCKS NATIONAL RECREATION AREA SHOULD BE CONSIDERED SUITABLE LANDS
	Response: Congress has directed the Forest Service to conduct vegetative management in the White Rocks NRA Management Area only for recreation and wildlife habitat purposes (revised Forest Plan p. 80). Vegetative management can be accomplished by Forest Service crews, contractors, or through small timber sales. All treatments will be narrow, irregular patches of five acres or less. While timber may be harvested in the White Rocks NRA, it

	will not be planned as a regularly scheduled activity. The amount of volume and acres commercially harvested cannot be predicted, but it is expected to be small and would not clearly be considered suitable land (FSH 2409.13). Suitable lands are those lands that include timber harvesting as an identified and scheduled management practice. Timber harvested in the NRA is considered "non-chargeable" volume and does not contribute to the ASQ. Only volume harvested from lands suitable for timber production can contribute to the ASQ. The FEIS Timber section 3.13 discusses which MAs are suitable for timber harvesting.
SC 34000-27w	TO PROVIDE AN ACCELERATED SCHEDULE OF EVEN-AGED REGENERATION
	Response: The Multiple-Use Sustained Yield Act of 1960 requires that timber harvesting be conducted by maintaining a non-declining, even-flow to provide a sustainable flow of timber products. The SPECTRUM model calculated a non-declining, even-flow of 164 MMBF/Decade (16.4 MMBF/Year) for 15 decades (150 years). It is permissible for the Forest Service to select an alternative that departs from the non-declining, even-flow constraint as long as it is consistent with the multiple-use objectives (see NFMA and FSH 2409.14). The rationale for departure normally is to capture mortality anticipated with maturation of short-lived species or forest health related mortality. A departure was considered but rejected from further analysis. Forest Inventory & Assessment (FIA) data and Forest Plan monitoring did not show a forest health and/or mortality issue. The ROD provides rationale for choosing the Selected Alternative over other alternatives. The resulting harvest volumes are a result of managing to meet these vegetative objectives. The revised Forest Plan includes desired conditions and objectives to supply a consistent level of harvest for industry. Appendix D of the revised Forest Plan identifies the percentage of harvesting that is associated with even-aged management that is tied to desired future conditions, including age class objectives. If the Forest Service does not approach the sell volumes identified in the revised Forest Plan, the vegetation resource objectives will not be achieved. Other than the maximum amount of commercial volume that may be harvested during the ten-year planning period (ASQ), no target volumes for amount of harvest are stated. The sell volume is set by the Congress each year through the national budget process and allocated by the agency to each National Forest.
PC 34000-28:	**The Forest Service should limit the permits for commercial non-timber products.**
SC 34000-28a	BECAUSE IT DECREASES THE QUANTITY OF THESE ITEMS AVAILABLE FOR PERSONAL USE
	Response: See response to PC 34000-15.
PC 34000-29:	**The Forest Service should disclose the share of timber that it supplies to mills in the 6 counties containing the GMNF.**
	Response: Twenty-six percent of Vermont's sawtimber is exported to other states and Canada, but the specific information on the share of timber that the GMNF supplies to the six counties is not tracked. The Forest Service sells stumpage to the highest bidder using timber sale contracts that require the trees to be harvested and removed. The Forest Service does not know which industry will utilize the wood harvested or the actual end product manufactured. Establishing controls on the processing of forest products from National Forest timber sales is outside the scope of decisions to be

	made in the Forest planning process. The Research Branch of the Forest Service conducted a national survey in 2002 to determine that amount of timber harvested from private and public ownerships. The survey of timber producers in Vermont determined the following was harvested from either the GMNF or the WMNF: Sawtimber 0.3 million cubic feet (20 million board feet) Veneer 0.1 million cubic feet (10 million board feet) Pulpwood 0.1 million cubic feet (10 million cords) Firewood 0.1 million cubic feet (10 million cords) Total NF 0.6 million cubic feet. The survey did not indicate the final destination of the timber harvested from either national forest.
PC 34000-30:	**The Forest Service should disclose the amount of timber offered for sale, sold, and cut from 1960 to 2004.**
SC 34000-30a	BY USING ONE TERM TO MEASURE TIMBER VOLUME SUCH AS BOARD FEET
	Response: The data has been added to Table 3.13-4 of the FEIS. A total 462.7 million board feet was sold from 1960 to 2004. The annual average was 10.3 MMBF over the 45 year period. The cut volume was approximately the same as the sold volume over the 45 year period. The cut volume varied each year due to logging conditions and fluctuations in the wood product markets. Several log scale systems have been used throughout the United States for buying and selling timber for more than 125 years. Each log scale system estimated the volume of lumber differently, which is confusing at the national scale. In order to have a consistent measurement system, the Bureau of Land Management (BLM), USDA Forest Service, and industry joined on a national level to develop the National Cubic Scaling Rule that was accepted in 1989. Measurements in cubic offer an accurate, consistent measurement that accounts for lumber, the chips, and the sawdust that is produced from logs of all sizes. The Forest Service often uses both the cubic measure and local scale to sell timber. Eventually, all timber will be measured, sold and/or referred to by the National Cubic Scale. 1 CCF = 1.27 cords of pulpwood or 600 board feet of sawtimber.
PC 34000-31:	**The Forest Service should incorporate into the Final EIS the information in the "Timber Supply and Demand Assessment for the Green and White Mountain National Forests' Market Area."**
SC 34000-31a	BECAUSE THE REPORT PROVIDES INFORMATION ON THE VOLUME OF WOOD GROWING VERSUS THE AMOUNT PROCESSED
SC 34000-31b	BECAUSE THE GMNF CONTRIBUTES A VERY SMALL PERCENTAGE OF THE REGIONAL MARKET
	Response: While the GMNF has the capacity to produce more timber, timber output was not a selection criterion for alternatives (see revised Forest Plan Appendix A, Table A-7, Timber Benchmarks). The report states "The National Forests have the potential to contribute significantly, representing 18.37 percent (14.82 percent for the WMNF and 3.6 percent for the GMNF) of the total economically available sawtimber inventory (reserve and steep terrain plots removed) in the market area. These forests contribute 16.43 percent of the pulpwood (13.57 percent for the WMNF, 2.8 percent of the GMNF). About 82 percent of the National Forests' timber inventory is economical to harvest under current market conditions."

	"Under current market conditions, estimated annual demand represents 1.56 percent of the economically available timber supply from all ownerships in the market area and 49.9 percent of the net annual growth. Ignoring any changes in timber inventories due to growth or mortality, the estimated economically available stock of timber in the market area could sustain current annual consumption for nearly 64 years." The Forest Service has not offered timber sales at a level close to the Allowable Sales Quantity (ASQ). Much of that timber has been sold to local mills. The GMNF timber processed by the local mills is important to those mills that purchase the timber, especially considering the quality of GMNF timber. The public has made substantial investments in converting poor-quality timber stands, use of thinning to promote high-quality trees within stands and allowing stands to grow longer. The result is quality timber that is now yielding returns to years of investment. "When the timber resources in the market area are segmented by quality, about 14 percent (3.9 billion cubic feet) of the sawtimber inventory was classified as high-quality plots, 21 percent (5.9 billion cubic feet) on average quality plots, and 65 percent (18.1 billion cubic feet) on low quality plots. Fifty-seven percent of the high-quality plots are on Non-Industrial Private Forestland (NIPF). National Forest lands account for about 26 percent of the high of the high-quality plots, while forest industry, corporations, and other public timberlands account for 17 percent of the high-quality plots."

Mining and Mineral Exploration (36000)

PC 36000-1:	**The Forest Service should discourage extraction of subsurface minerals and fuels on the GMNF.**
SC 36000-1a	BECAUSE THE GMNF IS SMALL
SC 36000-1b	BECAUSE OTHER PRIVATE AND PUBLIC LANDS ARE MORE SUITED FOR THIS USE
	Response: Currently there is no extraction of fuels on the GMNF, other than permits granted to individuals to take dead and down trees for wood burning. There is also limited extraction of sand and gravel from the Forest. The DEIS states that there are no known large deposits of sand and gravel on the Forest, and the sand and gravel industry is not a major presence on the Forest (p. 3-332). The DEIS also states that "Large scale commercial extraction is not foreseen as occurring on the Forest in the near future" (DEIS p. 3-330). Current uses are primarily for Forest Service use (maintaining roads on the Forest) and limited Town use.
PC 36000-2:	**The Forest Service should clarify that exercising private mineral rights on Forest Service land is subject to State and local laws**
	Response: For any mineral rights that are privately owned, it is the role of the private individual to abide by State and local laws; in no way is an individual exempt from these laws just because they own mineral rights on National Forest System land.

Other Activities: Non-Recreation Special Uses, Administrative Facilities (37000)

PC 37000-1:	**The Forest Service should incorporate "green building" strategies and goals into the Forest Plan's Standards and Guidelines.**
SC 37000-1a	TO BE CONSISTENT WITH THE LEADERSHIP ENERGY AND ENVIRONMENT DESIGN (LEED)

SC 37000-1b	TO CONSERVE ENERGY AND USE RECYCLED MATERIALS
	Response: Forest Service budget direction for Fiscal Year 2006 requires the application of Leadership in Energy and Environment Design (LEED) principles. For this reason, and because energy conservation technology and principles continue to evolve, the current LEED principles are not included in the revised Forest Plan Forest-wide standards and guidelines.
PC 37000-2:	**The Forest Service should require bonding of wind energy developments to pay for removal of the installation.**
	Response: This is a project-level issue and is outside the scope of the Forest Plan revision process. Consideration for types and levels of bonding for special use activities are guided by an evaluation of the risks involved. One example would be an estimation of the potential for damage to NFS lands and resources during construction. Another example would be the cost to restore the site to as near a natural condition as possible in the event of the failure or abandonment of the use while considering the possibility that another viable entity may apply to take over the project.
PC 37000-3:	**The Forest Service should undertake a comprehensive planning process to determine which sites on the GMNF are suitable for wind development.**
SC 37000-3a	BECAUSE WIND AND OTHER CLEAN RENEWABLE ENERGY SOURCES SHOULD BE DEVELOPED
SC 37000-3b	BECAUSE OF THE ADVERSE IMPACTS OF GLOBAL WARMING, POWER-RELATED AIR POLLUTION AND ACID RAIN
SC 37000-3c	WITH A WIDE RANGE OF STAKEHOLDERS
SC 37000-3d	TO DETERMINE SUITABILITY AND DESIRABILITY BASED ON REMOTENESS AND LEVEL OF CONSTRUCTION REQUIRED
	Response: Development of the revised Forest Plan used studies showing where viable locations for wind energy facilities exist (DEIS p. 3-282). The revised Forest Plan supplies strategic and programmatic direction for non-recreation Special Use opportunities, including wind power development. Suitability and desirability are further defined by management area direction. Site-specific environmental analysis precedes any decision to approve a proposed wind energy facility. These site-specific analyses would include public involvement. The National Energy Policy (Executive Order 13212) directs federal agencies to make agency land and energy resources available and to expedite permits and other federal actions necessary for energy related project approvals on a national basis.
PC 37000-4:	**The Forest Service should defer wind energy siting decisions until a statewide wind energy plan is developed.**
SC 37000-4a	TO PUT WIND ENERGY DECISIONS ON PUBLIC LAND INTO A LARGER CONTEXT
SC 37000-4b	SO THAT WIND PROPOSALS ON THE GMNF ARE CONTINGENT UPON APPROVAL BY THE PUBLIC SERVICE BOARD
SC 37000-4c	TO COMPLY WITH STATEWIDE DIRECTION FOR WIND DEVELOPMENT BY AMENDING THE FOREST PLAN
SC 37000-4d	TO USE NEARBY PRIVATE LANDS INSTEAD OF PUBLIC LAND
	Response: See response to PC 37000-3. For Federal lands, the larger context has been set at the national level by the National Energy Policy (Executive Order 13212). Given that direction, regional issues such as state-wide direction should be considered in the site-specific analysis of a proposed wind energy facility. In addition, Non-Recreation Special Use Forest-wide standards and guidelines state that special use applications shall be consistent with applicable federal, State, and local laws (revised Forest Plan p. 44). Guidelines further

	direct the Forest Service to issue special use authorizations only when there are no reasonable private land alternatives or when the use has a clear and significant public benefit (revised Forest Plan p. 44). Forest Service policy in FSM 2703.2 states in part: "Deny proposals for uses of National Forest System land which can reasonably be accommodated on non-National Forest System lands" (DEIS p. 3-283).
PC 37000-5:	**The Forest Service should not allow communication towers, alternative energy, or wind energy development on the GMNF.**
SC 37000-5a	TO PROTECT HABITATS
SC 37000-5b	IN THE LAMB BROOK AREA
SC 37000-5c	TO PROTECT SCENIC VISTAS AND RIDGE TOPS AND TO PREVENT DISTURBING THE NIGHT SKY WITH LIGHTS
SC 37000-5d	BECAUSE WIND DEVELOPMENT WOULD FRAGMENT THE LANDSCAPE
SC 37000-5e	BECAUSE THE AREA WOULD BE EXCLUDED FROM WILDERNESS
SC 37000-5f	IN INVENTORIED ROADLESS AREAS
	Response: The Telecommunications Act of February 8, 1996 (Pub. L. 104-104; 47 USC 332), Section 704(c) requires federal agencies to facilitate the development and placement of telecommunications equipment on buildings and land they manage. The National Energy Policy (Executive Order 13212) directs federal agencies to make agency land and energy resources available and to expedite permits and other federal actions necessary for energy related project approvals on a national basis. Wind towers are only considered in a few select management areas to minimize effects (DEIS p. 3-285). Further, these projects must be consistent with the Plan's goals and objectives. Forest Service direction (currently found in FSH 2709.11, 11 & 12) requires any new proposal for use or occupancy of National Forest System lands to go through a two-stage screening process. If such a proposal were accepted as an application, the public would be given an opportunity to identify their issues and concerns, and the appropriate National Environmental Policy Act environmental analysis would be conducted before the issuing of a permit was considered. The analysis would study potential impacts on resources, including, but not limited to, public safety, noise, visuals, and wildlife (36 CFR 251.54 (e)). Revised Forest Plan Non-Recreation Special Use guidelines state that permits should be denied when it is determined that undesirable social and or resource impacts occur (p. 45).
SC 37000-5g	BECAUSE THEY DEGRADE PUBLIC LAND TO BRING PROFIT TO A FEW
	Response: A purpose of site-specific analysis of any proposed wind energy facility is to determine whether or not it can be done without significant adverse environmental effects that cannot be mitigated. Potential environmental effects are identified, as are measures to minimize those that are negative. A proposal that cannot adequately protect Forest land and resources will not be approved. Further, the authorizations used to permit any use of NFS land allow the authorized Forest Service officer to take action in the event damage to NFS lands and resources does occur. Finally, when the project ends, the permittee is required to restore the site to a natural appearance and condition. Successful applicants authorized to develop, operate, and maintain a wind power project on NFS lands may be any entity that successfully provides proof they are capable of bearing the technical and economic risks inherent in a project of such scope. They may be for-profit companies, government agencies, or non-profit organizations. They would pay a fee based on the market value of their project. Forest-wide standards and guidelines in the revised Forest Plan direct the Forest Service to issue special use authorizations only when there are no

	reasonable private land alternatives or when the use has a clear and significant public benefit (pp. 44).
PC 37000-6:	**The Forest Service should provide more analysis on renewable energy in the Final EIS.**
SC 37000-6a	ON STATE AND REGIONAL ENERGY NEEDS
SC 37000-6b	ON FEDERAL POLICY
SC 37000-6c	ON THE ROLE OF RENEWABLE ENERGY IN MITIGATING THE IMPACTS OF AIR POLLUTION AND CLIMATE CHANGE
SC 37000-6d	ON THE ROLE OF RENEWABLE ENERGY IN MEETING GMNF MANAGEMENT GOALS AND OBJECTIVES
	Response: See the responses to PC 37000-3 and PC 37000-5.
PC 37000-7:	**The Forest Service should conduct wildlife baseline studies at any proposed wind energy site before and after construction.**
SC 37000-7a	FOR AT LEAST 3 YEARS
SC 37000-7b	TO BETTER UNDERSTAND AND AVOID ADVERSE IMPACTS ON WILDLIFE
SC 37000-7c	TO MITIGATE ADVERSE IMPACTS
SC 37000-7d	TO MONITOR AND RECORD IMPACTS
SC 37000-7e	BY ASSESSING IMPACT FEES ON WIND DEVELOPERS
SC 37000-7f	TO ADVANCE THE UNDERSTANDING OF THE BENEFITS AND IMPACTS OF WIND POWER
	Response: The revised Forest Plan supplies strategic and programmatic direction for non-recreation Special Use opportunities, including wind power development. All applications for special use permits to site wind towers on the GMNF will need to consider the potential effects of structures and their operations on wildlife. Site-specific environmental analysis precedes any decision to approve a proposed wind energy site. It would include studies of fauna, flora, visual impacts, soils, and water. The identification of adverse effects from the project results in its denial or the formulation of mitigation actions. Revised Forest Plan monitoring and evaluation requirements include an evaluation of the extent to which Forest Service management activities contribute toward restoration and maintenance of habitat for native and desirable non-native species.
PC 37000-8:	**The Forest Service should allow wind energy development in the Alpine Ski Area and Alpine Ski Area Expansion Management Areas.**
SC 37000-8a	BECAUSE THEY ARE INTENSELY DEVELOPED
	Response: To the extent that wind energy developments can be made compatible with the purpose and Desired Future Condition for Alpine Ski Area and Alpine Ski Area Expansion management areas are set aside, such developments can be considered in those areas and in three other management areas: Diverse Forest Use, Remote Wildlife Habitat, and Moosalamoo Recreation and Education Area. The Forest Service erroneously listed Alpine Ski Area Expansion as an area that allows wind energy development (DEIS p. 3-28 and Table 3.14-2). The Alpine Ski Area Expansion Management Area Recreation Special Use standard reads: “Any special use facility development shall be prohibited until an area is assigned to a different management area” (revised Forest Plan pp. 104). This error has been corrected in the FEIS.
SC 37000-8b	BECAUSE IT WOULD HELP OFFSET THE ELECTRICAL CONSUMPTION OF THE SKI AREAS
	Response: Electricity produced by a wind energy development on NFS lands would be marketed at the discretion of the holder of the authorization. When

	power is produced on the same lands where it is being used, this statement is correct.
PC 37000-9:	**The Forest Service should allow towns to develop, own, and maintain wind farms on the GMNF.**
	Response: Any entity may apply for authorization to develop, own, and maintain wind power sites on the GMNF. They must provide reasonable proof that they have both the technical and economic capability to build, operate, and maintain the facility (revised Forest Plan p. 44). That proof will be examined and verified. Further, the decision to approve proposed wind power sites must result from a site-specific environmental assessment.
SC 37000-9a	TO DELIVER AT COST ENERGY AND CREATE JOBS
	Response: Delivery of energy generated on the GMNF "at cost" must include the fee for the use of NFS land. The fee is determined by an analysis of fees charged for similar uses in the free market. Further, there may be cases where several entities are interested in a site. If the site is approved for a wind development project, a competitive bid process may be used to select the operator. Creation of jobs as a benefit of a proposal would be analyzed on a site-specific project basis.

Transportation System Management (40000)

PC 40000-1:	**The Forest Service should address in the Final EIS the detailed cumulative impacts of transportation management.**
	Response: The initial Roads Analysis Process (RAP) completed in January 2003 (USDA 2003a, see DEIS Appendix F) provides significant information on the major components of the roadway system which is adequate to inform the broader scale of the revised Forest Plan and FEIS. This is consistent with national and regional Forest Service guidance, agency rules and policies, and FSM direction. The revised Forest Plan has very specific Management Area direction regarding road construction. The cumulative effects associated with the roads system is based on this information and is commensurate with the level of detailed required for a programmatic document. The DEIS analyzes the cumulative effects of the road system for each alternative (p. 3-339). The Forest Service will be planning and performing travel analyses for specific project areas according to the travel management policy (36 CFR Part 212) and FSM 7700. Decisions regarding specific roads and trails will be made using this "Travel Analysis" process, as well as site-specific NEPA analysis and public involvement. Roads cannot be constructed or decommissioned without site-specific NEPA, travel analysis and public involvement. An objective has been added under Goal 14 of the revised Forest Plan to complete comprehensive transportation planning for 100 percent of the Forest within the planning period (p. 16).
PC 40000-2:	**The Forest Service should gate skid trails between Lye Brook Wilderness and Kelly Stand Road to preclude inappropriate use and restore the area to its natural state.**
	Response: The revised Forest Plan is a programmatic document that does not address site-specific implementation such as skid trail and gate closure decisions. If there is significant inappropriate use occurring on these unspecified skid trails, the Forest Service would likely initiate a project-level travel and environmental analysis to determine the future transportation needs in the area, as well as any environmental consequences due to their existence.

	If the result of these analyses is that these skid trails are no longer needed for Forest management or other appropriate uses, they would be decommissioned. If they are needed for future Forest Service management access they would likely not be gated, but instead physically closed by alteration of a small portion of the roadbed. The remainder of the trail template would be left to naturally re-vegetate rather than be destroyed, in order to allow for future potential use.
PC 40000-3	**The Forest Service should help the Nature Conservancy obtain and maintain easements over private lands to access State forests and wild places.**
	Response: While the Forest Service is open to working with any organized entity on Forest issues, actively helping others obtain and maintain easements over private lands is not within the Forest Service's authority.
PC 40000-4	**The Forest Service should account for Ancient Roads on GMNF lands to strategically meet the desired ROS and manage the Forest.**
	Response: The Forest Service keeps records available for public research regarding land purchases and any known rights-of-way, easements, or temporary licenses related to each. Accounting for ancient roads that may or may not occur on National Forest System land requires detailed record research of not only GMNF records, but also that of town and county governments. This comment is outside of the scope of the Forest Plan revision process, and cannot be specifically addressed as part of the revised Forest Plan.
PC 40000-5	**The Forest Service should adequately address critical issues raised by the Roads Analysis Process and provide specific management direction regarding the GMNF transportation system in the Final Revised Plan and Final EIS.**
	Response: The revised Forest Plan is a programmatic document that is not meant to address site-specific issues raised in the Roads Analysis Process (RAP) completed in 2003 (DEIS Appendix F). These issues will be addressed through other analyses outside of the Forest planning process. An objective has been added under Goal 14 of the Final Plan to complete comprehensive transportation planning for 100 percent of the Forest within the planning period (p. 16). The Forest Service is currently addressing issues raised by the RAP, but does not believe that specific, detailed management direction on all National Forest System roads is necessary to inform the broader scope of the Forest planning process. This is consistent with national and regional Forest Service guidance, agency rules and policies, and FSM direction.
SC 40000-5a	TO PRIORITIZE ROADS THAT CAN REMAIN OPEN AND BE MAINTAINED WITHIN BUDGET CONSTRAINTS
SC 40000-5e	TO ADEQUATELY EVALUATE DIFFERING ROAD SYSTEM IMPACTS FOR ROADS OF ALL TYPES ON THE GMNF
	Response: The Forest Service is currently planning and performing travel analyses for specific project areas. Decisions regarding specific roads and trails will be made using this "Travel Analysis" process, as well as site-specific NEPA analysis and public involvement. The Forest Service is also currently undertaking a Forest-wide Roads Management Objectives (RMO) analysis to examine current maintenance objectives and budget limitations.
SC 40000-5b	TO PREVENT ILLEGAL SUMMER ORV USE AND OTHER ILLEGAL ACTIVITIES
	Response: The revised Forest Plan is a programmatic document that does not address site-specific issues. The Forest Service works with the public to make

	sure that visitors abide by all laws and Forest rules. Many Forest Service employees, including law enforcement officers, spend significant amounts of time in the field talking with visitors to increase their understanding of what is allowed and why, and to help prevent illegal activities. The Forest Service has a law enforcement program, but many departments assist in patrol work.
SC 40000-5c	TO REDUCE IMPACTS TO SOIL, WATER, AND WETLAND RESOURCES
	Response: The Forest Service's commitment to protecting soil, water, and wetland resource quality is highlighted in goals and objectives 3 and 4, Chapter 2 of the revised Forest Plan, as well as the Forest-wide standards and guidelines for Soil, Water, and Riparian Area Protection and Restoration (2.3.2) and Transportation (2.3.18). The DEIS describes impacts to soils and water in sections 3.2 and 3.3.
SC 40000-5d	TO PREVENT WILDLIFE AND FISH HABITAT DEGRADATION
	Response: Forest Plan goals and objectives 1, 2, 4, 5, and 7, as well as Forest-wide standards and guidelines concerning Wildlife and Wildlife Habitat (2.3.2, 2.3.7, 2.3.8) and Transportation (2.3.18), have been developed to address these impacts.
PC 40000-6	**The Forest Service should develop a long-term maintenance plan for its primitive roads to ensure continued access to more remote parts of the Forest.**
	Response: The Forest Service is currently undertaking a Forest-wide Roads Management Objectives (RMO) analysis and project level Travel Analyses as recommended in the Forest-wide RAP completed in January 2003 (see Appendix F of the EIS). This process and analysis will help prioritize the list of needs to optimize the use of limited funds. Once completed, the proper maintenance level for each road segment will be determined and assigned, and be consistent with the intent of the final Forest Plan. An objective has been added under Goal 14 of the Final Plan to complete comprehensive transportation planning for 100 percent of the Forest within the planning period (p. 16).
PC 40000-7	**The Forest Service should limit the amount of wheelchair accessible roads and trails to allow more opportunity for wilderness and roadless areas.**
	Response: Please see Table 3.20-1 and the proceeding and succeeding paragraph on page 3-336 of the DEIS for information regarding the existing road system and wheelchair accessible roads (mainly Level 3, 4, and 5 roads), as well as DEIS section 3.10 regarding trails data. As stated in the DEIS (Section 3.20.2), it is expected that changes in the transportation system would be relatively small. This is supported by recent history of the GMNF. The major focus of transportation management will be expended on maintenance and minor improvements. See also response to PC 51500-3 and PC 51500-11.
PC 40000-8	**The Forest Service should allow for an increase in motorized access to the GMNF in the future to meet the needs of an aging population.**
	Response: The future transportation system will be guided by the revised Forest Plan management area direction, project specific NEPA review, and applicable Forest standards and guidelines. This process allows for the potential of increases in motorized access. FEIS Table 3.20-2 shows the acres in management areas that allow road development.
PC 40000-9	**The Forest Service should work closely with the Vermont Agency of Natural Resources and Fish and Wildlife Department to manage wildlife road crossings.**

	Response: The 1960 Sikes Act, as amended, as well as FSM 2624.1, require the coordination of management and improvement of wildlife, fish, and endangered and threatened species habitat through implementation of Forest Plans. The Forest Service has also added a Forest-wide guideline in the revised Forest Plan under section 2.3.7 as follows: "Wildlife management should be coordinated with the Vermont Fish and Wildlife Department, the US Fish and Wildlife Service, and other agencies or organizations as necessary" (p. 27). Consideration of road crossings would be addressed at the site-specific project level.
PC 40000-10	**The Forest Service should identify in the Final Revised Plan and Final EIS the differences in the minimum road system necessary to implement each of the different alternatives.**
SC 40000-10a	TO ADEQUATELY ASSESS THE DIFFERENCES IN RESOURCE EFFECTS
SC 40000-10b	TO DISCLOSE THE FINANCIAL AND ECOLOGICAL COSTS OF BUILDING AND MAINTAINING THE ROAD SYSTEM APPROPRIATE TO EACH ALTERNATIVE
SC 40000-10c	TO UNDERSTAND THE IMPLICATIONS OF NOT RECEIVING SUFFICIENT FUNDING TO MAINTAIN THE ROAD SYSTEM
SC 40000-10d	TO MEET THE MINIMUM REQUIREMENTS OF THE APPLICABLE REGULATIONS
	Response: As required by 36 CFR 212, the Forest-wide Roads Analysis Process evaluated the minimum system necessary for FS system class 3, 4, and 5 roads. The minimum system For class 1 and 2 roads is determined at the project-level applying Forest Plan and other agency direction using the appropriate level of environmental and travel analysis. The initial Roads Analysis Process (RAP) completed in January 2003 (USDA 2003a, see EIS Appendix F) provides significant information on the major components of the roadway system, which is adequate to inform the broader scale of the revised Forest Plan and FEIS. This is consistent with national and regional Forest Service guidance, agency rules and policies, and FSM direction. The revised Forest Plan has very specific Management Area direction under each of the alternatives regarding road construction. Information from the 2003 RAP and data from lower maintenance level roads were used in the development of management alternatives. Road mileage inconsistent with Wilderness designation for each alternative is identified in DEIS Table 3.10-17 (p. 3-213). If designated, the roads in these Wilderness Study Areas would be decommissioned. Comprehensive transportation analysis will identify a minimum road system necessary to implement the Selected Alternative (Goal 14, revised Forest Plan p. 16). Management area allocations allow different amounts of potential road development and maintenance (DEIS section 3.20.2). Potential resource impacts from road management by alternative are addressed in other sections of the EIS (DEIS p. 3-333). Also see response to SC 40000-5a.
PC 40000-11:	**The Forest Service should complete the second phase of the Roads Analysis Process as part of the Forest Plan revision process.**
	Response: The Forest Service believes that the initial Roads Analysis Process (RAP) completed in January 2003 (USDA 2003a, see DEIS Appendix F) provides significant information on the major components of the roadway system which is adequate to inform the broader scale of the revised Forest Plan and FEIS. The Forest Service will be planning and performing travel

	analyses for specific project areas according to the new travel management policy (36 CFR Part 212) and FSM 7700 which correspond closely with the old Roads Analysis Process. Decisions regarding specific roads and trails will be made using this "Travel Analysis" process, as well as site-specific NEPA analysis and public involvement. The Forest recognizes the importance of transportation planning and has added an objective under Goal 14 of the revised Forest Plan to complete comprehensive transportation planning for 100 percent of the Forest within the planning period (p. 16). Also see responses to PC 40000-1 and 40000-10d.

Roads Management General (41000)

PC 41000-1:	**The Forest Service should prohibit or strictly limit new road construction.**
SC 41000-1a	TO REDUCE IMPACTS TO THE ECOSYSTEM
SC 41000-1b	BECAUSE IT IS NOT A WISE USE OF PUBLIC FUNDS
SC 41000-1c	BECAUSE ACCESS IS ALREADY SUFFICIENT
SC 41000-1d	TO MAXIMIZE POTENTIAL WILDERNESS DESIGNATION
SC 41000-1e	TO REDUCE IMPACTS FROM ILLEGAL MOTORIZED VEHICLES
	Response: The current transportation policy and rules for national forests require each Forest to maintain the minimum road transportation system necessary to provide access to the Forest for its management and for recreation and rural access, and to use a science-based roads analysis process to determine the minimum system (DEIS p. 3-333 and Appendix F). The policy also requires the Forest Service to decommission unneeded roads, to coordinate road management with adjacent public road agencies, and to maintain a sustainable flow of goods and services while not compromising the health of the land and water. Revised Forest Plan direction has incorporated the policy and includes direction for managing the road system to minimize introduction of exotic species, to protect threatened and endangered species, and to minimize impacts to fish, wildlife and other ecosystem values through Forest-wide standards and guidelines (revised Forest Plan Chapter 2). Project-level analysis will integrate all revised Forest Plan and agency direction when roads are evaluated for public motor use, when roads are planned for resource management, and when new trails are proposed. New road construction on National Forest System lands has decreased in the past 10 to 15 years due to the amount of adequate road access already available to Forest users (USDA 2003a). Also, management area (MA) designations limit the amount of road building that could be done overall.
PC 41000-2:	**The Forest Service should include in the Final EIS the direct linkages among effects of recommending wilderness study areas, miles of road construction and maintenance needed, and the cost of maintaining alternative road systems.**
	Response: See response to PC 40000-10. There has been and likely will continue to be no new road building and little road maintenance necessary by the Forest Service in areas recommended as Wilderness Study Areas. Roads in Wilderness Study Areas will be closed to general public access if the Congress designates them as Wilderness.
PC 41000-3:	**The Forest Service should include and consider in the Final Revised Plan and Final EIS the scientific literature that discusses the negative effects associated with roads and roads construction.**
	Response: The Forest Service works to maintain the minimum road

	transportation system necessary to provide access to the Forest for its management, for recreation and rural access, and will continue use of a science-based roads analysis process, on a project or watershed scale, to further refine this minimum system. The Forest Service will work to decommission unneeded roads through the NEPA and public involvement process, coordinate road management with adjacent public road agencies, and maintain a sustainable flow of goods and services while not compromising the health of the land and water. Potential negative impacts of road construction and maintenance were considered and included throughout Chapter 3 of the DEIS analysis (p. 3-333).
SC 41000-3a	TO DECREASE ANIMAL MORTALITY FROM COLLISIONS WITH VEHICLES
	Response: Forest Plan goals and objectives 1, 2, 4, and 7, as well as Forest-wide standards and guidelines concerning Wildlife and wildlife habitat (2.3.2, 2.3.7, 2.3.8) and Transportation (2.3.18), have been developed to address wildlife and wildlife habitat protection. In addition, management-specific standards and guidelines have been developed that address the variety of uses and resources in each management area (revised Forest Plan, Chapter 3). The revised Forest Plan does not include provisions for increasing the number of Forest Service roads on the GMNF, or increasing either the volume or speed of traffic on existing Forest Service roads. Therefore, the revised Forest Plan is not expected to increase impacts to wildlife related to roads or road building.
SC 41000-3b	TO REDUCE IMPACTS TO WILDLIFE POPULATION VIABILITY
	Response: See response to SC 41000-3a. The Species Viability Evaluation (SVE) panels convened by the Forest Service considered limiting factors and threats, as well as information gaps, when assessing the current and projected future status of threatened and endangered species, Regional Forester sensitive species, and other species of potential viability concern. Potential threats and limiting factors included road and road building effects for species and situations for which they are relevant. These issues are included where appropriate in Chapter 3.9 (Species of Potential Viability Concern) and in the Biological Evaluation (Appendix E) of the FEIS. Also see response to SC 32000-1b.
SC 41000-3c	TO REDUCE ILLEGAL HUNTING AND TRAPPING
	Response: Hunting is regulated by the Vermont Department of Fish and Game (see also response to SC 40000-5b). The revised Forest Plan does not include provisions for increasing the number of Forest Service roads on the GMNF, or increasing the volume of traffic on existing Forest Service roads. Therefore, the revised Forest Plan is not expected to increase incidence of illegal hunting and trapping as a consequence of roads or road building.
SC 41000-3d	TO REDUCE IMPACTS TO THE PHYSICAL ENVIRONMENT SUCH AS THE SOIL, WATER, VEGETATION, AND AIR RESOURCES
SC 41000-3e	TO PREVENT THE SPREAD OF EXOTIC SPECIES
	Response: Goals and objectives 2, 3, 4, and 5 of the revised Forest Plan, as well as Forest-wide standards and guidelines for Soil, Water, Air, and Riparian Area Protection and Restoration (2.3.2), Forest Health and Disturbance Processes (2.3.9), and Transportation (2.3.18) highlight the Forest Service's commitment to reducing the impacts to the physical environment.
SC 41000-3f	TO REDUCE NOISE IMPACTS TO WILDERNESS SETTINGS
	Response: Management areas adjacent to Wilderness are not to be considered buffer zones for the Wilderness; however, activities that take place

	on lands adjacent to Wilderness can nevertheless impact wilderness character. The configuration of management areas adjacent to Wilderness and their compatibility with wilderness values varies across the alternatives and is analyzed in Section 3.12 of the DEIS (Indicator 2, p. 3-225-226). All of the alternatives offer some degree of Wilderness protection related to the configuration and compatibility of adjacent management areas.
SC 41000-3g	TO REDUCE IMPACTS TO NATIVE BIODIVERSITY
	Response: See response to SC 41000-3a and SC 41000-3d.
PC 41000-4:	**The Forest Service should include in the revised Forest Plan that new road construction for public access will not be encouraged.**
	Response: See response to PC 41000-1.
PC 41000-5:	**The Forest Service should require innovative and traditional best management practices in the design and construction, reconstruction, or maintenance of roads and parking lots to minimize soil erosion and impacts to water quality.**
	Response: The Forest Service has and will continue to use best management practices contained within its Manuals and Handbooks for all road and parking lot construction, reconstruction, and maintenance on the Forest and in accordance with any additional State and federal requirements to maintain water quality. The Forest Service will also use innovative designs, materials, and practices when needed to meet the project objectives. Forest-wide standards and guidelines demonstrate how the Forest Service is continuing to work with State and local jurisdictions to accomplish improved water quality on roads under State and local management within the Forest (p. 42). Many of the issues with roads and water quality on the forest come from these local and State jurisdiction roads because of their higher use and maintenance needs year-round. Most all Forest Service jurisdiction roads are closed during the winter and receive relatively low maintenance and no sanding or salting in the winter.
PC 41000-6:	**The Forest Service should maintain close relationships with towns when GMNF activities affect town roads and trails.**
	Response: See response to PC 41000-5.
PC 41000-7:	**The Forest Service should re-open closed roads in cases where there is public demand for access.**
	Response: The revised Forest Plan is a programmatic document that does not address site-specific implementation decisions. Re-opening of closed roads due to public demand for access can be considered on a case–by-case basis and will require Management Area direction review, travel analysis, and NEPA review that allows the re-opening prior to implementation. This is consistent with revised Forest Plan guidance.
PC 41000-8:	**The Forest Service should include in the Final EIS a benchmark analysis describing the miles of roads that could be maintained adequately using the average annual funding it has received during the past 15 years.**
	Response: Information regarding miles of road maintained to standard and the miles of road on the GMNF system is tracked annually and reported to the Regional Forest Service office. Of the approximately 251 miles of Forest Service jurisdiction road, the Forest Service is able to do physical maintenance on approximately 90 to100 miles each year. With current funding, the Forest Service is able to maintain approximately 60 to 70 percent of its roads at their current objective maintenance level. The initial Roads Analysis Process (RAP) completed in January 2003 (USDA 2003a, see DEIS Appendix F) provides significant information on the major components of the roadway system which

	is adequate to inform the broader scale of the proposed Forest Plan and EIS. This is consistent with national and regional Forest Service guidance, agency rules and policies, and FSM direction. The Forest Service cannot compare the desired future conditions of the proposed Forest Plan alternatives, and how those conditions would be achieved without comparing the alternatives as though each alternative was fully funded. If the Forest Service compared alternatives at a variety of percentages of full funding, the impacts of a portion of the desired future condition would be disclosed. See also response to PC 40000-5, and SC 40000-5a and 5e.
PC 41000-9:	**The Forest Service should identify un-needed roads that should be closed or decommissioned in the Final Revised Plan.**
SC 41000-9a	TO REDUCE SOIL COMPACTION AND EROSION
SC 41000-9b	TO REDUCE IMPACTS TO WATER QUALITY AND QUANTITY
SC 41000-9c	TO REDUCE IMPACTS TO WILDLIFE AND NATURAL COMMUNITIES
SC 41000-9d	TO REDUCE IMPACTS TO WETLANDS AND RIPARIAN AREAS
	Response: The Forest Service is currently planning and performing travel analyses for specific project areas. Decisions regarding specific roads and trails will be made using this “Travel Analysis” process, as well as site-specific NEPA analysis and public involvement. An objective has been added under Goal 14 of the revised Forest Plan (p. 16) to complete comprehensive transportation planning for 100 percent of the Forest within the planning period. In the interim, any roads or trails that are causing environmental problems and are unneeded will be stabilized and closed or decommissioned after the site-specific environmental analysis and public involvement. See also response to SC 40000-10d.
PC 41000-10:	**The Forest Service should maintain roads in Roaded Natural areas at their current levels. Adding a significant amount of roads in these areas will cause sections of the GMNF to become over developed while decreasing the amount will severely limit public access.**
	Response: The revised Forest Plan is a programmatic document that does not address site-specific implementation decisions such as road decommissioning or construction. Any site-specific decision regarding road decommissioning or construction would follow management area direction for Diverse Forest Use and Mooslamoo Recreation and Education MAs. Please see Tables 3.10-9, and 3.10-10of the FEIS for information regarding Roaded Natural percentages relative to the Selected Alternative.
PC 41000-11:	**The Forest Service should not discontinue a road without a sound environmental reason.**
	Response: Roads are typically discontinued (decommissioned) for sound environmental and transportation management reasons. Decommissioning roads would occur only after travel analysis, site-specific environmental analyses, and public involvement (DEIS p. 3-336).
PC 41000-12:	**The Forest Service should construct more roads to access more stands of valuable timber.**
	Response: Please see DEIS Appendix F (Roads Analysis Process (RAP) report). This document addresses the fundamental needs of the Forest Transportation system. It found that in general, the transportation system on the GMNF is currently meeting the strategic intent of the guidance in the 1987 Forest Plan. Section 3.20 of the DEIS explains this is expected to continue for the revised Forest Plan. It is expected that new temporary roads will be

	needed for Forest Management, but a significant increase in building of permanent system roads is not anticipated (revised Forest Plan Appendix D, Table D-5).

Recreation Management, General (50000)

PC 50000-1:	**The Forest Service should provide a more equal balance between acreage designated as recreation areas and acreage designated as wilderness areas.**
	Response: Lands managed for recreation use on the Forest are not limited to those areas with special recreation designations, such as the White Rocks National Recreation Area (NRA) or the Moosalamoo Recreation and Education Area. Designations such as NRAs are congressionally directed acknowledgements of an area's unique recreation potential. This in no way lessens the recreation potential of non-congressionally designated lands. For those interested in winter motorized recreation on the Forest, for example, 54 percent of the Forest is open for potential snowmobile use. For a full discussion of recreation opportunities on the GMNF, see FEIS Chapter 3.10.
PC 50000-2:	**The Forest Service should place higher priority on recreation opportunities than on timber harvesting to align with the higher economic contribution provided by recreation.**
	Response: Recreation objectives contained in Chapter 2 of the revised Forest Plan provide for a full range of recreation activities and settings across the Forest. All management areas provide opportunities for various recreation activities in a variety of settings with particular emphasis developed to meet the desired future conditions for each management area. Each management area provides for a different mix of recreation activities and a different balance of resource use, depending on the desired future condition for the management area. For analysis of timber harvest activities, see Timber section 3.13 of the FEIS.

Recreation Opportunity Spectrum (ROS) (51000)

PC 51000-1:	**The Forest Service should maintain Rural ROS areas at the current level.**
	Response: This comment is asking for the Forest Service to not add facilities such as visitors' centers, picnic areas, and campgrounds on the GMNF. The Forest Service feels existing developed facilities will have ample capacity to meet future visitor needs (DEIS p. 3-209). Should that need change, 39 percent of the Forest would be available for consideration of future construction of developed recreation sites. It should be noted, however, that this 39 percent includes management areas such as Diverse Forest Use and the White Rocks National Recreation Area, and is not limited to areas with a desired Recreation Opportunity Spectrum setting of Rural (FEIS, Section 3.10.2). See also response to PC 52000-1.
PC 51000-2:	**The Forest Service should maintain Primitive ROS areas at the current level.**
	Response: The mix of Desired ROS classes (see FEIS Table 3.10-10) is based on the inventory of recreation characteristics, management area desired future conditions, and the overall objectives for the recreation resource. The stated objective for recreation is to provide a range of opportunities that complement those provided off National Forest System land, (where nearly all

	opportunities and settings are rural in character). Due to the lack of opportunities for primitive and unconfined types of recreation both on and off the Forest, all alternatives considered maintaining or increasing acreage assigned to the Primitive ROS class. Acreage in the Primitive ROS class increases from 15 percent (in Alternative A) to 22 percent in the Selected Alternative (FEIS Table 3.10-10).
PC 51000-3:	**The Forest Service should maintain Semi-primitive Non-motorized ROS areas at the current level.**
	Response: The mix of Desired ROS classes (see FEIS Table 3.10-10) is based on the inventory of recreation characteristics, management area desired future conditions, and the overall objectives for the recreation resource. The stated objective for recreation is to provide a range of opportunities that complement those provided off National Forest System land (where nearly all opportunities and settings are rural in character). Due to the lack of opportunities for semi-primitive recreation opportunities and settings outside the Forest, all action alternatives considered, except Alternative C, increase the acreage assigned to the Semi-primitive Non-motorized ROS Class. Semi-primitive Non-motorized ROS areas increase from 13 percent (in Alternative A) to 21 percent in the Selected Alternative (FEIS Table 3.10-10).
PC 51000-4:	**The Forest Service should increase the amount of acreage available for Semi-primitive Motorized recreation to increase opportunities for on-highway vehicle use.**
	Response: The mix of Desired ROS classes (see FEIS Table 3.10-10) is based on the inventory of recreation characteristics, management area desired future conditions, and the overall objectives for the recreation resource. The stated objective for recreation is to provide a range of opportunities that complement those provided off National Forest System land. Due to the relative abundance of opportunities for motorized recreation off-forest all of the action alternatives decrease acreage assigned to the Semi-primitive Motorized ROS Class. Acreage in the Semi-primitive Motorized ROS class decreases from 34 percent in Alternative A to 24 percent in the Selected Alternative (FEIS Table 3.10-10).
PC 51000-5:	**The Forest Service should reduce the amount of acreage available for motorized use, as determined by the ROS**
	Response: The mix of Desired ROS classes (see FEIS Table 3.10-10) is based on the inventory of recreation characteristics, management area desired future conditions, and the overall objectives for the recreation resource. The stated objective for recreation is to provide a range of opportunities that complement those supplied off National Forest System land. Due to the relative abundance of opportunities for motorized recreation off-Forest, Alternatives B, C, D, and E increase the acreage assigned to the non-motorized ROS classes (Semi-primitive Non-motorized and Primitive) and reduce the acreage assigned to motorized ROS classes (Urban, Rural, Roaded Natural and Semi-Primitive Motorized). In the Selected Alternative, 58 percent of the Forest will be in motorized ROS settings, compared to 72 percent in Alternative A (FEIS Table 3.10-10). See also response to PC 53000-1.
PC 51000-6:	**The Forest Service should increase primitive areas to provide experiences limited on non-National Forest System lands.**
	Response: The mix of Desired ROS classes (see FEIS Table 3.10-10) is based on the inventory of recreation characteristics, management area desired future conditions, and the overall objectives for the recreation resource. The

	stated objective for recreation is to provide a range of opportunities that complement those provided off National Forest System land, (where nearly all opportunities and settings are rural in character). Due to the lack of opportunities for primitive and unconfined types of recreation outside the Forest, all alternatives considered maintain or increase acreage assigned to the Primitive ROS class. In the Selected Alternative, 22 percent of the GMNF is assigned to the Primitive ROS class (FEIS Table 3.10-10).
PC 51000-7:	**The Forest Service should disclose the potential cumulative impacts of ROS designations allowing for motorized vehicle use.**
	Response: The potential effects of existing and potential new motorized trails on the soil, water, and fisheries resources are displayed in Tables 3.2-1 (DEIS Chapter 3, p. 28) and 3.3-1 (DEIS Chapter 3, p. 38) (see Activity - Trail construction and maintenance). Other potential impacts are soil quality, air quality, aquatic and riparian habitat, and water quality. The effects of existing motorized trails were considered in the effects analyses for soil, water, and fisheries in the DEIS Sections 3.2.2 (p. 3-27), 3.3.2 (p. 3-36), and 3.7.2 (p. 3-133). Additional analysis has been added to the FEIS related to impacts of motorized vehicle use on the Forest. The impacts of snowmobiles on air quality is now included in the Air section of the FEIS (FEIS Chapter 3.4) Increases in the number of trails on the Forest require a site-specific environmental analysis. The environmental effects of future trails as well as a consideration of trail locations and lengths would be disclosed in site-specific environmental analyses as proposals are developed. In the DEIS the Forest Service projected the general nature of ORV effects based on past experience with existing motorized trails. This was considered in the DEIS effects analyses. Also see responses to SC 53000-1f and SC 53000-1g.

Recreational Access General (51500)

PC 51500-1:	**The Forest Service should prohibit or seasonally restrict all recreation in areas with sensitive wildlife or vegetation.**
	Response: The Forest Service agrees with the commenter. Forest-wide standards and guidelines for rare and unique biological features protect species such as peregrine falcons in sensitive times such as nesting seasons. For more standards and guidelines related to recreation and other activities in areas with sensitive wildlife and vegetation, see Chapter 2 of the revised Forest Plan (pp. 30-32). The commenter was also concerned about the relative impacts of mountain biking on wildlife, as compared to other recreation uses. For further discussion of that topic, see response to SC 53000-23a.
PC 51500-2:	**The Forest Service should increase the Grout Pond and Stratton Pond trail systems to provide more cross-country ski and snowshoe access opportunities.**
	Response: Comprehensive trail planning is a goal of the revised Forest Plan (Chapter 2, p. 16). A comprehensive look at trail systems, such as those at Grout Pond and Stratton Pond, would be part of that objective. The revised Forest Plan supplies strategic and programmatic direction for recreation resources, including trail-based recreation opportunities. A decision to increase the trail network in specific locations is not within the scope of the Plan revision process.

	Forest-wide and management area direction permit all methods of foot travel across the entire GMNF. Furthermore, the Ecological Special Area Management Area around Grout Pond (which has been enlarged in the Selected Alternative based on public comment) allows for future consideration of non-motorized trail construction and improvement projects for resource protection, and interpretation and education enhancements (revised Forest Plan Chapter 3, p. 94), The Desired Future Condition and the guidelines for trails pertaining to the Remote Backcountry Forest Management Area have also been refined to clarify management intent concerning trail-based opportunities (revised Forest Plan pp. 54, 56).
PC 51500-3:	**The Forest Service should provide motorized vehicle permits to people with disabilities and senior citizen populations to provide access opportunities.**
	Response: Opportunities for motorized access are provided in all of the alternatives considered. In all alternatives, the majority of the Forest has the opportunity for motorized use. In the Selected Alternative, 58 percent of the Forest has the opportunity for motorized use. Management intent is to provide access options for people of all ages and abilities. Federal laws, regulations and policies that apply to federal agencies, including Section 504 of the Rehabilitation Act of 1973 (as amended) do not require the Forest Service to make exceptions for people with disabilities in areas where motorized use is restricted or prohibited. Restricted use applies equally to the general public and to people with disabilities. Individuals who use assistive devices for mobility purposes may use their device as long as it meets the definition of a wheelchair (both manual and motorized). Motorized wheelchairs are also allowed in Wilderness areas, and other areas signed as “Foot Travel Only.” See also response to PC 51500-8.
PC 51500-4:	**The Forest Service should increase equine access on the Forest.**
	Response: All alternatives provide capacity for equine access on the Forest. In all action alternatives, the potential acreage available for horse and pack animal activity is maintained (Alternative D) or increased (Alternatives B, C, and E) (FEIS Table 3.10.12). In the Selected Alternative, the potential acreage available for equine use increases from 58 percent (in Alternative A) to 66 percent. Furthermore, comprehensive trail and transportation planning is a goal of the revised Forest Plan (revised Forest Plan p. 16). A comprehensive study of trail systems would include analysis of equine opportunities on the Forest. A decision to increase equine access through trail designation or other actions would then be determined through site-specific analysis.
PC 51500-5:	**The Forest Service should avoid closing roads and trails that provide public access.**
	Response: The revised Forest Plan supplies strategic and programmatic direction for the Forest trail and transportation systems and direction for trail-based opportunities. A decision to close a specific road or trail that currently provides public access is not within the scope of the Plan revision process. In general, the continuation of existing road and trail uses is common to all management areas and alternatives. One exception, however, would be roads in Wilderness Study Areas if they become designated wilderness. Any roads in Wilderness Study Areas would be closed to motorized and mechanized transport upon congressional wilderness designation. For impacts of

	wilderness designation on recreation opportunities, see Chapter 3.10 in the FEIS.
PC 51500-6:	**The Forest Service should prohibit motorized vehicle use around Somerset, Grout Pond, and the Deerfield River to reduce user conflicts with non-motorized recreationists and to protect natural resources.**
	Response: In response to public comment, management direction of the Somerset Reservoir area has changed since the release of the Proposed revised Forest Plan. The land on the east side of Somerset Reservoir will be managed as Remote Wildlife Habitat. The lands to the west of the Reservoir will continue to be managed as Diverse Forest Use. New motorized vehicle trails are prohibited in the Remote Wildlife Habitat MA (revised Forest Plan p. 62). The Diverse Forest Use MA to the west of the reservoir permits a range of activities, and includes various existing motorized uses, such as a snowmobile corridor trail in the areas (revised Forest Plan p. 47). Such existing uses made non-motorized management of the area inappropriate. New trails in this area will be subject to site-specific environmental analysis and public involvement. Summer ORV trails in Diverse Forest Use MA are restricted as described in Forest-wide standards and guidelines (revised Forest Plan p. 37). The area immediately surrounding Somerset Reservoir is currently privately owned and outside the jurisdiction of the Forest Service. These lands are subject to a conservation easement held by the Vermont Land Trust. The management area around Grout Pond is an Ecological Special Area MA. In this Management Area, motorized vehicles are prohibited except for existing snowmobile uses (revised Forest Plan p. 96). In all management areas, user conflicts are to be resolved through the use of adaptive management.
PC 51500-7:	**The Forest Service should remove restrictions that limit summer ORV trail development to connecting corridor trails in order to provide equal access opportunities.**
	Response: Goal 12 of the revised Forest Plan (p. 15) highlights the intention to provide a diverse range of high-quality, sustainable recreation opportunities that complement those provided off National Forest System lands. Standards and guidelines reflect the emphasis on maintaining and enhancing opportunities that are infrequently found off-forest. The Forest Service will not provide a self-contained summer ORV trail system, but rather management area allocations will provide the opportunity to link to a larger public trail system primarily located off National Forest System land (revised Forest Plan p. 37, DEIS p. 3-197). For a more complete discussion of summer ORV use in the revised Forest Plan, see the Record of Decision. Also see response to PC 51500-3.
PC 51500-8:	**The Forest Service should revise management area allocations to provide additional opportunities for motorized recreation trail corridors.**
	Response: All of the alternatives considered provide options for a diverse range of recreational opportunities, including motorized trail use. Forty-five percent of the Forest is available for consideration of potential future summer ORV trail corridors as described in the revised Forest Plan Forest-wide standards and guidelines (p. 37), and 54 percent of the Forest is available for potential future winter motorized trail development in the Selected Alternative. These uses are described in the motorized trail standard and guidelines in the revised Forest Plan (p. 37), and in FEIS Chapter 3, Table 3.10-12. Management intent is to limit summer off-road vehicle trails to corridors that link sections of a larger statewide, motorized trail system located off National

	Forest System land (revised Forest Plan Chapter 2, section 2.3.12). Motorized corridor designation is not within the scope of the Plan revision process. For a more complete discussion of summer ORV use in the revised Forest Plan, see the Record of Decision. See also response to PC 51000-5. Some commenters were also concerned about maintaining current motorized access in the Lamb Brook area of the Forest. The Lamb Brook area will be managed as Remote Backcountry Forest (RBF) MA north of the Corridor 9 snowmobile trail, and as Remote Wildlife Habitat (RWH) MA south of the trail. RBF MA does not permit any motorized trails. RWH MA does permit the continuation of existing snowmobile trails, which would include Corridor 9 as well as FT 393 in the Lamb Brook area. Other trails in the area are considered illegal use and are not permitted. If the commenter has a deeded agreement with the Forest Service for certain uses, however, that deeded right would be honored. Other commenters were concerned about the impact of the Appalachian Trail and Long Trail on future summer and winter motorized opportunities in the Forest. The Appalachian Trail and Long Trail Management Areas do not prohibit motorized crossings of the AT/LT (revised Forest Plan pp. 71, 77). Although new motorized crossings of the MAs should be minimized, they are not prohibited. Finally, comprehensive trail and transportation planning is a goal of the revised Forest Plan (revised Forest Plan p. 16). A comprehensive review of trail systems would include analysis of motorized opportunities on the Forest.
PC 51500-9:	**The Forest Service should increase cross-country ski access and opportunities to reflect the proportion of Forest users participating in this activity.**
	Response: All alternatives considered options for a diverse range of recreational opportunities, including cross-country ski access (see FEIS Recreation section 3.10). Similar to hiking and foot travel opportunities, cross-country skiing is allowed in nearly all management areas, on the majority of trails as well as off trails. In the Selected Alternative, 92 percent of the Forest is available for hiking, foot travel, and cross-country skiing (FEIS Chapter 3, Table 3.10-12). The revised Forest Plan is a programmatic document that does not address site-specific implementation such as new cross-country ski access development.
PC 51500-10:	**The Forest Service should increase the number of secluded, dispersed campsites accessible by car.**
	Response: Opportunities for secluded, dispersed campsites that are accessible by car are provided in areas of the Forest designated to motorized ROS classes. In the Selected Alternative, the majority of the Forest remains in a motorized ROS class (58%; FEIS Chapter 3, Table 3.10-10). The revised Forest Plan does not analyze any specific proposals for new dispersed campsites; dispersed camping in select areas may be prohibited based on site-specific analysis. See also response to PC 51500-3 for discussion of disabled access to Forest facilities.
PC 51500-11:	**The Forest Service should bring programs and facilities up to current accessibility standards for people with disabilities.**
	Response: The revised Forest Plan is a programmatic document that does not address site-specific issues such as scheduled facility improvements to meet

	accessibility standards. Forest-wide goals, however, do include objectives for developed recreation site operation and maintenance (revised Forest Plan p. 15). Current federal laws require that all new facilities constructed or under major alteration, rented, leased, or purchased by a federal agency be accessible including programs and activities. The Forest Service developed an Accessibility Transition Plan in FY 2002 which provides for existing recreation and administrative facilities to be brought to current standard when improvements or renovations are made. The Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines (2004) (ADAABAG) do not adequately address conditions found in the natural environment. The Forest Service Trails Accessibility Guidelines (FSTAG) and Forest Service Outdoor Recreation Accessibility Guidelines (FSORAG) have been developed by the Forest Service to address the natural setting. See also response to PC 51500-3.

Developed Recreation/Recreation Facilities (52000)

PC 52000-1:	**The Forest Service should not significantly increase the number of campgrounds.**
	Response: The Forest Service agrees with the commenter. Based on public input, the Forest Service is not currently considering increasing the number of developed campgrounds on the Forest. If new campground facilities were considered in the future, they would likely be non-traditional facilities, such as boat-in campgrounds. Existing facilities have ample capacity to meet projected future demand (DEIS p. 3-209). The revised Forest Plan does not analyze any specific proposals for new campgrounds. Opportunities for constructing new campgrounds, or enhancing or increasing the capacity of existing campgrounds, would be based on demonstrated visitor demand, public input, and the results of site-specific analysis. The management area direction provided in the revised Forest Plan describes where future developed recreation facilities (including campgrounds) may be constructed (FEIS Table 3.10-13, Table 3.10-14). The Selected Alternative reflects a slight increase in Forest acreage available for potential future developed recreation opportunities.
PC 52000-2:	**The Forest Service should maintain the majority of its campgrounds in a rustic state with only basic amenities.**
	Response: The level of development and character of campgrounds on the Forest is based on the desired ROS classification for the area, which is Roaded Natural for most campground areas. All of the campgrounds are maintained in a rustic state and provide basic amenities that are in keeping with the Roaded Natural desired ROS.
PC 52000-3:	**The Forest Service should utilize latest technologies to construct and/or improve sanitary facilities to protect groundwater and surface waters.**
	Response: The Forest Service agrees with the commenter. The Forest Service uses the technologies that best fit the project, follow revised Forest Plan direction, and complies with federal and State law and standards when constructing and/or improving sanitary facilities. This includes researching of new technologies.
PC 52000-4:	**The Forest Service should disclose the impacts of water withdrawals by alpine ski areas.**
	Response: Water withdrawals are under the jurisdiction of the State of Vermont and must meet all State of Vermont Water Quality Standards.

	Relevant State policies include not withdrawing water below the median February flow, and meeting at least 80 percent (as opposed to 100 percent) of the snowmaking water demand of a ski area in four out of five years. Water withdrawals and impoundments associated with ski area operations are allowed by the management prescription for Management Area 7.1, subject to appropriate environmental considerations. The impacts of new proposed water withdrawals by alpine ski areas would be disclosed in a site-specific environmental analysis.
PC 52000-6:	**The Forest Service should prohibit alpine ski area expansion to protect the alpine layer.**
	Response: The revised Forest Plan recognizes the potential need for ski area expansion and provides direction in the Alpine Ski Area Expansion MA to manage the land so as not to preclude future ski area development (revised Forest Plan p. 103). Although existing Alpine Ski Area Expansion MAs are retained in the Selected Alternative, their acreages are not increased from their current sizes (see FEIS section 3.10.2, Indicator 4). The revised Forest Plan also recognizes the value of alpine and subalpine habitats through designation of these habitats within the Alpine/Subalpine Special Area MA. Management intent for these alpine and subalpine areas is to protect the alpine layer through recognition, conservation, and interpretation of alpine and subalpine ecological values (revised Forest Plan p. 82). There is no ecologically significant overlap between the Alpine Ski Area Expansion Management Area and important alpine/subalpine habitat. All of the alpine zone (restricted to the summit of Mt. Abraham), as well as much of the subalpine zone that includes krummholz vegetation associated with Bicknell's thrush, are included within the Alpine/Subalpine Special Area MA.

Dispersed Recreation Management (53000)

PC 53000-1:	**The Forest Service should limit or prohibit motorized recreation use.**
	Response: Due to the relative abundance of opportunities for motorized recreation off-forest, there is a reduction in acreage of ROS classes available for motorized use opportunities (Urban, Rural, Roaded Natural. and Semi-primitive Motorized), from 72 percent in the 1987 Forest Plan to 58 percent in the Selected Alternative. There is an accompanying increase (from 28% to 43%) in the acreage assigned to the non-motorized ROS classes (Semi-primitive Non-motorized and Primitive). The mix of Desired ROS Classes under all alternatives is displayed in Table 3.10-10 of the FEIS. The FEIS analyzed a wide variety of alternatives with different outcomes and with varying management area allocations, addressing Forest Plan revision issues. Each alternative meets the intent of relevant laws, including the Multiple Use Management Act, under which the national forests are managed. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. The Selected Alternative represents what Forest managers believe to be the best balance of outcomes in achieving sustainable ecosystems and meeting the intent of relevant laws, as well as addressing the issues and concerns specific to the GMNF and motorized recreation use.
SC 53000-1a	TO PROTECT WILDLIFE AND WILDLIFE HABITAT
	Response: Wildlife and Wildlife Habitat on the Forest are protected by Forest-

	wide management direction. Goals and objectives 1, 2, 4, and 7, as well as the Forest-wide standards and guidelines concerning wildlife and wildlife habitat (2.3.2, 2.3.7, 2.3.8), and those for Transportation (2.3.18) and Trails (2.3.12) have been developed to address wildlife and wildlife habitat protection. In addition, specific management area standards and guidelines have been developed that address the variety of uses and resources in each management area (revised Forest Plan, Chapter 3). See also FEIS Recreation section 3.10.
SC 53000-1b	TO PROVIDE PEACE AND SOLITUDE
	Response: Opportunities for finding peace and solitude, away from motorized recreation, can be found in many management areas across the Forest. Remote Wildlife Habitat areas, Wilderness Study Areas, Wilderness Areas, and Ecological Special Areas are just a few of the management areas prohibiting motorized use that maximize opportunities for visitor solitude. See also FEIS Recreation section 3.10.
SC 53000-1c	TO PREVENT ENVIRONMENTAL AND AIR POLLUTION
SC 53000-1d	TO PREVENT NOISE POLLUTION
	Response: Other resource concerns regarding motorized recreation use include air and noise pollution. Goal 5 and Objectives, Chapter 2, of the revised Forest Plan highlight the Forest Service's commitment to maintaining or improving air quality on the Green Mountain National Forest (revised Forest Plan p. 14). See also response to PC 31000-2 and PC 51000-5. Noise pollution by motorized uses is addressed by State laws. Vermont State law requires that motorized recreation vehicles meet specific decibel level restrictions and other standards before they can be licensed. The maximum allowable noise level is 82 decibels on the A scale at 50 feet (Vermont Statutes, Title 23, Chapters 29 and 31, Motor Vehicle Laws of Vermont, 2004). All motor vehicles using National Forest System trails meet State safety and registration requirements and other applicable State laws (revised Forest Plan p. 37).
SC 53000-1f	TO PROTECT SOIL QUALITY
	Response: The Forest Service's commitment to maintaining or improving soil quality on the GMNF is addressed in Goal 3 and Objectives, Chapter 2 of the revised Forest Plan (p. 13) as well as the Forest-wide standards and guidelines for Soil, Water, and Riparian Area Protection and Restoration (2.3.2), Trails (2.3.12), and those for Transportation (2.3.18). The effects of motorized trails on soil quality are addressed in the DEIS, pages 3-28-31. These effects fall into the general category of Trail construction and maintenance (DEIS p.3.28, Table 3.2-1). The effects of existing snowmobile trails on soil quality are small because trails are generally well vegetated, and erosion control structures (such as culverts, ditches, water bars and bridges) are functioning. There are currently no other legal motorized trail uses on the Forest. Additional motorized trails may be added during the next planning period. The effects of new trails on soil quality would be evaluated in a project-specific environmental analysis. The magnitude of the effects will depend on site-specific factors such as the soil characteristics, trail type, design and length, and seasons of trail use.
SC 53000-1g	TO PROTECT WATER QUALITY
	Response: The Forest Service's commitment to protecting water quality on the Forest is addressed in Goal 4 and Objectives, Chapter 2, of the revised Forest Plan (p. 13), as well as the Forest-wide standards and guidelines for Soil,

	Water, and Riparian Area Protection and Restoration (2.3.2), Trails (2.3.12), and those for Transportation (2.3.18). All site-specific motorized trail proposals will be subject to Forest Plan standards and guidelines prior to authorization. Also see response to SC 53000-1f; statements made regarding soil quality also apply to water quality.
SC 53000-1i	TO PROTECT VEGETATION AND ECOLOGICAL RESOURCES
	The Forest Service's commitment to protecting vegetation and ecological resources is addressed in Goal 1, Goal 2, Goal 6, and Goal 7 in Chapter 2 of the revised Forest Plan (pp. 10-14). In addition, the Forest-wide standards and guidelines for Soil, Water, and Riparian Area Protection and Restoration (2.3.2), Trails (2.3.12), and those for Transportation (2.3.18) further emphasize resource protection. All site specific motorized trail proposals will be subject to Forest Plan standards and guidelines prior to authorization. See also responses to SC 53000-1f and SC 53000-1g.
SC 53000-1e	TO REDUCE USER CONFLICTS WITH NON-MOTORIZED RECREATIONISTS
SC 53000-1l	BECAUSE THEY ARE DANGEROUS TO USERS AND NON-USERS
	Response: Potential user and resource conflicts are addressed through the programmatic goals and objectives for recreation, trails, and various resources, along with the standards and guidelines contained in the revised Forest Plan (see Chapters 2 and 3). Chapter 4, Section 4.1.2 highlights the Forest Service's commitment to the adaptive management process. Using results from monitoring and evaluation the Forest Service can adjust management direction as necessary to address user conflicts should they arise. The Forest Service also uses the Recreation Opportunity Spectrum (ROS), a national recreation planning framework, to manage for a range of recreation activities and opportunities and to minimize conflicts between recreation users. Non-motorized activities are appropriate on roads and trails designated for such uses, according to the revised Forest Plan standards and guidelines (p. 36). Application of the ROS classification system ensures that there will be places on the Forest where each type of user can enjoy a chosen activity with minimal possibility of conflict.
SC 53000-1h	BECAUSE LAW ENFORCEMENT BUDGETS PREVENT ADEQUATE PATROL OF ILLEGAL USE
	Response: Working with the public to make sure that they abide by all laws and Forest rules is an on-going challenge. Many Forest Service employees, including law enforcement officers, spend significant amounts of time in the Forest talking with visitors to increase their understanding of what is allowed and why, and to help prevent illegal activities. Although the Forest Service has a law enforcement program, many other entities assist in patrol work. The revised Forest Plan is a programmatic document, however, that does not address site-specific implementation concerns such as consideration of patrol scheduling and staffing strategies. The resource impacts of illegal use would be addressed in a site-specific environmental analysis, to accompany any new motorized trail proposal.
SC 53000-1j	TO FIGHT OBESITY AND PROMOTE PHYSICAL EXERCISE
	Response: Section 1.1 of the revised Forest Plan highlights the role that the GMNF plays in providing outdoor recreation opportunities in the region. Section 2.1.2 describes the Forest's recreation niche and emphasizes dispersed recreation opportunities and trail-based recreation. Management intent is to provide a range of opportunities suitable for people of all ages and abilities. As the Chief of the Forest Service has stated, motorized recreation,

	including summer ORVs, is a legitimate use of NFS lands in the right places (USSA 2005).
SC 53000-1k	TO REDUCE FOSSIL FUEL CONSUMPTION
	Response: See response to SC 53000-4p.
SC 53000-1m	TO AVOID CATERING TO SPECIAL INTEREST GROUPS
	Response: Chapter 2, Section 2.1.2 of the revised Forest Plan describes the recreation niche for the Forest. Working in partnership with many organizations will continue to be a hallmark of how the Forest Service provides recreation opportunities to the public (revised Forest Plan p. 9). The programmatic goals for recreation further emphasize the role of partnerships (revised Forest Plan Goal 12 and Objectives, p. 15). Furthermore, site-specific proposals undergo a complete environmental analysis process, where all interested parties can participate through public involvement.
SC 53000-1n	DURING PERIODS OF POOR AIR QUALITY
	Response: Goal 5 and Objectives, Chapter 2, of the revised Forest Plan highlight the Forest Service's commitment to maintaining or improving air quality on the GMNF (revised Forest Plan p. 14). The FEIS provides additional information on the impact of motorized activities on the Forest (FEIS Air section 3.4) See also response to PC 31000-2.
SC 53000-1o	TO PROTECT KEEWAYDIN PROGRAMS
	Response: Through management area allocation, the area around Camp Keewaydin will continue to provide opportunities for adventure and challenge that benefit Camp Keewaydin participants. The area surrounding the camp is in the Moosalamoo Recreation and Education Area and Escarpment MAs. The major emphasis for the Moosalamoo Recreation and Education Area MA focuses on the special values of recreation, interpretation, and education. This management area allows snowmobiles but prohibits summer ORV use. The major emphasis for Ecological Special Areas also highlights the protection of resource values and opportunities for public use and interpretation. In the Green Mountain Escarpment MA, interpretation will focus on increasing visitor awareness concerning the area's unique ecological and heritage features (revised Forest Plan pp. 86, 88).
SC 53000-1p	TO PROVIDE FOR, BUFFER, OR PROTECT WILDERNESS AND WILD AREAS
	Response: See response to SC 62000-16a.
SC 53000-1q	TO PROMOTE TOURISM AND ECONOMIC OPPORTUNITIES
	Response: The social and economic analysis of the alternatives is displayed in the DEIS in Section 3.21, starting on page 3-340. The economic impacts form Forest activities (Tables 3.21-20, 3.21-21, 3.21-22, 3.21-23, and 3.21.24) show a similar total income for recreation activities across the alternatives. As stated in the Effects Common to all Alternatives for Indicator 2, Economic Impacts, page 3-368, all alternatives would contribute positively to the economy of the six Vermont counties with National Forest System lands.
SC 53000-1r	TO PREVENT TRAIL DAMAGE
	Response: Motorized trail use is only allowed on designated trails (revised Forest Plan p. 37). These trails are designed to accommodate these uses. Furthermore, trails on the GMNF are managed in accordance with the standards and guidelines contained in Chapter 2, Section 2.3.12 of the revised Forest Plan. The Forest Service's commitment to maintaining and improving the Forest's trail system is highlighted in several of the Forest-wide objectives for recreation under Goal 12 of the revised Forest Plan (Chapter 2, p.15).
SC 53000-1s	BECAUSE IT WILL INCREASE ILLEGAL USE ON PRIVATE AND PUBLIC

	PROPERTY
	Response: The impacts of a site-specific project on other lands, both private and public, are evaluated and disclosed in an environmental analysis. This analysis includes ecological effects as well as the potential for trespass and other illegal activities. Public involvement, including the input of adjacent landowners, would be an important facet of the analysis. See also response to SC 53000-1h.
SC 53000-1t	IN THE APPALACHIAN AND LONG TRAIL MANAGEMENT AREAS OR WITHIN EARSHOT OF THE TRAILS AND TRAIL FACILITIES
	Response: The Appalachian National Scenic Trail (AT) Management Area is defined as the foreground area visible from the AT footpath and associated trail facilities (revised Forest Plan p. 66). The Long Trail Management Area boundary includes GMNF lands within 500 feet either side of the footpath and associated facilities (revised Forest Plan p. 73). The intent is to protect the qualities of the trails that make them part of the National Scenic and Recreation Trails Systems. (The AT Management Area includes the section of the Long National Recreation Trail that is co-aligned with the Appalachian National Scenic Trail.) For more information, see management area direction for the Appalachian Trail and Long Trail MAs, on pages 66 and 73 of the revised Forest Plan. See also response to SC 53000-1d.
SC 53000-1u	TO AVOID CONSTRUCTION, MAINTENANCE, ENFORCEMENT, AND MITIGATION EXPENSES
	Response: Management intent under the revised Forest Plan is to continue maintenance and operation of the National Forest trail system with the support of partners and user groups (revised Forest Plan Goal 12, p. 15). New summer motorized trail proposals and the operation and maintenance of motorized trails will be supported by a capable and willing, organized group that is affiliated with a statewide entity (revised Forest Plan p. 37). Winter motorized partners, such as the Vermont Association of Snow Travelers, also assist with trail construction and maintenance costs, under agreement with the Forest Service. See also response to SC 53000-1m.
SC 53000-1v	IN ELIGIBLE SCENIC OR RECREATIONAL RIVER CORRIDORS
	Response: Management area intent is to protect the outstandingly remarkable values for which the river or stream segment was determined to be eligible. Major emphasis depends on the preliminary classification assigned. Eligible rivers and segments identified as wild do not allow motorized uses. Eligible rivers identified as scenic may be accessible by road. Off-road vehicle use is limited to trails needed to cross the river segment or corridor. Eligible recreation segments are commonly readily accessible by road (revised GMNF Plan, Chapter 3, Section 9.4, p. 109). Also see response to SC 53000-1g.
PC 53000-2:	**The Forest Service should prohibit new motorized trail development.**
	Response: See response to SC 53000-1.
PC 53000-3:	**The Forest Service should prohibit summer ORV use.**
	Response: The Forest Service further reviewed summer ORV management direction subsequent to the release of the Proposed revised Forest Plan. This review produced several changes in Forest-wide standards and guidelines for summer motorized recreation activities on the Forest (revised Forest Plan p. 37). These changes include the prohibition of trail beginnings or endings on NFS land, and further clarification of the role of summer ORV trail partners. For a more complete discussion of summer ORV use in the revised Forest Plan, see the Record of Decision. See also response to SC 53000-1.
SC 53000-3a	TO PROTECT WILDLIFE AND WILDLIFE HABITAT

	Response: See response to SC 53000-1a.
SC 53000-3b	TO PROVIDE PEACE AND SOLITUDE
	Response: See response to SC 53000-1b.
SC 53000-3c	TO PREVENT ENVIRONMENTAL AND AIR POLLUTION
	Response: See response to SC 53000-1c.
SC 53000-3d	TO PREVENT NOISE POLLUTION
	Response: See response to SC 53000-1d.
SC 53000-3e	TO REDUCE USER CONFLICTS WITH NON-MOTORIZED RECREATIONISTS
	Response: See response to SC 53000-1e.
SC 53000-3f	TO PROTECT SOIL QUALITY
	Response: See response to SC 53000-1f.
SC 53000-3g	TO PROTECT WATER QUALITY
	Response: See response to SC 53000-1g.
SC 53000-3h	BECAUSE LAW ENFORCEMENT BUDGETS PREVENT ADEQUATE PATROL OF ILLEGAL USE
	Response: See response to SC 53000-1h.
SC 53000-3i	TO PROTECT VEGETATION AND ECOLOGICAL RESOURCES
	Response: See response to SC 53000-1i.
SC 53000-3j	TO FIGHT OBESITY AND PROMOTE PHYSICAL EXERCISE
	Response: See response to SC 53000-1j.
SC 53000-3k	TO REDUCE FOSSIL FUEL CONSUMPTION
	Response: See response to SC 53000-1k.
SC 53000-3l	BECAUSE THEY ARE DANGEROUS TO USERS AND NON-USERS
	Response: See response to SC 53000-1l.
SC 53000-3m	TO AVOID CATERING TO SPECIAL INTEREST GROUPS, POLITICAL PRESSURES, OR BIG BUSINESS
	Response: See response to SC 53000-1m.
SC 53000-3n	TO PROVIDE FOR, BUFFER, OR PROTECT WILDERNESS AND WILD AREAS
	Response: See responses to SC 53000-1p and SC 62000-16a.
SC 53000-3o	TO PROMOTE TOURISM AND ECONOMIC OPPORTUNITIES
	Response: See response to SC 53000-1q.
SC 53000-3p	UNTIL A STATE-WIDE TRAIL NETWORK IS ESTABLISHED AND A PLAN AMENDMENT COULD BE CONSIDERED
	Response: For a more complete discussion of summer ORV use in the revised Forest Plan, see the Record of Decision. See also response to PC 51500-7.
SC 53000-3q	BECAUSE THE PRIVATE SECTOR OR OTHER PUBLIC LANDS CAN PROVIDE THIS USE
	Response: See response to PC 51500-7.
SC 53000-3r	BECAUSE IT WILL INCREASE ILLEGAL ORV USE AND ACTIVITIES ON PRIVATE AND PUBLIC PROPERTY, INCLUDING LITTERING AND POACHING
	Response: See responses to SC 53000-1s and SC 53000-1h.
SC 53000-3s	BECAUSE SUMMER ORV OPERATORS ARE IRRESPONSIBLE
	Response: See responses to SC 53000-1h and SC 53000-1s.
SC 53000-3t	TO PROTECT TRAILS AND ROADS, INCLUDING THE APPALACHIAN TRAIL AND LONG TRAIL
	Response: See response to SC 53000-14.
SC 53000-3u	TO AVOID CONSTRUCTION, MAINTENANCE, ENFORCEMENT, AND

	MITIGATION EXPENSES
	Response: See responses to SC 53000-1h and SC 53000-1u.
SC 53000-3v	BECAUSE THERE ARE FEW PRISTINE, REMOTE, OR QUIET PLACES REMAINING IN VERMONT OR THE UNITED STATES FOR PRESENT AND FUTURE GENERATIONS
	Response: See response to SC 53000-1b.
SC 53000-3w	TO PREVENT SPREADING NON-NATIVE INVASIVE SPECIES
	Response: The Non-native Species Objective under Goal 2 of the revised Forest Plan (p. 13) highlights the Forest Service's commitment to minimizing the adverse effects of non-native, invasive species. In addition, the Forest-wide standards and guidelines in the section on Forest Health and Disturbance Processes (Section 2.3.9) prescribe specific measures to help prevent the spread of non-native, invasive species. Trail construction and use are discussed in the DEIS and the effects related to non-native invasive species are minimal (DEIS p. 3-92).
SC 53000-3x x	BECAUSE THE ACTIVITY DOES NOT MEET FOREST SERVICE GOALS OF RESOURCE PROTECTION AND AESTHETIC VALUES
	Response: The revised Forest Plan, Chapter 2, Section 2.3.13 describes the Forest Service's strategy for protecting aesthetic values (pp. 37-39). The Forest-wide standards and guidelines for Visuals apply to all management areas and all activities.
SC 53000-3y	TO PREVENT ACCIDENTS AND RESULTING HIGHER INSURANCE RATES OR LITIGATION
	Response: See response to SC 53000-1l.
SC 53000-3z	BECAUSE THERE ARE NO SUMMER ORV TRAILS CURRENTLY DESIGNATED ON THE GMNF AND THEY REQUIRE HARDENED TRAIL SURFACES
	Response: Summer ORVs are currently allowed on the GMNF, except in specific management areas such as designated Wilderness. Although no trails were designated during the 1987 Forest Plan implementation period, this was mostly due to the lack of formal partner(s) with the resources to assist with the operations and maintenance of new trails. The revised Forest Plan is actually much stricter regarding summer ORV use than the 1987 Forest Plan. The revised Forest Plan is a programmatic document that does not address site-specific implementation issues such as consideration of trail surfacing and other trail design features such as drainage structures, signage, grades and trail alignment. See also response to PC 53000-8.
SC 53000-3aa	IN ALL ROADLESS AREAS AND DESIGNATED WILDERNESS
	Response: Motorized and mechanized uses are prohibited in designated Wilderness (revised Forest Plan p. 52). Areas inventoried in the 2004 Roadless Area Inventory will be managed as listed in Table C-4 in Appendix C of the FEIS. Twenty four percent of the Roadless Area inventory is in management areas that allow consideration of potential summer ORV trail development in the Selected Alternative.
SC 53000-3bb	TO ALIGN WITH FOREST SERVICE CHIEF DALE BOSWORTH'S IDENTIFICATION OF ORVS AS A MAJOR THREAT TO NATIONAL FOREST SYSTEM LANDS
	Response: The issue that the Chief of the Forest Service has referred to in numerous speeches is unmanaged recreation; summer ORV use in

	undesignated areas and on unplanned overland trails is one part that concern. ORV use has been affirmed as a legitimate use of National Forest System lands. The Chief encourages local programs that keep summer ORV use on designated roads and trails. The programmatic direction provided in the revised Forest Plan for ORV use on the GMNF is consistent with the Chief's direction. For specifics on revised Forest Plan direction regarding summer ORVs, see Forest-wide recreation standards and guidelines (revised Forest Plan p. 37).
SC 53000-3cc	BECAUSE THERE IS NO ORGANIZED CLUB TO PERFORM MAINTENANCE, MITIGATION, AND ENFORCEMENT MEASURES
	Response: See responses to SC 53000-1h, SC 53000-1m, and SC 53000-1u.
SC 53000-3dd	TO AVOID DRAWING MORE PEOPLE TO THE GMNF
	Response: Located within a day's drive of more than 70 million people, the GMNF is a destination for visitors seeking a variety of recreation opportunities. The maximum recreation capacity of the Forest currently exceeds the demand in all recreation setting types (ROS classes), including those that support motorized recreation opportunities (revised Forest Plan Appendix A, p. 9).
SC 53000-3ee	BECAUSE THE WHITE MOUNTAIN NATIONAL FOREST, GOVERNOR'S ATV COLLABORATIVE, AND OTHER AGENCIES, ORGANIZATIONS, AND INDIVIDUALS DO NOT RECOMMEND SUMMER ORV USE ON PUBLIC LANDS OR HAVE IDENTIFIED NEGATIVE ENVIRONMENTAL IMPACTS FROM SUMMER ORV USE
	Response: The Governor of Vermont's Collaborative on ATVs was initiated during the Plan revision process. The Forest Service was a participant in this statewide process, and information gathered during this process was used to assist the Forest Service in developing the range of alternatives and programmatic direction for summer ORV use in the revised Forest Plan. The decision on the GMNF was also informed by a study of summer ORV use on Forests nation-wide, which was conducted by the University of Vermont and is available on the GMNF Plan Revision webpage: http://www.fs.fed.us/r9/gmfl/nepa_planning/plan_revision/plan_revision_gm/ The White Mountain National Forest (WMNF) completed a separate process that deals with an entirely different set of socio-economic and other resource related circumstances. With that separate process, the WMNF came up with a different range of alternatives and programmatic Forest Plan direction than the GMNF. See also the Record of Decision for more information, as well as the response to SC 53000-1u.
SC 53000-3ff	BECAUSE THE TOPOGRAPHY AND SOILS OF THE GMNF ARE NOT SUITABLE FOR SUMMER ORV USE
	Response: See response to SC 53000-1f. Topography and soils on the GMNF vary in their suitability for summer ORV trails. Site-specific factors that affect suitability include slope steepness and stability, soil erodibility, clay content, and soil wetness. Trail design, location, and construction also affect the suitability of a site for trails. If a summer ORV trail is proposed, the topographic and soil suitability will be assessed in a site-specific environmental analysis.
PC 53000-4:	**The Forest Service should provide summer ORV use in designated areas.**
	Response: See responses to PC 51000-5 and PC 51500-8.
SC 53000-4a	TO INCREASE ECONOMIC OPPORTUNITIES

	Response: See response to SC 53000-1q.
SC 53000-4b	FOR CONSISTENCY WITH THE STATE OF VERMONT'S EFFORTS TO DEVELOP A TRAIL SYSTEM
	Response: See response to SC 53000-3ee.
SC 53000-4c	TO AVOID CATERING TO SPECIAL INTEREST GROUPS
	Response: See response to 53000-1m.
SC 53000-4d	INCLUDING IN REMOTE AREAS
	Response: See response to SC 53000-1b.
SC 53000-4e	IF LAW ENFORCEMENT IS PROVIDED TO ENFORCE RULES AND PROVIDE PENALTIES FOR MISUSE
	Response: Penalties for misuse or illegal activities on the National Forest are codified in Title 18 U.S.C. 3559 and 3571 as well as penalties established in the Vermont State Statutes. Additions or revisions to these schedules are not within the scope of the revised Forest Plan. See also response to SC 53000-1h.
SC 53000-4f	IF AN ORGANIZED CLUB REQUIRES PERMITS AND PROVIDES MAINTENANCE AND FUNDING ASSISTANCE
	Response: See response to SC 53000-1m and SC 53000-1u.
SC 53000-4g	TO PROVIDE PROPORTIONATE AMOUNTS OF VARIED RECREATION OPPORTUNITIES
SC 53000-4h	TO PROVIDE OPPORTUNITIES LIMITED ON PRIVATE AND NON-NATIONAL FOREST SYSTEM PUBLIC LANDS
SC 53000-4i	TO MAINTAIN HUMAN TRAVEL CORRIDORS
SC 53000-4l	TO PROVIDE MULTIPLE USES
	Response: The Selected Alternative provides a mix of recreation opportunities on the GMNF, including winter and summer motorized potential, as well as varied forms of non-motorized recreation. Fifty-four percent of the Forest is available for future snowmobile trail development, forty-five percent of the Forest is available for consideration of future summer ORV trail development, and sixty-six percent of the Forest is available for such non-motorized recreation opportunities as bicycling and equestrian activities (FEIS Section 3.10). The Forest also manages a range of recreation activities through the Recreation Opportunity Spectrum (ROS). ROS is a Forest Service classification that is used nationally and also by many states to manage for a variety of recreation opportunities. The Multiple-Use Sustained Yield Act of 1960 states that, "It is the policy of the Congress that the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes." This means that the National Forests will be managed to provide for the use of all the various renewable surface resources in a combination that best meets the needs of the American people. The Selected Alternative and revised Forest Plan provide a balance between competing concerns while managing for multiple resource opportunities including summer ORV use. See also references identified in PC 53000-4.
SC 53000-4j	BECAUSE THERE ARE NO, OR LIMITED, ADVERSE ENVIRONMENTAL IMPACTS
	Response: See response to PC 53000-4 and SC 53000-1s.

SC 53000-4k	BECAUSE NOISE IMPACTS ARE LESS THAN THOSE OF SNOWMOBILES
	Response: See response SC 53000-1d.
SC 53000-4m	TO PROVIDE ACCESS FOR PERSONS WITH DISABILITIES AND SENIOR CITIZENS
	Response: See response to PC 51500-3.
SC 53000-4n	TO REDUCE ILLEGAL SUMMER ORV INCIDENTS
	Response: See response to SC 53000-1h and SC 53000-1s.
SC 53000-4o	SUCH AS DOWNHILL SKI AREAS
	Response: The revised Forest Plan supplies strategic and programmatic direction for recreation resources including trail-based recreation opportunities. Summer ORV use is not consistent with the major emphasis and desired future conditions for the Alpine Ski Area and Ski Area Expansion MAs. In these MAs, motorized trail vehicles, except snowmobiles, are prohibited unless required by law to provide access to private land or for administrative uses (revised Forest Plan, Chapter 3, p. 63 and p. 103).
SC 53000-4p	BUT SHOULD PROHIBIT TWO-STROKE ATVS
	Response: Motor vehicle management on the GMNF is consistent with Vermont State laws (revised Forest Plan p. 37). See also response to SC 53000-1d.
SC 53000-4q	SUCH AS NATIONAL RECREATION AREAS, MOOSALAMOO, AND LINCOLN RIDGE
	Response: Summer ORV use is not consistent with the major emphasis and desired future conditions for the White Rocks National Recreation Area, the Moosalamoo Recreation and Education Management Area, or the Remote Wildlife Habitat Management Area around Lincoln Gap. In the Moosalamoo Recreation and Education Management Area, motorized trail vehicles, except snowmobiles, are prohibited unless required by law to provide access to private land (revised Forest Plan p. 102). In the Remote Wildlife Habitat Management Area around Lincoln Gap, motorized use is limited to winter use of designated Forest Service system trails (revised Forest Plan p. 62). In the White Rocks National Recreation Area on the GMNF, motorized trail vehicles (except snowmobiles) are prohibited unless required by law to provide access to private land (revised Forest Plan p. 80). Management direction for future NRA designations would be contained in the legislation that establishes the NRA.
PC 53000-5:	**The Forest Service should prohibit summer ORV use during winter months, mud season, and hunting season to protect resources.**
	Response: The revised Forest Plan is a programmatic document that does not address site-specific implementation such as analysis of the need for or timing of temporary closures and other seasonal (or non-reoccurring) considerations. Management intent regarding summer ORVs is to provide opportunities for summer motorized trail use within corridors that link sections of a larger statewide summer motorized trail system located off National Forest System land (revised Forest Plan, Chapter 2, 2.3.12, p. 37). All of the alternatives considered in the FEIS provide options for a diverse range of recreational opportunities, including motorized trail use. Decisions regarding specific trail use constraints will be made using a site-specific environmental analysis and public involvement.
PC 53000-6:	**The Forest Service should identify potential summer ORV trail locations.**
	Response: The revised Forest Plan is a programmatic document that does not address site-specific implementation such as analysis of potential summer ORV trail locations. All of the alternatives considered provide options for a

	diverse range of recreational opportunities, including motorized trail use. Management intent regarding summer ORVs is to provide opportunities for summer motorized trail use within corridors that link sections of a larger summer motorized trail system located off National Forest System land (revised Forest Plan, Chapter 2, 2.3.12, p. 37).
PC 53000-7:	**The Forest Service should provide a range of alternatives for summer ORV management.**
	Response: The revised Forest Plan is a programmatic document that does not address site-specific implementation issues such as minimization of summer ORV trail impacts. All of the alternatives considered provide opportunities for a diverse range of recreational opportunities, including summer ORV use. The alternatives portray a range of options for summer ORV management through management area allocations. Forest-wide standard and guidelines govern summer ORV use in these management areas (revised Forest Plan p. 37). The range of alternatives for summer ORV management is expressed as variation in the size and configuration of management areas across the alternatives. The acreage available for summer ORV trail development ranges from 41 percent in Alternative D to 64 percent in Alternative B (FEIS Table 3.10-12). The management area maps for each alternative display this range of alternative spatially (FEIS Chapter 2). See also response to SC 23000-1d for a discussion of the range of alternatives that was provided in the DEIS.
PC 53000-8:	**The Forest Service should require a trial period for summer ORV use and should maintain the ability to revoke summer ORV recreation opportunities.**
	Response: All of the alternatives provide options for a range of recreational opportunities, including summer ORV use. The revised Forest Plan outlines strategic direction and describes broad goals and objectives for the recreation and trails programs (revised Forest Plan, Chapter 2, 2.3.11, 2.3.12). The revised Forest Plan is a programmatic document, however, that does not address site-specific implementation issues such as analysis of the need for temporary or trial use, site-specific mitigation measures, conflict resolution tactics, or non-reoccurring management considerations. Using measures such as site-specific environmental analyses and monitoring programs, the Forest Service will be able to manage summer ORV opportunities in a manner that is consistent with resource protection, and public health and safety.
PC 53000-10:	**The Forest Service should prohibit or limit utilization of summer ORVs for trail maintenance.**
	Response: The use of summer ORVs for administrative purposes such as trail maintenance is generally consistent with all of the management areas except Wilderness. In general, the purpose of the Forest-wide trail guideline regarding administrative summer ORV use (revised Forest Plan Chapter 2, 2.3.12) is to allow for brush control and mowing in order to maintain permanent openings and vista points. Motorized use for administrative purposes must be approved in writing by the Forest Service (revised Forest Plan p. 35).
PC 53000-11:	**The Forest Service should disclose methods for submitting summer ORV trail proposals.**
	Response: The revised Forest Plan does not address how a proposal is developed or submitted. New trails would be considered based on demonstrated visitor demand. The Forest-wide guideline in Section 2.3.12 for motorized vehicles emphasizes the role of partnerships in operating and maintaining trails. New motorized trail proposals should be supported by an

	organized group that is affiliated with a statewide entity (revised Forest Plan p. 37). All new trail proposals accepted by the Forest Service that meet desired objectives for trail-based recreation opportunities would be subject to site-specific analysis and public involvement.
PC 53000-12:	**The Forest Service should open snowmobile trails to summer ORV recreation use.**
	Response: All of the alternatives considered options for a diverse range of recreational opportunities, including summer ORV recreation use. The revised Forest Plan is a programmatic document and does not make site-specific decisions such as the type of uses allowed on individual trails. These are evaluated in a site-specific environmental analysis and through public involvement. Management intent is to provide opportunities for motorized trail use within corridors that link sections of a larger statewide motorized trail system located off National Forest System land. Multiple-use trails are to be emphasized over single use trails (revised Forest Plan, Chapter 2, 2.3.12).
PC 53000-13:	**The Forest Service should locate and build a summer ORV trail to ensure the recreation opportunity will exist.**
	Response: All of the alternatives considered provide options for a diverse range of recreational opportunities and the opportunity for potential summer ORV trail. A decision to locate and build a new trail (for any purpose) is not within the scope of the revised Forest Plan and would be based on a site-specific environmental analysis with public involvement.
PC 53000-14:	**The Forest Service should prohibit new summer ORV use and new, or existing, snowmobile use and trail crossings on the AT, LT, and related side trails.**
SC 53000-14a	TO REDUCE CONFLICTS WITH HIKING TRAIL USES
	Response: New motorized trails, including snowmobile trails, are prohibited in the Appalachian Trail (AT) and Long Trail (LT) Management Areas, except for at designated crossings. New snowmobile or motorized crossings of the management area(s) will be minimized and will be approved by the Forest Service in consultation with the Appalachian Trail Conservancy and local AT clubs (revised Forest Plan pp. 36, 71). Side trails that are within the Appalachian National Scenic Trail and Long Trail Management Areas are managed to be consistent with the respective trails' MA direction (revised Forest Plan Chapter 3, pp. 70, 77). Side trails that are outside the AT and LT management areas are managed in accordance with Forest-wide standards and guidelines and the applicable management area direction. In accordance with this Forest-wide direction, side trails are primarily non-motorized trails. Minor exceptions, such as sharing with motorized uses, may be allowed where there are no other reasonable options. See also response to SC 53000-1e.
PC 53000-15:	**The Forest Service should prohibit snowmobile use on the Forest.**
	Response: The Code of Federal Regulations requires the Forest Service "to the degree consistent with needs and demand for all major resources" to provide a broad spectrum of outdoor recreation opportunities (36 CFR 219.21). Therefore, both motorized and non-motorized forms for recreation are recognized as acceptable and valid uses of the National Forests. All of the alternatives considered provide options for a diverse range of high-quality, sustainable recreational opportunities through management area allocation. The FEIS analyzed a wide variety of alternatives with different outcomes and with varying management area allocations, addressing Forest Plan revision issues. Each alternative meets the intent of relevant laws, including the

	Multiple Use Management Act, under which the national forests are managed. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. The Selected Alternative represents what Forest managers believe to be the best balance of outcomes in achieving sustainable ecosystems and meeting the intent of relevant laws, as well as addressing the issues and concerns specific to the GMNF and snowmobile use. In the Selected Alternative, there is a slight decrease (from 55% in Alternative A to 54% in Alternative E) in acreage available for potential snowmobile use opportunities (FEIS Recreation section 3.10, Table 3.10-12). The existing snowmobile trail system on the Forest is part of a popular statewide network managed in partnership with the Vermont Association of Snowmobile Travelers (VAST). The opportunities offered are intended to complement those provided off National Forest System land (revised Forest Plan Goal 12, p. 15).
SC 53000-15a	TO PROTECT WILDLIFE AND WILDLIFE HABITAT
	Response: See response to SC 53000-1a.
SC 53000-15b	TO PROTECT SOIL QUALITY
	Response: See response to SC 53000-1f.
SC 53000-15c	IN THE PROPOSED GLASTENBURY MOUNTAIN WILDERNESS TO REDUCE ILLEGAL WHEELED MOTORIZED USE AND TO BE COMPATIBLE WITH FUTURE WILDERNESS DESIGNATION
	Response: Mechanized uses, including snowmobiles, are prohibited in designated Wilderness areas (Wilderness Act of 1964). The revised Forest Plan allows for snowmobiling on existing National Forest Service system trails in Wilderness Study Areas pending potential congressional Wilderness designation (revised Forest Plan p. 11). Management intent is to allow current activities in Wilderness Study Areas to continue only where they do not adversely impact the potential for future wilderness designation (revised Forest Plan Chapter 3, p. 110). There are no designated snowmobile trails within the Glastenbury Wilderness Study Area MA in the Selected Alternative.
PC 53000-16:	**The Forest Service should limit existing or prohibit new snowmobile use on the Forest.**
	Response: All of the alternatives provide options for a diverse range of high-quality, sustainable recreational opportunities through management area allocation. In the Selected Alternative there is a slight decrease in acreage available for snowmobile use (FEIS Recreation section 3.10, Table 3.10-12). Snowmobile use is limited or prohibited in areas where it would be inconsistent with management area desired future condition. Additional snowmobile trail designation or construction requires a site-specific environmental analysis and public involvement. See also response to PC 53000-15.
SC 53000-16a	TO PREVENT ENVIRONMENTAL AND AIR POLLUTION
	Response: See response to SC 53000-1c.
SC 53000-16b	TO PROTECT VEGETATION AND ECOLOGICAL RESOURCES
	Response: See response to SC 53000-1i.
SC 53000-16c	TO PROTECT WILDLIFE AND WILDLIFE HABITAT
	Response: See response to SC 53000-1a.
SC 53000-16d	BECAUSE THEY ARE DANGEROUS TO NON-USERS
	Response: See response to SC 53000-1l.
SC 53000-16e	TO PROHIBIT AN EAST-WEST CORRIDOR BETWEEN ROUTES 125 AND 73

	Response: Based on public comment and recent field data gathered by Forest Service staff, some of the of management area boundaries between Routes 125 and 73 in the Worth Mountain area have been adjusted to better reflect on-the-ground resource conditions and incorporate public concerns (see Management Alternative E Map, (North Half), FEIS, Chapter 2). Although corridor designation and analysis of specific trail alignments is not within the scope of the revised Forest Plan, the adjusted management area configuration would preclude an east/west motorized trail corridor between Routes 125 and 73 in this area in the Selected Alternative. See also the Record of Decision for more information, as well as response to SC 62000-14c.
SC 53000-16f	BECAUSE EXPANSION OF LOCAL CLUB SNOWMOBILE TRAILS SHOULD BE PROHIBITED UNTIL THERE IS FULL NATIONAL ENVIRONMENTAL POLICY ACT REVIEW
	Response: See response to PC 53000-16.
PC 53000-17:	**The Forest Service should establish and disclose on maps in the Final EIS where Forest Service-sanctioned snowmobile trails currently exist, or are known future expansions, and not rely on information from special interest groups.**
	Response: Existing Forest Service designated snowmobile trails are identified on maps available for public review as part of the project record in the GMNF Supervisor's Office located in Rutland, VT. Future expansions to the snowmobile network may be considered in the Diverse Forest Use, Moosalamoo Recreation and Education Area, Diverse Backcountry, White Rocks NRA, Alpine Ski Area, Alpine Ski Area Expansion, and Eligible Scenic and Recreation River Corridor Management Areas. The revised Forest Plan is a programmatic document, however, and does not address site-specific implementation issues such as consideration of specific trail alignments.
SC 53000-17a	TO CLARIFY WHAT TRAILS HAVE UNDERGONE NATIONAL ENVIRONMENTAL POLICY ACT ANALYSIS VERSUS ILLEGAL USER-CREATED TRAILS
	Response: All additions to the trail network, including snowmobile trails, are subject to environmental analysis before making the decision to add a trail or use. Current Forest Service records management requirements (FSH 6209.11) do not require retention of analysis and decision documents beyond five years. Given this, the Forest Service may not have documentation that supports each trail on NFS lands. The standards for analysis and decision documentation have also changed over time, and different levels of analysis and documentation are required depending on project complexity.
PC 53000-18:	**The Forest Service should prohibit and disclose the effects of existing snowmobile trails that have not been approved through regulatory procedures.**
	Response: The snowmobile trail system on the GMNF is part of a popular statewide network managed in partnership with the Vermont Association of Snowmobile Travelers (VAST). The opportunities offered are intended to complement those provided off National Forest System land (revised Forest Plan Goal 12, p. 15). Snowmobile use is limited or prohibited in areas where it would be inconsistent with the desired future condition of the management area (DEIS p. 3-200). See also response to SC 53000-17a. Some commenters raised concerns regarding perceived new snowmobile trails in the White Rocks National Recreation Area (NRA) since the NRA's authorization. The law that created the White Rocks NRA authorized winter

	motorized use on roads, trails, and ponds that were authorized prior to NRA designation. Those winter motorized routes total 62 miles (White Rocks National Recreation Area Management Plan, p. B-17). Any additional trails are considered illegal use, enforced by Forest Service Law Enforcement Officers. See also response to SC 62000-49b
PC 53000-19:	**The Forest Service should clarify the impacts to snowmobile trails pending Remote Backcountry or Remote Wildlife Habitat Management Area designations.**
	Response: Designation of an area as Remote Wildlife Habitat MA will not impact existing snowmobile trails. New additions to existing trail networks are prohibited in Remote Wildlife Habitat MAs, however, unless they meet specific criterion provided in MA standard and guidelines (revised Forest Plan pp. 62). Snowmobile trails are prohibited in the Remote Backcountry Forest Management Areas. These areas will be accessible only by foot and other non-motorized means of transport. Motorized uses are not permitted unless required by law to provide access to private land (revised Forest Plan pp. 56). Snowmobile trails will not be impacted by the designation of Remote Backcountry Forest MAs, however, as these management areas were not allocated in areas with existing motorized trails.
PC 53000-20:	**The Forest Service should maintain or increase snowmobile access on the Forest.**
	Response: The revised Forest Plan retains the current number of miles of snowmobile trails present on the GMNF. All of the alternatives considered provide options for a diverse range of high-quality, sustainable recreational opportunities through management area allocation. Although there is a slight decrease in acreage available for future snowmobile trail development in the Selected Alternative compared to existing management direction, there will be the opportunity for potential new trail development on 54 percent of the Forest (FEIS Recreation section 3.10, Table 3.10-12).
PC 53000-21:	**The Forest Service should provide a range of alternatives for snowmobile management.**
	Response: The revised Forest Plan outlines strategic direction and describes broad goals and objectives for the recreation program and trails. All of the alternatives considered provide options for a diverse range of high-quality, sustainable recreational opportunities through management area allocation. The range of alternatives for snowmobile management is expressed as variation in management area boundaries (DEIS, p. 3-192). Management areas vary in both size and configuration across the alternatives. In all alternatives the opportunities offered are intended to complement those provided off National Forest System land (revised Forest Plan Goal 12, p. 15).
PC 53000-22:	**The Forest Service should provide a snowmobile plan in the Final EIS.**
	Response: The revised Forest Plan is a programmatic document that does not address site-specific implementation such as snowmobile trail planning. Management intent, however, is to complete comprehensive trail planning for 100 percent of the Forest within the planning period (see Goal 12 and objectives, revised Forest Plan p. 15).
PC 53000-23:	**The Forest Service should maintain or increase mountain bike access, including providing access in areas such as Long Trail sections that allow motorized use.**
SC 53000-23a	UNTIL AN EVALUATION PROVIDES EVIDENCE REGARDING THE RELATIVE EFFECTS OF MOUNTAIN BIKING VERSUS PEOPLE WALKING,

	RUNNING, HORSEBACK RIDING, OR MOTORCYCLING.
	Response: The Selected Alternative increases mountain bike opportunities on the Forest from the 1987 Forest Plan. Sixty-six percent of the Forest is now open to future bicycle trail development opportunities, whereas 58 percent was available in the 1987 Plan. All new trail proposals accepted by the Forest Service that meet desired objectives for trail-based recreation opportunities would be subject to site-specific analysis and public involvement. (See FEIS Recreation section 3.10, Table 3.10-12). Within the Long Trail Management Area, however, bicycles are generally prohibited. The revised Forest Plan does allow bicycles on the Long Trail where the Long Trail is on or crosses Forest System, State, or town roads. New bicycle crossings should be minimized except as mutually agreed on by the Forest Service and the Green Mountain Club (revised Forest Plan p. 77).
PC 53000-24:	**The Forest Service should limit or prohibit mountain bike access on the Forest.**
	Response: All of the alternatives considered provide options for a diverse range of high-quality, sustainable recreational opportunities through management area allocation, including opportunities for bicycling. Management area direction allows for future mountain bike trail development in appropriate areas of the Forest as described in FEIS Table 3.10-11. In the Selected Alternative, there is an eight percent increase in the overall acreage available for future bicycle trail development from existing management direction (FEIS Recreation section 3.10, Table 3.10-12). Sixty-six percent of the Forest is now open to future bicycle trails. Existing bicycle trails currently make up about four percent of the GMNF trail system mileage. Future development of bicycle trails on the GMNF will be based on demonstrated demand. Future trail development may be permitted across the Forest based on management area direction, after site-specific environmental analysis.
PC 53000-25:	**The Forest Service should prohibit mountain bike use on the Long Trail and related side trails and in designated wilderness and wilderness study areas.**
	Response: See Response to PC 53000-23 for Forest policy on mountain bike use on the Long Trail and related side trails. Mountain bikes, a mechanized use, are prohibited in the Wilderness MA. New mechanized and motorized trails, including those for mountain bikes, are prohibited in the Wilderness Study Area MA. Existing mountain bike trails are allowed to remain until the area is designated by Congress as wilderness.
PC 53000-26:	**The Forest Service should establish a mountain bike trail system and form a partnership with mountain bike organizations to provide trail construction and maintenance assistance.**
	Response: There are currently efforts underway to create formal partnerships with bicycling clubs for assistance in operation and maintenance of trails. Under the revised Forest Plan, bicycle trails will be identified and maintained in cooperation with these partners (revised Forest Plan p. 36). Furthermore, comprehensive trail planning will assist in identifying and managing resource-appropriate mountain bike opportunities on the Forest (see Goal 12 and objectives, revised Forest Plan p. 15).
PC 53000-27:	**The Forest Service should open the Long Trail, Appalachian Trail, and/or Catamount Trail to dog sledding and skijoring recreational use.**

	Response: Dog sledding and skijoring are allowed on National Forest System roads and on trails that have been designated for that use, based on site-specific environmental analysis with public review and input (FEIS Recreation section, Table 3.10-12). Dog sledding is prohibited on trails that pass through the deer wintering areas (revised Forest Plan p. 36). The Long National Recreation Trail (LT) and the Appalachian National Scenic Trail (AT) are managed primarily for foot travel to preserve the unique historical culture as a premier long distance hiking opportunity. In the revised Forest Plan, the use of dog teams is prohibited on the AT and LT and within 500 feet of the trails. The revised Forest Plan allows dog teams on the AT and LT where the trails are on or cross National Forest System roads, and State or town roads. New dog sled trail crossings should be minimized except as mutually agreed on by the Forest Service and the Green Mountain Club (revised Forest Plan p. 76).
PC 53000-28:	**The Forest Service should remove guidelines that prohibit dog sledding recreational activities in deer wintering areas.**
	Response: Dog sledding and skijoring are allowed on National Forest System roads and on trails that have been designated for that use based on site-specific environmental analysis with public involvement. Dog sledding is prohibited on trails passing through deer wintering areas (revised Forest Plan p. 36). The revised Forest Plan includes other Forest-wide guidelines to minimize recreation-based disturbance to deer during winter, including provision for seasonal restriction of recreation uses in and adjacent to deer wintering areas; no construction of new winter use trails in deer wintering areas; and considering opportunities to relocate existing winter-use trails, trailheads, and associated facilities out of shelter portions of deer wintering areas (revised Forest Plan p. 29). Free-roaming dogs can be a source of winter mortality for white-tailed deer. Although sled and skijoring dogs are not free-roaming, the presence of these dogs still presents a potential disturbance to local deer populations during a critical time of the year. Also, packed trails provide predator access to deer wintering areas, giving the predators an advantage over deer.
PC 53000-29:	**The Forest Service should consider dog sledding as a unique recreational use, separate from horse and pack animal recreation.**
	Response: In the revised Forest Plan, dog sledding was considered separate from horse and pack animal recreation. Because dog sledding is unique, the programmatic direction for this activity differs from the direction that was developed for horse and pack animal recreation. Specific standards and guidelines that address dog sledding are found in the revised Forest Plan on page 36. In the FEIS section on Recreation Opportunities and Forest Settings, Indicator 2 (Number of Acres Available for Development by Trail Activity), motorized activities and non-motorized activities are compared and contrasted. In this context, dog sledding is discussed along with other non-motorized activities such as horse/pack animals and bicycling and compared to motorized activities such as summer ORV and snowmobile use (FEIS Recreation section 3.10).
PC 53000-30:	**The Forest Service should clarify the definition of saddle/pack/draft animals.**
	Response: This question posed by the commenter is whether dog teams are included in the term “saddle/pack/draft animals.” Dog teams are a separate category of users from saddle, pack, and draft animals, and are not considered saddle/pack/draft animals. For further clarification, see Forest-wide management direction regarding non-motorized trail users on page 36 of the

	revised Forest Plan. See also response to PC 53000-29.
PC 53000-31:	**The Forest Service should prohibit dogs on National Forest System lands to prevent noise pollution.**
	Response: The Code of Federal Regulations (36 CFR 261.14) requires control of animals in developed recreation sites. Based on Forest Service experience to date, there has not been evidence of the need to ban dogs or other pets from the entire Forest. The Forest Service believes educating pet owners is the best means of dealing with concerns raised about pet impacts on the Forest. Dog sledding and skijoring is allowed only on National Forest System trails that are designated for that those uses. Dog sledding is also prohibited on trails that pass through deer wintering areas (revised Forest Plan p. 36).
PC 53000-32:	**The Forest Service should consider alternative recreation developments, such as ice waterway travel corridors and balloon launching pads, to replace motorized recreation and related demands on fossil fuels.**
	Response: In the revised Forest Plan, management intent is to provide a diverse range of high-quality, sustainable recreation opportunities that complement those provided off National Forest System lands (revised Forest Plan Goal 12 p. 15). The focus of the EIS is on issues of greatest public concern as determined through the public involvement process (DEIS p. 1-7). Emerging uses are highlighted in the Affected Environment for Recreation Opportunities and Forest Settings (FEIS section 3.10.1, Recreation Demand). The revised Forest Plan is a programmatic document that does not address site-specific implementation issues such as designating balloon launching pads, ice waterway travel corridors, or other unique recreation uses. Potential new recreation uses of the Forest would be subject to site-specific analysis and public involvement.
PC 53000-33:	**The Forest Service should provide opportunities for auto/rally racing recreation.**
	Response: See response to PC 53000-32.
PC 53000-34:	**The Forest Service should provide additional recreation opportunities such as ice skating, ice boating, skijoring, kite skating and skiing, hang-gliding, and wind surfing.**
	Response: Skijoring is allowed on National Forest System roads and trails that have been designated for that use based on site-specific environmental analysis, with public review and input. Recreation on water bodies, such as kite-skating, windsurfing, and ice skating is under the jurisdiction of the State of Vermont and is allowed on all Forest water bodies. See also response to PC 53000-32.
PC 53000-35:	**The Forest Service should place higher priority on non-motorized recreation than on motorized recreation.**
	Response: The balance of non-motorized and motorized recreation opportunities is expressed as Desired ROS Classes (see FEIS Table 3.10-10). Desired ROS classes are based on the inventory of recreation characteristics, management area desired future conditions, and the overall objectives for the recreation resource. The primary objective for recreation is to provide a range of opportunities that complement those supplied off National Forest System lands. Due to the relative abundance of opportunities for motorized recreation off-Forest, the Selected Alternative reflects an increase (from 28% to 43%) in the acreage assigned to the non-motorized ROS classes (Semi-primitive Non-motorized and Primitive) and a reduction (from 72% to 58%) in the acreage available for motorized use (Urban, Rural, Roaded Natural, and Semi-primitive Motorized) (FEIS Table 3.10-10).

	The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. The Selected Alternative represents what Forest managers believe to be the best balance of outcomes in achieving recreation opportunity objectives.
PC 53000-36:	**The Service should provide hunting and fishing opportunities on all National Forest System lands.**
	Response: Hunting and fishing are allowed on National Forest System lands. Hunting and fishing are regulated by the Vermont Department of Fish and Wildlife. For the purposes of consistency and enforcement, any regulations established by this State agency apply equally to Green Mountain National Forest system lands.
PC 53000-37:	**The Forest Service should provide disc golf courses on the North Half and South Half of the Forest.**
	Response: See response to PC 53000-32.
PC 53000-38:	**The Forest Service should continue to protect the Long Trail and Appalachian Trail as remote backcountry hiking opportunities.**
	Response: The Forest Service appreciates the commenter's support of the revised Forest Plan and will continue to protect the Long Trail and Appalachian Trail as remote backcountry hiking opportunities, in conjunction with partner organizations. See also response to PC 22000-39.
PC 53000-39:	**The Forest Service should emphasize the values of hunting, fishing, and motorized recreation and provide the habitat or opportunities to support these activities.**
	Response: Hunting and fishing are allowed on National Forest System lands and are regulated by the Vermont Department of Fish and Wildlife. A discussion of hunting, fishing, and other recreation uses on the Forest can be found in Chapter 3.10 of the FEIS. Motorized recreation values are also discussed in Chapter 3.10 of the FEIS. A role of the GMNF, as stated in the revised Forest Plan, specifically includes management to "enhance wildlife and plant habitat conditions" (revised Forest Plan p. 9). In the revised Forest Plan, the GMNF will move towards vegetation composition and age class objectives that will provide forest habitats for a diverse array of species, including game species. In all alternatives, the majority of the Forest acreage is in a motorized ROS class (Rural, Roaded Natural, or Semi-primitive Motorized). In the Selected Alternative, 58 percent of the Forest remains in a motorized ROS class (see FEIS Table 3.10-10). See also responses to SC 53000-35 and SC 53000-36.
PC 53000-40:	**The Forest Service should maintain or improve hiking opportunities to provide low-impact recreation and to improve the recreation experience for hikers.**
	Response: The commenters' concerns focus on improved maintenance of hiking trails on the GMNF, and on continuing to provide hiking opportunities as low-impact recreation. Low-impact, foot-travel recreation will continue to be provided across the entire Forest. In the Selected Alternative, acreage available for hiking trail development opportunities is increased from 77 percent of the Forest under existing management direction to 92 percent (see FEIS Table 3.10-10 and Table 3.10-12). The revised Forest Plan is a programmatic document that does not address implementation issues such as maintenance concerns on specific trails. The

	Forest-wide recreation goals in the revised Forest Plan, however, do recognize this concern. The objectives under Goal 12 address maintenance and enhancement of the trail system and hiking opportunities through partnership, comprehensive trail planning, interpretation, deferred maintenance, and implementation of trails operation and maintenance standards (revised Forest Plan p. 15).
PC 53000-41:	**The Forest Service should consider additional information in the Final EIS analysis regarding hunting trends as a recreational activity.**
	Response: Table 3.10-7 in the DEIS provides recent statistics on participation in various recreation activities for the State of Vermont (DEIS p. 3-202). The source of the hunting trends data cited in Chapter 3 of the DEIS (DEIS, Table 3.10.8) is the National Survey on Recreation and the Environment (NSRE). The NSRE is a long-term survey of outdoor recreation participation patterns across the United States, conducted by Forest Service research staff. The Forest Service analysis also uses data from the US Fish and Wildlife Service in analyzing hunting trends. The USFWS's National Survey of Fishing, Hunting, and Wildlife-Associated Recreation found a decrease in wildlife-related recreation activities such as hunting, angling, and wildlife watching among Vermont residents from 82 percent in 1991 to 67 percent in 2001). See also response to PC 53000-36 and PC 53000-39.
PC 53000-42:	**The Forest Service should incorporate additional research in the Final EIS discussion on summer ORV impacts.**
	Response: Additional research regarding the impacts of summer ORV use has been added to the FEIS Chapter 3.10. This research was completed by the University of Vermont and has been available on the GMNF Plan Revision webpage. Sections have now been incorporated into the FEIS discussion. Information regarding the impact of soil disturbing activities such as summer ORV use on Forest resources is found in the respective resource section of the FEIS, such as the Chapter 3 sections for Soil, Water, Non-native Invasive Species, and Heritage.
PC 53000-43:	**The Forest Service should complete an environmental analysis and disclose the full environmental impacts and rationale associated with providing legal and illegal motorized recreation use, including summer ORVs and snowmobiles.**
	Response: See response to PC 51000-7, PC 53000-3, and SCs 53000-1a through 1v.
PC 53000-44:	**The Forest Service should clarify how trail development and recreation management can vary by alternative while recreation budgets and costs remain static**.
	Response: The revised Forest Plan describes programmatic goals and objectives for the recreation program. Variation among the alternatives is expressed through differences in acreage allocated to various management areas (DEIS p. 3-192). The focus for each area is expressed in the emphasis and management area desired future condition sections found in Chapter 3 of the revised Forest Plan. Trail development and recreation management vary by alternative because program priorities (as expressed in management area emphasis and desired future condition) shift in relation to the acreage allotted to each management area type. See response to PC 70000-14.
PC 53000-45:	**The Forest Service should complete a trail system plan to identify specific areas for future trail development.**
	Response: The overall goal for recreation on the GMNF is to provide a diverse range of high-quality, sustainable recreation opportunities that complement

	those provided off National Forest System Lands. Management intent is to complete comprehensive trail planning for 100 percent of the Forest within the planning period (see Goal 12 and Objectives, revised Forest Plan p. 15).
PC 53000-46:	**The Forest Service should classify non-motorized trails in a consistent manner to recognize that many trails have multiple uses.**
	Response: Table 3.10-4 in the FEIS displays miles of National Forest system trails by managed use on the GMNF. As outlined in the Table, non-motorized trails are classified in a manner that indicates multiple uses along single sections of trail (see table Notes). In general, multiple-use trails should be emphasized over single use trails (revised Forest Plan, Section 2.3.12, Guidelines, p. 35). The Forest Service also acknowledges the need for Forest-wide trail analysis and planning (FEIS Section 3.10). Management intent is to complete comprehensive trail planning for 100 percent of the Forest within the planning period (see Goal 12 and Objectives, revised Forest Plan p. 15).
PC 53000-47:	**The Forest Service should clarify the difference between miles of trails by primary managed use versus miles of trail opportunities.**
	Response: The total GMNF trail system is approximately 906 miles. Some trails allow for multiple uses along single sections of trail. For instance, many snowmobile trails also provide cross-country skiing opportunities. The Miles of Trails by Managed Use Table (FEIS Table 3.10-4) displays the opportunity for various uses in terms of trail mileage. Miles of trail by "managed use" represent opportunities, stated in miles, available for various trail-based activities. The sum of the mileage displayed in the Table for various activities is greater than miles of trail opportunities (total trail mileage) because many trail segments accommodate more than one activity.
PC 53000-48:	**The Forest Service should meet increasing demand for dispersed recreational opportunities.**
	Response: The Forest Service provides dispersed recreation opportunities throughout the Forest, including hunting, fishing, trail-based activities, roadside camping and picnicking. One way to measure the amount of opportunities for dispersed recreation is the mileage of trails on the Forest. Miles of trail opportunities on the Forest is shown in Table 3.10-4 of FEIS Chapter 3.10. The maximum recreation capacity of the Forest currently exceeds the demand in all recreation setting types (ROS classes),.
SC 53000-48a	TO PROMOTE OLD GROWTH, PROTECT ROADLESS AND WILD AREAS, AND SUPPORT LOCAL ECONOMIES BY PROMOTING ACTIVITIES WITH MINIMAL ENVIRONMENTAL IMPACT
	Response: The Green Mountain National Forest's role in maintaining old growth, roadless and wild areas was a key consideration during the development of the alternatives. The Forest's role in providing mature and old forest habitat, as well as large areas without timber harvest and road construction, was part of the basis for the land allocations in the proposed Alternatives. The Selected Alternative increases the amount of acreage in management areas such as Wilderness Study Areas, Candidate Research Natural Areas, and Ecological Special Areas that promote old growth and protect roadless values. See also response to SC 53000-1q regarding the contribution of the Forest to local economies and PC 62000-42 for discussion of roadless inventory issues.
PC 53000-49:	**The Forest Service should emphasize multiple use trails over single use trails, on trails that have the least ecological effects, and prohibit or minimize multiple uses on trails that have high levels of ecological effects.**

	Response: The environmental effects of trail use and construction are analyzed, along with the impacts of trails on other resource values, at the site-specific level. Specific strategies and mitigation for addressing the environmental effects of a particular trail, whether existing or proposed, would be developed through site-specific environmental analysis and are not within the scope of the revised Forest Plan. The programmatic direction for trails contained in the revised Forest Plan emphasizes multiple-use trails over single use trails (revised Forest Plan p. 35). Goal 12 for the recreation program is to provide sustainable opportunities in all cases (revised Forest Plan p. 15).
PC 53000-50:	**The Forest Service should prohibit new trail construction within the Bingo Brook and Moosalamoo areas because of the rarity of their un-roaded and pristine condition.**
	Response: The Moosalamoo area is allocated to the Moosalamoo Recreation and Education (REA) MA in the Selected Alternative. Programmatic direction, including standards and guidelines, for the MREA MA is contained in Section 8.9, Chapter 3 of the revised Forest Plan (pp. 100-102). Management of the area emphasizes public use, interpretation and education and the protection of special values. In the revised Forest Plan, recreation and trail opportunities will be diverse in this area. Trail construction that complements the management objectives and desired future conditions for the Moosalamoo REA may be considered, based on site-specific environmental analysis with public involvement. Most of the Bingo Brook watershed is allocated to the Diverse Forest Use Management Area in the Selected Alternative. Trail construction that complements the management objectives and desired future conditions for Diverse Forest Use areas may be considered. Management intent is to provide a diverse range of trail opportunities (revised Forest Plan p. 47). Consideration of new trail construction would be based on site-specific environmental analysis with public involvement. The Forest-wide standards and guidelines for trails would apply (revised Forest Plan p. 35). Furthermore, comprehensive trail planning, Goal 12 of the revised Forest Plan (p. 15) will assist in identifying and managing resource-appropriate recreation opportunities on the Forest.
PC 53000-51:	**The Forest Service should evaluate in the Final EIS the need for helicopter servicing for Appalachian Trail and Long Trail facility maintenance and operation.**
	Response: Administrative motorized use, either on the Appalachian National Scenic Trail (AT) or Long National Recreation Trail (LT) footpaths or within the AT or LT Management Areas, may be permitted only when approved in writing by the Forest Service (revised Forest Plan p. 71 and p. 77). The revised Forest Plan is a programmatic document, however, that does not address site-specific implementation concerns such as helicopter servicing of AT and LT facilities. A proposal to use helicopters to service the Trails would be based on administrative review at the local level.
PC 53000-52:	**The Forest Service should include in the Final Revised Plan a trails plan that identifies specific areas for future types of trail development.**
	Response: See response to PC 53000-45.
PC 53000-53:	**The Forest Service should decrease the corridor width and level of use-restriction around the Appalachian Trail, the Long Trail, and similar trails.**
	Response: The Appalachian National Scenic Trail (AT) Management Area is

	defined as the foreground area visible from the AT footpath and associated trail facilities (revised Forest Plan p. 66). The Long Trail Management Area boundary includes GMNF lands within 500 feet either side of the footpath and associated facilities (revised Forest Plan p. 73). The intent is to protect the qualities of the trails that make them part of the National Scenic and Recreation Trails Systems. (The AT Management Area includes the section of the Long National Recreation Trail that is co-aligned with the Appalachian National Scenic Trail.) For more information, see management area direction for the Appalachian Trail and Long Trail MAs, on pages 66 and 73 of the revised Forest Plan.

Trailheads, Signs, Parking (54000)

PC 54000-1:	**The Forest Service should increase parking areas for cross country ski and snowshoe recreation access.**
	Response: The construction of parking areas for cross-country ski and snowshoe access would be suitable in all management areas that allow motorized use, as well as in some areas that do not allow motorized use, under certain circumstances. For example, see guidelines for trailheads in Ecological Special Areas MA (revised Forest Plan p. 96). The revised Forest Plan is a programmatic document, however, that does not address site-specific implementation issues such as developing parking areas. Consideration of parking area development would be based on site-specific environmental analysis with public involvement. Furthermore, comprehensive trail planning, a goal of the revised Forest Plan (see Goal 12 and objectives, p.15), will assist in identifying appropriate trail access points.
PC 54000-2:	**The Forest Service should improve signage to clarify where dog team recreational activities are permitted.**
	Response: Project specifics such as signage, season or timing of use, site mitigation, shared uses, and trail alignment are determined through site-specific analysis or administrative decisions and are not within the scope of Forest Plan revision.
PC 54000-3:	**The Forest Service should implement an "<u>open unless posted closed</u>" signing strategy for managing bike, horse, dog sled, skijor, or hike use on trails and National Forest System roads.**
	Response: Forest-wide standards and guidelines for bicycles, saddle, pack and draft animals, and dog sledding and skijoring reflect management intent to provide opportunities for these activities only on National Forest System trails that are evaluated and designated for these uses (revised Forest Plan p. 36). National Forest System trails on the GMNF are closed to these activities unless specifically designated "open." Appropriate signing for a particular trail or location would be determined through site-specific environmental analysis or administrative decisions. Hiking is allowed on all National Forest System roads and trails and in the general forest area unless prohibited by Forest Order. A decision to close an area to foot travel would be analyzed and determined through site-specific environmental analysis with public involvement except where and when an immediate threat to public health and safety exists. See also response to SC 22000-11a concerning road access.
PC 54000-4:	**The Forest Service should maintain its "<u>closed unless designated open</u>" signing strategy for managing mountain bike use on the Forest.**

	Response: Forest-wide standards and guidelines regarding bicycle use on the Forest have been clarified since the proposed revised Forest Plan in response to public concern. While bicycling on trails will remain permissible only on trails that are evaluated and designated for bicycle use, the policy regarding bicycle use on roads has been clarified. All National Forest System Roads will be open to bicycle use unless posted closed (revised Forest Plan p. 36). See also response to PC 54000-3.

Recreation Fees (55000)

PC 55000-1:	**The Forest Service should prohibit organizations from collecting fees for recreational use occurring on National Forest System lands.**
	Response: A decision to prohibit organizations from collecting fees for recreational use occurring on National Forest System lands would be made at the national level and is not within the scope of the revised Forest Plan.
PC 55000-2:	**The Forest Service should provide a minimum of one free campground on both the North Half and the South Half of the Forest.**
	Response: Both the North Half of the Forest and the South Half of the Forest provide opportunities for dispersed camping in areas where no fees are required. Dispersed camping is permitted throughout the General Forest Area, and in Concentrated Use Areas, which are located outside developed recreation sites. Currently, there is a range of developed camping opportunities with varying levels of services and associated fees across the GMNF. Some campgrounds offer few amenities and request donations for camping while other more developed sites with services require a fee. Fee sites offer on-site amenities, such as potable water, bathrooms, lighting, garbage service, picnic tables, fire grills, paved roads/sites, campground hosts, and interpretive services. Fees are necessary on the GMNF to help augment the costs to operate and maintain the sites and are charged where services and amenities are provided. A guide to camping opportunities on the GMNF is available on the Forest website at: http://www.fs.fed.us/r9/gmfl/green_mountain/recreation_management/camping/index.htm
PC 55000-3:	**The Forest Service should require entrance fees to access areas of the Forest that need specialized trail maintenance.**
	Response: Fees are charged for developed sites that offer on-site amenities, such as potable water, bathrooms, electric hook-ups, lighting, garbage cans, picnic tables, fire grills, paved roads/sites, and interpretive services. Consideration of the need for and feasibility of charging entrance fees to areas of the Forest that need specialized trail maintenance, or fees for developed sites, is not within the scope of this Plan. For more information regarding the Federal Recreation Fee program, see www.fs.fed.us/recreation/programs
PC 55000-4:	**The Forest Service should utilize user fees and donations to fund Forest activities and maintenance.**
	Response: The 2004 Federal Lands Recreation Enhancement Act (REA) granted a 10-year authority to collect and retain fees on federal lands across the United States. REA enables federal agencies, including the Forest Service, to collect user-generated fees and retain receipts for reinvestment into the sites and areas where the fees are collected. Fees may not be charged, however, for general access to national forests, for access to areas where no facilities or services are used, for access to overlooks or scenic pullouts, for undesignated parking areas where no facilities are provided, for picnicking along roads or

	trails, or for individuals under 16. More than 95 percent of the revenues generated from the Green Mountain National Forest recreation fee program currently remain on the Forest and are reinvested into annual recreation facility maintenance and backlog recreation projects. Recreation fees make up only a portion of the funds required to maintain and provide public recreation on the Forest. Volunteers and partnerships provide valuable contributions and help achieve the Forest goals to provide quality recreation opportunities and settings. Currently, the Forest Service has an active donation program that helps support some Forest activities and maintenance. These fee programs are subject to change at the national level and not within the scope of this Plan.

Recreation Permitting (56000)

PC 56000-1:	**The Forest Service should improve management direction for addressing commercial authorizations and use of the Appalachian Trail.**
	Response: The commenter expressed a concern that the Forest Service had not included the use of a template that is being developed by the Region 8 Forests and the Appalachian Trail Conference for managing commercial use of the Appalachian Trail (AT). The language used in the revised Forest Plan reflects agreement with AT partners on the management of commercial authorizations (revised Forest Plan pp. 43-44).

User Education (57000)

PC 57000-1:	**The Forest Service should increase educational programs and opportunities.**
	Response: Revised Forest Plan Goal 19 and its objectives direct the Forest Service to provide a diverse range of information and education opportunities (revised Forest Plan p. 18). The revised Forest Plan is a programmatic document, and as such does not address specific educational programs or opportunities.

Heritage Resources Management (59000)

PC 59000-1:	**The Forest Service should clarify if the Stratton Mountain fire tower will be maintained if designated in an Ecological Special Area.**
	Response: The relevant "Recreation" Guideline for Ecological Special Areas (8.7) includes the statement that "Existing facilities may be maintained as long as they are… significant historic properties" (revised Forest Plan p. 96) The Stratton Mountain fire tower is a significant historic property (as noted in the original comment, it is listed on the National Register) and will be maintained whether or not the area is designated 8.7.
PC 59000-2:	**The Forest Service should maintain and preserve cultural heritage resource sites.**
	Response: The Forest Service agrees with the commenter. Goal 16 of the revised Forest Plan emphasizes protection and stewardship for significant resources (p. 17). The Heritage Resources standards and guidelines (revised Forest Plan section 2.3.15, p. 40) provide for the protection of significant sites in accordance with the National Historic Preservation Act and other pertinent laws and regulations. More specifically, the revised Forest Plan states: "All

	proposed undertakings must take into account the effect on any… heritage resource… prior to implementation. The Forest Service must protect and manage properties found eligible for the National Register, or which remain unevaluated, as if they were listed on the NR.”

Lands and Special Designations (60000)

Land Acquisition and Exchanges (61000)

PC 61000-1:	**The Forest Service should acquire additional lands to add to the GMNF federal land base.**
SC 61000-1a	TO PRESERVE OPEN SPACES AS PUBLIC LAND
SC 61000-1b	BECAUSE INCREASING ACREAGE IN PUBLIC LANDS IS NECESSARY TO BALANCE INCREASING DEVELOPMENT
SC 61000-1c	TO PROVIDE AND PROTECT THE WIDEST VARIETY OF VIABLE WILDLIFE HABITATS
SC 61000-1d	TO PREVENT PRIVATE INTERESTS FROM CONTROLLING VERMONT’S WOODLANDS AND WILDERNESS
SC 61000-1f	TO PROVIDE THE WIDEST VARIETY OF SUSTAINABLE RECREATION OPPORTUNITIES THAT ARE NOT POSSIBLE ON PRIVATE LAND
SC 61000-1g	TO ENSURE PRESERVATION OF FOREST LAND THAT WILL CONTINUE TO PROVIDE A WIDE VARIETY OF SUSTAINABLE FOREST PRODUCTS
SC 61000-1h	TO PROVIDE ACCESS TO UPPER PLAINS ROAD IN SALISBURY
	Response: The GMNF has a very active land acquisition program (revised Forest Plan Goal 22, p. 18), and has acquired about 92,000 acres since the 1987 Forest Plan was approved. The Forest Service is fortunate to have strong congressional support, dedicated and experienced lands staff, and outside partners to provide assistance in land purchases. Funding for land acquisition is dependant upon yearly appropriations from the Congress and can fluctuate greatly from year to year. By law, other funds allocated to other Forest Service programs cannot be used for land purchases. The Forest Service purchases land from willing sellers. The Forest Plan contains priorities for land acquisition (revised Forest Plan p. 41).
SC 61000-1e	TO PROVIDE AND MAINTAIN FOREST HEALTH AND THE HIGHEST POSSIBLE SOIL, WATER, AND AIR QUALITY
	Response: The Forest Service agrees that these are benefits resulting from land acquisition.
PC 61000-2:	**The Forest Service should not acquire additional lands to add to the GMNF federal land base.**
SC 61000-2a	BECAUSE FOREST SERVICE MANAGEMENT RESTRICTS PUBLIC LAND-USE OPPORTUNITIES
	Response: Funding is specifically allocated each year to purchase lands within each national forest’s proclamation boundary. Funding is made available under the Land and Water Conservation Fund, of which the goal is to provide a “quality and quantity” of outdoor recreation resources to all “citizens.” Moreover, land purchases, which occur from willing sellers only, are done so under the authority of the Weeks Act, the purpose of which is to conserve watersheds and forest land. Specific decisions regarding the management of newly acquired lands do not occur without public involvement, as required under the National Environmental

	Policy Act. Goal 22 of the revised Forest Plan includes an objective that the Forest Service consult with towns and the State in land adjustment program activities (p. 18). Public land is available for a variety of uses which do not normally include private development.
SC 61000-2b	BECAUSE PRIVATE INDIVIDUALS ARE THE BEST STEWARDS OF THE LAND
	Response: Indeed there are many private individuals who are good stewards of the land. The Forest Service also strives to achieve strong stewardship of National Forest System lands, which is reflected in the revised Forest Plan's goals and objectives, Forest Service management practices, mission, and vision, and the environmental laws by which the Forest Service abides.
SC 61000-2c	BECAUSE FOREST SERVICE PURCHASES INCREASE THE PRICE OF OTHER LAND
	Response: The Forest Service agrees that public land ownership may affect the value of surrounding lands due to the amenities provided by public land.
PC 61000-3:	**The Forest Service should acquire lands to extend protection of ecological environments and features.**
SC 61000-3a	IN THE TACONIC MOUNTAINS
	Response: See response to PC 61000-1.
SC 61000-3b	OUTSIDE THE PROCLAMATION BOUNDARY IN THE CHAMPLAIN VALLEY
	Response: To expand into the Champlain Valley (extend the proclamation boundary) would require an Act of the Congress and is outside the scope of the revised Forest Plan. A governmental agency such as the Forest Service cannot lobby for such actions to occur. The proclamation boundary expansion that occurred in 1991 to include a portion of the Taconic Range was a result of a grassroots effort among eight communities in southern Vermont.
SC 61000-3c	IN THE LANDS AROUND SOMERSET RESERVOIR AND THE EAST BRANCH OF THE DEERFIELD RIVER
SC 61000-3d	IN LANDS THAT INCLUDE WILDLIFE TRAVEL CORRIDORS AND OTHER SIGNIFICANT WILDLIFE HABITATS
SC 61000-3e	ALONG THE APPALACHIAN AND LONG TRAILS
	Response: See response to PC 61000-1 and SC 22000-5q.
PC 61000-4:	**The Forest Service should acquire lands to increase the acreage in designated Wilderness.**
	Response: Private lands within Wilderness areas have been identified and are a top priority for purchase (revised Forest Plan p. 41).
SC 61000-4a	WITHIN OR ADJACENT TO EXISTING WILDERNESS AREAS
	Response: Consolidation of public ownership is one of the Land Ownership Adjustment Guidelines (revised Forest Plan p. 41).
SC 61000-4b	IN THE CHATEQUAY-NOTOWN CONSERVATION AREA
	Response: See response to SC 61000-3b. This area is outside of the Proclamation Boundary.
PC 61000-5:	**The Forest Service should implement a more open public process when consulting with towns on land acquisition rather than only consulting a limited number of town representatives.**
	Response: The commenter's suggestion is outside the scope of the Forest Plan revision process. The Forest Service seeks the support of town Select boards for land purchases but is not required to get their consent. There have been cases when a Select board has put a potential acquisition out for a town vote. The Forest Service has adjusted a land ownership guideline to read "Consider the goals of towns, regional planning commissions, and the State of Vermont"

	(revised Forest Plan p. 41).

Land Designations/Management (62000)

PC 62000-1:	**The Forest Service should manage all public lands within the GMNF federal land base to preserve them as a "Legacy for the Future."**
SC 62000-1a	TO PREVENT DISRUPTION AND DEGRADATION CAUSED BY HUMAN ACTIVITY
SC 62000-1b	TO PROVIDE AN ALTERNATIVE TO DENSELY-POPULATED LANDS
SC 62000-1c	TO PROTECT LARGE BLOCKS OF UNFRAGMENTED FOREST LAND
SC 62000-1d	TO PROVIDE WILDERNESS-QUALITY RECREATION AND ENJOYMENT OF NATURE
	Response: These comments are concerned that the GMNF, as a public land resource, should provide uses that private lands cannot. The Forest Service recognizes that because more than 70 million people currently live within a day's drive of the GMNF, public land is under increasing pressure to serve the people of this region in a variety of ways. As the coming decades are predicted to bring further urbanization, sprawl, and loss of open space, the Forest Service management philosophy will continue to be guided by the belief that public land in the Northeast will be increasingly scarce and precious (revised Forest Plan p. 9). The GMNF does protect large, contiguous blocks of land. As such, it is well suited to provide backcountry recreation opportunities as well as unfragmented habitat settings. The remote nature of much of the Forest also makes congressionally designated Wilderness a unique role for this public land resource (revised Forest Plan p. 9).
PC 62000-3:	**The Forest Service should pre-designate lands to the Diverse Forest Use MA to continue active forest management on lands that historically have been working forest.**
PC 62000-8:	**The Forest Service should allocate MAs allowing active forest management on lands that historically have been working forest.**
PC 62000-9:	**The Forest Service should substantially increase the allocation of the Diverse Forest Use MA to support the timber-based economy of Vermont and to increase the availability of forest products.**
	Response: The Diverse Forest Use MA emphasizes a variety of forest uses. Vegetation management in this MA is focused on sustainable production of high-quality sawtimber and other timber products. The Selected Alternative allocates 118,717 acres, 30 percent of the Forest, to the Diverse Forest Use MA. In addition, 295,186 acres of land that are within the Forest Service Proclamation Boundary but not currently owned by the Forest Service would be designated Diverse Forest Use MA if they were purchased by the Forest Service. Diverse Forest Use is not the only management area that supports timber production; however, a total of 189,616 acres on the Forest are suitable for timber production (FEIS Timber section 3.13). The Forest Service considers land use history, resource information as provided in GIS data layers, recreational opportunities, and access when making decisions about the management of current GMNF lands, as well as possible management of lands that might be acquired within the GMNF Proclamation Boundary (see FEIS Appendix G).
PC 62000-5:	**The Forest Service should increase acreage designated as Remote**

	Backcountry Management Area.
	Response: See also response to PC 53000-1. The commenter is concerned that there are already more than enough miles of snowmobile trails on the Forest, and wants to see more lands allocated to non-motorized MAs such as Remote Backcountry Forest. The laws and regulations which govern national forests require that they be managed according to multiple-use principles. Using tools such as the Recreation Opportunity Spectrum, the Forest Service manages land for a range of recreation experiences and settings. The revised Forest Plan therefore establishes a balance of uses, and motorized recreation activities such as snowmobiling are an appropriate recreation use. The revised Forest Plan also provides management areas that focus on non-motorized recreation activities. Remote Backcountry Forest, Wilderness, Wilderness Study Areas, the Appalachian Trail, and Long Trail Management Areas, for example, all provide non-motorized recreation experiences. Management areas that provide a completely non-motorized experience total 43 percent of the Forest, and areas that prohibit summer motorized uses total 55 percent of the Forest (FEIS Chapter 3.10).
PC 62000-7:	**The Forest Service should change the allocation of all lands affected by the Battell Trust to comply with the provisions of that trust to preserve the primeval nature of that land.**
	Response: The approximately 30,000 acres of NFS lands originally owned by Joseph Battell have been, and will continue to be, managed with respect for the legacy of Mr. Battell. That said, however, the Forest Service is not legally obligated to be the keeper of that legacy. The United States does not acquire land with conditions on management or encumbrances in the title which would restrict the ability of the Forest Service to manage the land. Battell, a wealthy turn-of-the-century landowner in Middlebury, donated approximately 30,000 acres of land to his alma mater, Middlebury College, in 1915. These were lands that had been carefully tended by a forester and had been managed for forest products under newly emerging principles of scientific forestry. Battell's will stated that approximately 9,000 acres of this land should be managed as a park, and 21,000 acres, depicted as "Battell Forest," should be managed with no associated use restrictions. From 1936 through 1948, lands within the "Battell Forest" were sold without restrictions to the Forest Service. In 1949, a Court decreed that the College could sell the "Battell Park" to the Forest Service, believing the agency could best manage the lands for the long term, and the purchaser would have no obligation or responsibility as it pertained to the terms of the Battell Will (Brewster 1999). Allocation of the Battell lands in the revised Forest Plan is in keeping with Mr. Battell's legacy as a careful steward of Vermont's forested landscape. Of the former "Battell Park" lands, 97 percent will be managed without timber harvesting (Wilderness, Wilderness Study Area, or Long Trail MAs). Furthermore, of all former Battell lands, including the former "Battell Forest" lands, 70 percent will be managed without commercial timber harvest, in management areas such as Wilderness, Wilderness Study Area, Remote Backcountry, and Alpine/Subalpine Special Area. The remainder will be managed in keeping with the Forest Service's role of caring for these lands for future generations.
PC 62000-10:	**The Forest Service should include the escarpment, the Long Trail, any**

	relevant portions of new Wilderness Areas, Rattlesnake Point, and the Robert Frost Trail within the Moosalamoo Recreation and Education Area Management Area.
	Response: The Moosalamoo Recreation and Education Area Management Area does not include the Long Trail, any new Wilderness Areas, Rattlesnake Point, or the Robert Frost Trail. While these features may be within the general Moosalamoo region, they are not a part of the Recreation and Education Management Area. These features are contained in other management areas, and are managed to protect the unique features of these areas. The Forest Service has determined that the Long Trail, Rattlesnake Point, and the Robert Frost Trail need management direction other than the Moosalamoo Recreation and Education Area MA in order to protect, maintain, and enhance their respective values. Furthermore, overlays of management areas are minimized in the revised Forest Plan, to avoid confusion in management direction. The commenter also suggested specific boundaries for the Moosalamoo Recreation and Education Area MA. The Forest Service appreciates the suggestions regarding ease of identifying and managing boundaries, and has mapped the eastern boundary of the MA along roads and trails.
PC 62000-11:	**The Forest Service should use non-restrictive MA allocations on lands where existing trails may need to relocate or complete missing segments.**
	Response: The Forest Service recognizes that trail systems such as the Catamount Trail need to relocate or complete missing segments from time to time. While MA allocations are restrictive for reasons such as protecting wildlife habitat, the Forest Service will build flexibility into resource management wherever possible. For example, the Forest Service made adjustments to facilitate the need for trail completions, such as in the Remote Wildlife Habitat MA where standards and guidelines have been adjusted to accommodate development of existing trail systems (revised Forest Plan p. 62).
PC 62000-12:	**The Forest Service should change MA allocations to allow timber management in specific areas.**
SC 62000-12a	EAST OF MOUNT HORRID ALONG SMITH BROOK
SC 62000-12b	EAST OF THE LONG TRAIL ON ROMANCE MOUNTAIN
SC 62000-12c	UPSLOPE FROM FOREST ROAD 49 IN HANCOCK
	Response: The Forest Service re-examined the proposed MA allocations in these areas and feels that they have been designated appropriately. Most of these areas are now allocated to the Remote Backcountry Forest MA (FEIS Table 2.1.6). The emphasis of this MA is on large expanses of relatively natural landscapes. Management actions are limited to those that help restore those landscapes. Changing the MA allocation in these areas would present management challenges that would outweigh the benefits of increased timber harvest opportunities (FEIS Table 2.1.6).
SC 62000-12d	IN THE BINGO BROOK DRAINAGE
	Response: The Forest Service re-examined the proposed MA allocation in this area and, in light of other allocation changes, will manage this area as Diverse Forest Use MA rather than Remote Backcountry Forest MA. See response to PC 62000-14c for further discussion of the MA allocation changes in this area subsequent to the release of the proposed revised Forest Plan. In the region north of FR 42 in the Bingo Brook Drainage, 2,160

	acres will now be managed as Diverse Forest Use MA, thus allowing different timber management options in the area (FEIS Table 2.1.6).
PC 62000-13:	**The Forest Service should reallocate the former International Paper and Stanley Tools lands.**
SC 62000-13a	TO DIVERSE FOREST USE
	Response: These comments are concerned that lands in the southern end of the North Half of the Forest are not being managed for traditional uses such as timber, early successional habitat, and recreation such as hunting, angling, and trapping. These lands are classified in a variety of management areas, including Diverse Forest Use, Diverse Backcountry, and Remote Wildlife. All of these management areas are open to hunting, angling, and trapping uses. In fact, hunting, trapping, and fishing are allowed on all NFS lands. The Forest Service can also manage for early successional habitat in all of these management areas. Finally, regarding timber management in this area, the intent of the Remote Wildlife Habitat Management Area is to combine vegetation management, including commercial timber harvesting, with a lower degree of disturbance from recreation and other activities (revised Forest Plan p. 60). Timber management is in fact the primary tool for habitat manipulation in this management area. The goals expressed by this commenter can be achieved on the former International Paper and Stanley Tools lands within the management allocations of the revised Forest Plan.
SC 62000-13b	TO A MANAGEMENT AREA MORE RESTRICTIVE THAN DIVERSE FOREST USE FOR LANDS ABOVE 2,500 FEET IN ELEVATION
	Response: GMNF lands above 2,500 feet in elevation will continue to be protected through existing MA allocation. Approximately 21,000 acres (5%) of the Forest that are considered suitable timber lands in management prescriptions that allow harvesting are at an elevation over 2,500 feet. These suitable timber lands have always received, and will continue to receive, special consideration in site-specific environmental analysis. See also response to SC 34000-14a.
PC 62000-14:	**The Forest Service should allocate appropriate MAs to allow existing and future motorized uses.**
SC 62000-14a	BETWEEN STRATTON POND AND KELLY STAND ROAD
	Response: In the revised Forest Plan and FEIS, the area between Stratton Pond and Kelly Stand Road in Stratton and Sunderland is designated as Remote Backcountry Forest MA. Under this designation, roads and trails will be closed to public motorized vehicles to preserve the non-motorized recreation and wildlife values in the area. When the Forest Service acquired this land, there was a secondary snowmobile trail to Stratton Pond, the Stratton Pond Trail, in the area. This trail was later closed due to increasing user conflicts in the area. There is an existing snowmobile trail in this area on the IP Road, FR 341, on the eastern boundary of the Remote Backcountry Forest MA.
SC 62000-14b	FOR SNOWMOBILE ACCESS TO TRUES STORE IN WOODFORD
	Response: The Forest Service reviewed information received regarding motorized uses in the area of Trues' Store in Woodford. The trail connection to Trues' Store, which supplies gas and other items to snowmobilers, was not mapped when the alternatives were developed. A comment letter pointed out the existence of this access trail. In addition, the trail is located under a powerline that was also not mapped in the DEIS.

	Given this new information, the Forest Service concluded that an MA allowing continued snowmobile access to this destination is appropriate for the area. The MA in the area of Trues' Store in Woodford, south of the powerline, is now Diverse Forest Use MA (FEIS Table 2.1.6).
SC 62000-14c	FOR AN EAST-WEST SNOWMOBILE TRAIL SOUTH OF WORTH MOUNTAIN
	Response: The Forest Service received public comments both in support of an east-west snowmobile corridor south of Worth Mountain and against motorized use in this area. The Preferred Alternative designated a stretch of Diverse Backcountry MA south of Worth Mountain that would have allowed for a future motorized trail. After field investigation, however, Forest Service staff determined that the area is infeasible for a future east-west motorized trail due to cost and steep slope considerations. The Forest Service has therefore determined that a trail is not practical in that location and has changed the western section of the proposed Diverse Backcountry MA to Remote Backcountry Forest MA in the Selected Alternative. The eastern section of the proposed Diverse Backcountry MA within this area will now be designated as Diverse Forest Use MA in the Selected Alternative (FEIS Table 2.1.6). In order to maintain the potential for a future east-west snowmobile trail on the North Half of the Forest, the Forest Service has changed a land allocation in the Proclamation Boundary Mapping (FEIS Appendix G) along Route 125 to Diverse Forest Use MA. This means that should the Forest Service ever acquire this piece of land, there would be a continuous land use designation along Route 125 that would be compatible with future motorized uses.
PC 62000-15:	**The Forest Service should change the allocation of lands between the George D. Aiken Wilderness Area and Route 8 to Remote Backcountry or Remote Wildlife Habitat.**
SC 62000-15a	TO ENHANCE THE VALUE OF THE WILDERNESS
	Response: The lands between the Aiken Wilderness and Route 8 on the South Half of the GMNF will be managed as Diverse Backcountry MA and Diverse Forest Use MA. A 12,700-acre Diverse Backcountry unit surrounds the wilderness to the south and east. This designation is due to the combination of the semi-primitive setting and existing motorized trails. These lands surrounding the Aiken Wilderness allowed motorized uses in the 1987 Plan, including, potential summer ORV use; the Selected Alternative retains the area's semi-primitive motorized condition. In the area east of the Aiken Wilderness, for example, current motorized uses total approximately 15 miles, including the Corridor 9 snowmobile trail, the FT290 snowmobile trail, and other trails in the area. A non-motorized land allocation was not appropriate for this area, given this existing level of motorized use. Although the Remote Wildlife Habitat MA could have been allocated in this area because it permits existing motorized trails, it was not allocated because it is a motorized-accessible area not considered remote. Whether or not additional motorized uses will be considered in this region will be evaluated using a site-specific environmental analysis and public involvement. See also response to PC 62000-16a.
SC 62000-15b	TO PROTECT BEECH STAND HABITATS THAT ARE IMPORTANT FOR BLACK BEARS
	Response: The commenter is concerned about beech stands that

	experience high bear use located in the area east of the Aiken Wilderness. The Forest Service allocated this area to Diverse Backcountry and Diverse Forest Use Management Areas and feels that these designations will adequately protect bear habitat. Goal 2 in the revised Forest Plan is to "Maintain and restore quality, amount, and distribution of habitats to produce viable and sustainable populations of native and desirable non-native plants and animals" (revised Forest Plan p. 10). The revised Forest Plan also specifically identifies bear-clawed beech trees, especially groups of such trees, as mast trees to be retained as a Forest-wide guideline (revised Forest Plan p. 29). Additionally, Goal 7 in the revised Forest Plan is to "Protect rare or outstanding biological, ecological, or geological areas on the GMNF" (revised Forest Plan p. 14). Regionally important, foraging habitat for black bears, as identified by biologists from the Forest Service and the Vermont Fish and Wildlife Department, are considered outstanding biological and ecological areas. Finally, projects conducted or permitted by the Forest Service that would potentially affect bear habitat will be evaluated using a site-specific environmental analysis and public involvement. Management direction that provides protection for black bears and black bear habitat, whether in the form of goals or guidelines, applies Forest-wide and in all management areas. Similarly, the Forest Service will evaluate potential effects of individual projects on black bears, bear habitat, and on other resources in any management area on the GMNF.
PC 62000-16:	**The Forest Service should prevent the encroachment of disturbance, pollution, and erosion by excluding additional motorized uses from a 3-mile buffer zone.**
SC 62000-16a	AROUND DESIGNATED WILDERNESS AREAS
	Response: The revised Forest Plan does not create a buffer zone around designated wilderness areas and this has been clarified in the FEIS (FEIS section 3.12). To do so would be inconsistent with Forest Service policy (Forest Service Manual 2320.3, #5). This policy states "Do not maintain buffer strips of undeveloped wildland to provide an informal extension of wilderness." The policy further directs the Forest Service to use the Recreation Opportunity Spectrum to plan adjacent land management. Projects outside wilderness areas are planned to minimize negative effects on wilderness values. Where possible the Forest Service surrounds wilderness areas with management areas whose activities and Desired Futures Conditions are more consistent with wilderness objectives, but it was not possible to do in this area. A description of land use designations surrounding existing wilderness and proposed wilderness study areas can be found in section 3.12 of the FEIS.
SC 62000-16b	ALONG THE APPALACHIAN AND LONG TRAILS IN WOODFORD, STRATTON, AND WINHALL
	Response: The Appalachian and Long Trails are each protected within their own management areas. The Appalachian National Scenic Trail MA has a minimum width of 500 feet on either side of the AT footpath for "protection from social, aural, and other impacts." This MA is mapped as the foreground area visible from the AT footpath and associated trail shelters, overnight use sites, viewpoints, water sources, and spur trails (revised Forest Plan p. 66). The Long Trail Management Area also extends 500 feet on either side of the

	footpath. The Forest Service feels this area will adequately protect these trail resources and experiences.
SC 62000-16c	ADJACENT TO ALL EXISTING HIKING TRAILS AND NATURE PATHS
	Response: The Code of Federal Regulations requires the Forest Service "to the degree consistent with needs and demand for all major resources" to provide a broad spectrum of outdoor recreation opportunities (36 CFR 219.21). Therefore, both motorized and non-motorized forms for recreation are recognized as acceptable and valid uses of national forests. Forest Plan direction addresses the competing demands of motorized and non-motorized enthusiasts by designating certain parts of the Forest as non-motorized, such as the Remote Backcountry Forest Management Area. Potential conflicts between uses are addressed at the site-specific analysis level. Given the extent of hiking trails on the GMNF, a 3-mile buffer around all hiking trails and nature paths would effectively exclude all motorized uses on the Forest. The Multiple-Use Sustained Yield Act of 1960 states that, "It is the policy of the Congress that the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes." This means that the National Forests will be managed to provide for the use of all the various renewable surface resources in a combination that best meets the needs of the American people. The Selected Alternative and revised Forest Plan provide a balance between competing concerns while managing for biological diversity, off-road vehicles, timber harvest, and non-motorized recreation.
PC 62000-18:	**The Forest Service should allocate MAs that emphasize non-motorized recreation or remote wildlife habitat.**
SC 62000-18a	TO THE WEST OF SOMERSET RESERVOIR
	Response: This comment referred specifically to lands west of Somerset Reservoir, on the South Half of the Forest. These lands were designated Diverse Forest Use MA in the Selected Alternative. The Forest Service considered respondents' concerns regarding ecological values and wildlife habitat in this region and determined that the most appropriate land use for the area remains Diverse Forest Use MA. As this area is readily accessible, currently contains roads, and has a VAST corridor trail, a non-motorized or remote management area designation is not considered appropriate. Further planning for the protection of wildlife and plant species in this area will be evaluated using a site-specific environmental analysis and public involvement.
SC 62000-18b	ALONG THE DEERFIELD RIVER AND ITS HEADWATERS
	Response: The section of the Deerfield River from its headwaters to the Searsburg Reservoir is an Eligible Scenic River. Scenic Rivers are rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads (DEIS pp. 3-259-261). This segment of the river, in an area one-quarter mile out from each river bank, is protected under the standards and guidelines of MA 9.4, Eligible Wild, Scenic, and Recreational Rivers (revised Forest Plan pp. 108-109). Management of Eligible Scenic Rivers will protect the values that led that river to be determined eligible, which, for the Deerfield River, are hydrologic and wild values (revised Forest Plan p. 106). Although recreation management in Eligible Scenic River segments will be toward the Recreation Opportunity Spectrum Class of Semi-primitive Motorized, project-level planning will consider the Deerfield River's

	Outstandingly Remarkable Values when considering new motorized recreation uses. See also response to SC 62000-19f.
SC 62000-18c	SURROUNDING STRATTON POND
	Response: The area surrounding Stratton Pond was recommended for Remote Backcountry Forest MA designation in the Preferred Alternative. Remote Backcountry Forest MA prohibits motorized uses. The Selected Alternative retains this non-motorized management area designation surrounding Stratton Pond.
SC 62000-18d	ALONG THE NORTH SIDE OF THE WINHALL RIVER
	Response: This comment concerns protection of fish habitat in the Winhall River by protecting its north bank from erosion due to logging and motorized activity. The revised Forest Plan protects fish habitat from erosion through its Forestwide Management Direction, Soil, Water and Riparian Area Protection and Restoration Standards and Guidelines (revised Forest Plan pp. 20-22). This management direction dictates such erosion control measures as protective strips around all water sources. Furthermore, the Winhall River in this section is an Eligible Wild River (DEIS p. 3-261). Although the intent of the National Wild and Scenic Rivers Act is to protect various values of America's free-flowing rivers and is not expressly a habitat protection mechanism, the Winhall River's Eligible Wild River status adds to its level of protection from potentially detrimental activities. This segment of the river, in an area one-quarter mile out from each river bank, is protected under the standards and guidelines of MA 9.4, Eligible Wild, Scenic, and Recreational Rivers (revised Forest Plan pp. 108-109). Commercial timber harvest activities and new motorized trails are prohibited in this management area, in order to preserve a primitive experience and allow natural forces to dominate.
SC 62000-18e	IN THE MAD TOM DRAINAGE
	Response: The lands in the Mad Tom drainage will be managed as Diverse Forest Use MA and, in the western portion along the river, as Green Mountain Escarpment MA (FEIS Table 2.1.6). The commenter's primary concern regarding this area was protection of the Appalachian Trail experience. The Forest Service feels the Appalachian National Scenic Trail Management Area provides an appropriate level of protection for the trail, and comprehensive prohibition of motorized uses surrounding the AT is not necessary
SC 62000-18f	IN THE HEADWATERS OF THE OTTAUQUECHEE RIVER
	Response: The area surrounding the headwaters of the Ottauquechee River is managed as Diverse Forest Use. The Ottauquechee River itself is an Eligible Recreation River, and an area one-quarter mile in width from each river bank will be managed under MA 9.4, Eligible Wild, Scenic, and Recreational Rivers (revised Forest Plan p. 109). The Ottauquechee in this area will be managed to preserve its outstanding recreation value. Site-specific environmental analysis will therefore take this value into consideration when studying new proposals in the river corridor area.
PC 62000-19:	**The Forest Service should designate Wilderness Study Area or Remote Backcountry MAs.**
SC 62000-19a	ADJACENT TO PROPOSED WILDERNESS STUDY AREAS
	Response: These comments are concerned that proposed Wilderness Study Areas, particularly in Glastenbury, should be surrounded by non-motorized uses. Forest Plan direction needs to address the competing demands of

	motorized and non-motorized enthusiasts alike. The area north of the Glastenbury Wilderness Study Area contains a snowmobile trail that is unique for the primitive experience it provides motorized recreationists. These experiences must be balanced with the interests of non-motorized recreationists. The revised Forest Plan does not create a buffer zone around designated wilderness areas, and this has been clarified in the FEIS (FEIS Chapter 3.12). To do so would be inconsistent with Forest Service policy (Forest Service Manual 2320.3, #5). For further information on land-use planning around wilderness and wilderness study areas, see response to SC 62000-16a.
SC 62000-19b	ADJACENT TO THE WHITE ROCKS NATIONAL RECREATION AREA
	Response: The commenter is concerned with a particular section of the White Rocks National Recreation Area, in the northeast section of the NRA. The area will be managed as Diverse Forest Use MA. This area was analyzed during the development of the alternatives based on the recommendations of The Nature Conservancy (TNC) for protection of the area in a Gap 1 or Gap 2 status. There were no high-quality rare or outstanding ecological features in the area (identified either by the Vermont Nongame and Natural Heritage Program or the Forest Service) to warrant allocation to the Research Natural Area or Ecological Special Area management areas. In addition, the area of interest includes portions of two VAST Corridor snowmobile trails, making it unsuitable for Remote Backcountry MA designation unless the Forest Service was to close the trails. In general, alternatives were developed with the intent to maintain existing legal recreational uses, and no corridor snowmobile trails were allocated to management areas that would require closure in the Selected Alternative. The area of interest in and of itself is not remote, is relatively small, and while it is contiguous in part to the NRA, it is fragmented and is surrounded elsewhere by private ownership. Because the area is along the edge of the National Forest ownership, it is strongly influenced by adjacent private land uses, including private motorized trail development, logging, and housing development. Because the NRA has a different major emphasis than Remote Backcountry MA, designating this adjacent area as Remote Backcountry or Remote Wildlife Habitat MA means it would have to stand on its own to meet that management area's major emphasis. The area cannot do this due to its size, fragmentation, and intermingling with adjacent private land uses that are likely contrary to the purposes of either the Remote Backcountry or Remote Widlife Habitat MA designation. While there were some small areas designated as Remote Wildlife, these had special features, notably important black bear habitat, that added value to that designation. This area was included in the Roadless Area Inventory and Evaluation, and the reasons why this area was not carried forward as a Wilderness Study Area are contained in Appendix C of the FEIS (Roadless Area 92012). Consequently, the Forest Service decided not to allocate these lands to designations desired by the commenter. Part of the commenter's concern with designation of this area had to do with the presence of ecosystems in the area that are not well represented within the current group of protected designations (known as the ecological reference area network; see section 3.11 of the FEIS for further discussion of

	this network). The ecosystems of concern included five ecological land unit groups associated with low-elevation forests, mid-elevation warm and enriched warm slope forest types, low cool slope forest, moist conifer flats, and wetlands. Based on the revised allocations found in the Selected Alternative, the revised Forest Plan protects at least 25 percent of the area of each of these types in the ecological reference area network, greater than the target of 20 percent desired by The Nature Conservancy (TNC 2004). Consequently, it is not necessary to add the areas adjacent to White Rocks to this network to ensure adequate protection of these five ecological types. A commenter was also concerned about the Appalachian Trail and management of the Stamford Meadows area, on the South Half of the Forest. This area will be managed as Diverse Backcountry MA. As with elsewhere along the Appalachian Trail, the AT will be managed in its own management area to emphasize AT values.
SC 62000-19c	ALONG THE APPALACHIAN TRAIL, THE LONG TRAIL, AND SIMILAR TRAILS AND FACILITIES
	Response: Some of these comments were directed at specific areas of the Appalachian Trail and Long Trail where the commenters felt adjacent motorized uses were inappropriate. One of these areas is the Long Trail in Hancock, around Romance Mountain. The management area designation of that particular area around the Long Trail has been changed and is now Remote Backcountry Forest, which prohibits motorized uses. See also response to SC 62000-14c. Other areas surrounding the Appalachian Trail and Long Trail were considered on a case-by-case basis. For example, commenters also wanted to see Remote Backcountry MA around Stratton Pond, due to concerns about access to non-motorized winter recreation opportunities. This area was Remote Backcountry in the Proposed Revised Forest Plan, and it remains so in the revised Forest Plan.
SC 62000-19d	AROUND BOLLES BROOK
	Response: The area around Bolles Brook was evaluated as part of the Glastenbury Roadless Area (RA). This region of the Glastenbury RA was not recommended for wilderness designation in the proposed Forest Plan due to the improved roads in the area. Subsequent to the release of the proposed Plan and completion of the Roadless Inventory the Forest Service received new information about the area surrounding Bolles Brook. Based on this new information, the Glastenbury Wilderness Study Area was expanded to 22,425 acres to include the area around Bolles Brook. Most of the lands surrounding Bolles Brook will now be managed as a Wilderness Study Area (FEIS Table 2.1.6).
SC 62000-19e	ACROSS A FULL TOPOGRAPHICAL GRADIENT OF THE GREEN MOUNTAIN ESCARPMENT TO PROTECT HABITATS FROM LOW WETLAND TO MOUNTAINTOP
	Response: See response to SC 62000-46h.
SC 62000-19f	AROUND THE HEADWATERS OF THE DEERFIELD RIVER
	Response: The lands around the headwaters of the Deerfield River will be managed as Diverse Backcountry MA and Diverse Forest Use MA. This area was part of the Glastenbury Roadless Area, evaluated in the 2004 Roadless Inventory. While 22,425 acres of the Glastenbury Roadless Area are recommended as Wilderness Study Area in the Selected Alternative, the area around the headwaters of the Deerfield River was not found to be appropriate for wilderness recommendation. Non-motorized management

	allocations such as Remote Backcountry Forest MA were also determined inappropriate for the area due in part to the Corridor 7 snowmobile trail that crosses the area, as well as other roads and motorized trails in the vicinity. See also response to PC 62000-18b.
PC 62000-20:	**The Forest Service should allocate lands to the Remote Wildlife Habitat MA.**
	Response: Public comments demonstrated diverse opinions regarding wildlife, habitat management, and the course that the GMNF should follow during the next planning cycle and beyond (see sub-concerns under this PC and PC 62000-21). The intention of the Remote Wildlife Habitat (RWH) MA is to create diverse habitat conditions for wildlife while retaining the remote characteristics of the area (revised Forest Plan p. 60). From the standpoint of wildlife and wildlife habitat, remoteness and lack of habitat management are not synonymous. Support of diverse wildlife populations requires a mix of habitat conditions. Diversity of habitat in the forest setting is created in large part by diversity in species and age composition of the vegetation, and the resulting diversity in the horizontal and vertical structure of the forest communities. Different seral or successional stages of forest development, from regeneration through old growth, are characterized by particular forest and habitat structures. Habitat use by many species of wildlife spans successional stages of forest development, especially seasonally; habitat use by other species may be more closely associated with specific conditions. Land use history and abiotic features, such as elevation, slope, aspect, soil, and climate, also are integral components of habitat. Altering composition and structure of vegetation is the most effective and direct means to affect habitat conditions. Thus, timber and vegetation management are the primary tools used by the Forest Service for habitat manipulation. Specific tools include even- and uneven-aged silviculture, which can be applied through commercial timber sales, service contracts, volunteer activities, and partnerships. Careful application of vegetation management can create and maintain forests with diverse vegetation composition and age structure that provide equally diverse habitats for wildlife. Variations of this habitat management will be applied across the GMNF with site- and area-specific interpretations, depending on Forest-wide and MA direction. In the case of the RWH MA, management will be consistent with the remote character of the land.
SC 62000-20a	ADJACENT TO DESIGNATED WILDERNESS AND WILDERNESS STUDY AREA RECOMMENDATIONS
	Response: In allocation of the Remote Wildlife Habitat (RWH) MA, Forest Service planners considered inventoried Recreational Opportunity Spectrum (ROS), presence or proximity of existing roads or trails, other aspects of access, timber suitability, historical land use, and regional wildlife concerns. To the greatest extent possible, the Forest Service allocated this MA to areas of the GMNF that currently are remote and include few existing roads and trails. The RWH MA allocation was not always possible adjacent to existing Wilderness MAs. Designated Wilderness and recommended Wilderness Study Areas (WSA) MAs, as well as the Remote Backcountry Forest MA (RBF), also are located in more remote regions of the GMNF. Consequently, likely settings for the RWH MA would in many cases be adjacent or in proximity to these other remote areas. Habitat management in lands adjacent to Wilderness, WSA, and RBF MAs would provide favorable habitat,

	particularly for foraging, for many of the animal species that inhabit these areas during all or part of the year. In other areas, lands were allocated to the RWH MA because of specific wildlife concerns, such as seasonal bear feeding habitat or well-identified wildlife travel corridors. Some of these lands are not immediately adjacent to existing Wilderness, WSA, or RBF MAs. An analysis of land uses adjacent to Wilderness and Wilderness Study Area MAs can be found in section 3.12 of the FEIS. The Selected Alternative allocates near Wilderness and Wilderness Study Area MAs an amount of compatible management areas that is equal to or greater than that of the other alternatives (FEIS section 3.12).
SC 62000-20b	BECAUSE WILDLIFE BENEFIT FROM LOGGING AND SOUND FOREST MANAGEMENT
	Response: See responses SC 22000-27f and 22000-27g.
PC 62000-21:	**The Forest Service should not allocate lands to the Remote Wildlife Habitat MA.**
SC 62000-21a	BECAUSE SUFFICIENT REMOTE AREAS ALREADY EXIST ON GMNF FEDERAL LANDS
	Response: See the response to PC 62000-20 for a general discussion of the Remote Wildlife Habitat (RWH) MA. As described in the FEIS, approximately 43 percent of the GMNF land base is allocated to MAs that maintain or promote remote conditions (FEIS, Table 3.6-9). To the greatest extent possible, the Forest Service allocated the RWH MA to areas of the GMNF that currently are remote and include few roads and trails. The Forest Service is not “creating” new remote lands with this MA; rather, the Forest Service will increase the diversity of habitat conditions for wildlife on lands allocated to this MA while retaining their remote characteristics. Most of the remote areas of the GMNF are allocated to designated Wilderness, Wilderness Study Area, Remote Backcountry Forest, and Remote Wildlife Habitat. The emphases and desired future conditions for these MAs demonstrate the variety of uses and needs for these remote areas.
SC 62000-21b	BECAUSE WILDERNESS PROVIDES BETTER HABITAT FOR RECLUSIVE SPECIES
SC 62000-21c	BECAUSE LOGGING IS NOT NECESSARY TO IMPROVE HABITAT FOR RECLUSIVE WILDLIFE
	Response: See the response to PC 62000-20 for a general discussion of the Remote Wildlife Habitat (RWH) MA. The response to SC 62000-23l addresses designated Wilderness as it relates to diversity of wildlife habitat and diversity of plant and animal species. As described in these responses, no set of habitat conditions and management regimes benefits all species of wildlife. Thus, none is “better” or “worse” for wildlife. As described in the revised Forest Plan, “The major emphasis of the RWH MA is to provide a mix of different-aged forest habitats, from early succession to old forests, for the primary benefit of diverse wildlife species, including reclusive wildlife species“(revised Forest Plan p. 60). Reclusive species should benefit from this MA, but the MA is not intended exclusively for the benefit of reclusive species. Lack of timber or vegetation management and habitat needs of reclusive species are not synonymous. The “remoteness” of an area is a qualitative

	feature determined by factors such as the presence or proximity of roads and trails, levels of activity from recreation, vegetation management, and other uses, and distance from areas of higher activity levels. Activity certainly increases during timber management, whether it is a commercial timber sale or a much smaller-scale project. When projects within the RWH MA are completed, habitat diversity will have increased but the remote character of the area will be retained by restricting human access to the area. Designated Wilderness, as well as Wilderness Study Area and the Remote Backcountry Forest MA, provides remote settings that may be attractive to reclusive species. Because of the restrictions on timber and vegetation management, the overall diversity of habitats, and the frequency and abundance of early successional habitats in particular, will be lower in these areas, which is not beneficial for some reclusive species. For example, prime habitat for black bears combines relative inaccessibility to or infrequent interaction with humans with availability of adequate food. Bobcats frequent regions with low road densities. Both species forage extensively in early successional habitats (DeGraaf and Yamasaki 2001, Anderson and Lovallo 2003, Pelton 2003). The RWH MA includes areas in which the Forest Service will increase the diversity of habitat through timber and vegetation management. On the majority of remote lands on the GMNF (Wilderness, Wilderness Study Area, and Remote Backcountry Forest), changes to forest structure and habitat will occur through natural ecological processes. The habitat management measures included in the RWH MA are intended to provide a diversity of forest habitats for the primary benefit of diverse wildlife species. The remote character of the land, and its suitability for reclusive species, will be retained after completion of each project. The diversity of wildlife in an area is related to the diversity of habitat conditions that are available. Timber and vegetation management are the primary tools available to the Forest Service for managing habitat diversity. For pragmatic reasons, the economic advantages associated with commercial timber sales may be integral to achievement of habitat goals on large-scale projects. In other cases, partnerships or volunteer agreements may be most appropriate. Decisions regarding specific management actions will be made using a site-specific environmental analysis and public involvement. The FEIS analyzed a wide variety of alternatives with different outcomes and with varying management area allocations, addressing Forest Plan revision issues. Each alternative meets the intent of relevant laws, including the Multiple Use Management Act, under which the national forests are managed. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. The Selected Alternative represents what Forest managers believe to be the best balance of outcomes in achieving sustainable ecosystems and meeting the intent of relevant laws, as well as addressing the issues and concerns specific to the GMNF and wildlife habitats.
SC 62000-21d	BECAUSE MANAGEMENT UNDER THE REMOTE WILDLIFE HABITAT MA WILL HAVE A NEGATIVE EFFECT ON WILDLIFE
	Response: See the response to PC 62000-20 for a general discussion of the Remote Wildlife Habitat MA. The responses to SC 62000-23l and SC 62000-21b address designated Wilderness as it relates to diversity of wildlife habitat, the diversity of plant and animal species, and reclusive species.

	This commenter equated remote wildlife areas with designated Wilderness or old growth conditions, and cited declining deer harvest statistics in Vermont towns that have substantial land area within the GMNF. As described in the revised Forest Plan (p. 60): "The major emphasis of the Remote Wildlife Habitat MA is to provide a mix of different-aged forest habitats, from early succession to old forests, for the primary benefit of diverse wildlife species, including reclusive wildlife species. This MA creates diverse habitats, including, permanent upland and temporary openings and brushy areas that complement wildlife habitat management in other management areas." The intent of this MA is to provide diverse habit conditions that will benefit many species of wildlife, including deer. The MA description also specifically includes appropriate maintenance for deer wintering areas.
SC 62000-21e	BECAUSE REMOTE WILDLIFE AREAS INCLUDE OLD GROWTH FOREST WHICH DOES NOT BENEFIT WILDLIFE
	Response: See the response to PC 62000-20 for a general discussion of the Remote Wildlife Habitat (RWH) MA. The responses to SC 62000-23l and SC 62000-21b address designated Wilderness as it relates to diversity of wildlife habitat, the diversity of plant and animal species, and reclusive species. This commenter equated remote wildlife areas with designated Wilderness or old growth conditions. The term "old growth forest" has many definitions and interpretations. Thompson and Sorenson (2000) describe an old growth forest as "one in which human disturbance has been minimal and natural disturbance has been limited to small-scale windthrow events or natural death of trees" (p. 89). Old growth and forest communities that are approaching old growth conditions represent a small proportion of the GMNF land base. Lands designated as Wilderness and those allocated to Remote Backcountry Forest, Research Natural Areas, and Ecological Study Areas will approach old growth conditions in time. The mix of tree species and ages and abundant woody debris on the forest floor provide suitable habitat for many plant and animal species (for example, salamanders and other species associated with seasonal pools and other forest wetlands); these areas provide limited suitable habitat for early successional species. As described in the collective responses under PC 62000-20 and PC 62000-21, active habitat management is integral to the emphasis of the RWH MA. According to the desired future condition, the RWH MA will include a mix of forest conditions ranging from early succession to old forests (revised Forest Plan p. 60). Old growth and old forest are compatible with the RWH MA, but they will not be a dominant feature of the landscape within the MA. Thus, the remote areas of the GMNF will provide a mix of habitat conditions for wildlife: the RWH MA, in which management activity can increase the local diversity of habitat conditions; and Wilderness, Wilderness Study Areas, Remote Backcountry Forest, Research Natural Areas, and Ecological Study Areas in which changes occur through natural processes and habitat diversity likely will be less pronounced.
PC 62000-22:	**The Forest Service should correct the discrepancy in the allocation of**

	Diverse Backcountry MA to an area of less than 2,500 acres.
	Response: Although the Desired Future Condition of the Diverse Backcountry MA states that the management area will typically occur in contiguous parcels of at least 2,500 acres, this acreage is not a required element of the management area (revised Forest Plan p. 58). Likewise, while the goal of the MA is to manage towards the Semi-primitive ROS class, it is not a requirement. The location referenced by this commenter, between Sugar Hill Reservoir and the Long Trail in Hancock, has been changed to Remote Backcountry Forest MA in the Selected Alternative due to new information. See also response to PC 62000-14c.
PC 62000-23:	**The Forest Service should increase the acreage of land recommended for Wilderness.**
	Response: The acreage of land recommended for wilderness designation has changed from 17,869 acres in the Preferred Alternative to 27,473 acres in the Selected Alternative, an increase of three percent. The primary source of the increased acreage is in the Glastenbury Wilderness Study Area. The acreage increase was due to new information on the condition of the roads in the Bolles Brook area. See response to 62000-19d.
SC 62000-23a	BECAUSE MUCH MORE ROADLESS LAND COULD HAVE BEEN RECOMMENDED
	Response: An alternative was considered that allocated all Roadless Areas to the Wilderness Study Area MA. The FEIS (section 2.1.6) explains why this alternative was eliminated from detailed study. Alternative D allocates 40 percent of the Roadless Inventory to Wilderness Study Areas (FEIS Table 3.12-2). The Selected Alternative allocates 22 percent of the Roadless Inventory to Wilderness Study Areas. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. The Selected Alternative represents what Forest managers believe to be the best balance of outcomes in achieving sustainable ecosystems and meeting the intent of relevant laws, as well as addressing the issues and concerns specific to the GMNF and wilderness.
SC 62000-23b	BECAUSE PRIVATE LAND-OWNERSHIP CANNOT SUPPLY WILDERNESS
	Response: Management of the GMNF is guided by the belief that public land in the Northeast will be increasingly scarce and precious. Federally designated wilderness is uniquely a product of those public lands, as are designations such as Wild and Scenic Rivers and National Recreation Areas. The Forest Service is mandated to manage its lands for multiple uses, however, which means mixing these uniquely public land allocations with other uses, such as timber supply, fisheries management, or motorized recreation. The DEIS recognizes the unique role of the GMNF to provide this resource (DEIS p. 3-257). The FEIS analyzed a wide variety of alternatives with different outcomes and with varying management area allocations, addressing Forest Plan revision issues. Each alternative meets the intent of relevant laws, including the Multiple Use Management Act, under which the national forests are managed. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. The Selected Alternative represents what Forest managers

	believe to be the best balance of outcomes in achieving sustainable ecosystems and meeting the intent of relevant laws, as well as addressing the issues and concerns specific to the GMNF and wilderness.
SC 62000-23c	BECAUSE ONLY FINITE AMOUNTS OF WILD LAND ARE LEFT AND THEY SHOULD BE SAVED FOR FUTURE GENERATIONS
SC 62000-23d	TO PROTECT RARE WILD LANDS AND THE UNIQUE CHARACTER OF VERMONT FROM INCREASING POPULATION AND DEVELOPMENT
SC 62000-23e	AS A SPIRITUAL SANCTUARY AND REFUGE FROM THE ACTIVITY AND FAST PACE OF THE MODERN WORLD
SC 62000-23v	BECAUSE WILDERNESS IS WHAT REAL VERMONTERS DESIRE
SC 62000-23z	BECAUSE ONLY ONE PERCENT OF VERMONT IS DESIGNATED WILDERNESS
	Response: Wilderness has been a major issue in the revision of the Forest Plan and public opinion on its designation varies in Vermont and across the country (DEIS pp. 1-8 and 3-246). The Forest Service has received comments from individuals and groups, from Vermonters and residents of other states, both in support of and in opposition to additional wilderness on the Forest. The Forest Service recognizes public support for Wilderness designation, as well as these values that commenters express. Further discussion of wilderness needs is contained in Appendix C of the FEIS, and more information on Wilderness Study Area analysis can be found in the Wilderness section of the FEIS. The overall amount of recommended wilderness reflects an attempt to balance the various needs, uses, and public values of NFS lands. Furthermore, while the Wilderness Study Area MA designation could address many of these concerns, it is not necessarily the most appropriate, effective, or only way to address these concerns. It is important to keep in mind that the purpose for wilderness designation is to protect and maintain wilderness values in areas that meet specific criteria. There are many other allocations that provide for public desires for non-motorized recreation and non-commodity values, as well as opportunities for other compatible management activities. A visitor may find sanctuary in a Remote Backcountry Forest Management Area or other allocations that focus on providing more solitude. Finally, it is worth remembering that the philosophy that guides management of the entire GMNF is to help preserve and maintain Vermont's forested landscape, communities, and rural economy in the face of exponential population growth. The careful land stewardship provided on the GMNF is intended to preserve a large block of Vermont's landscape for many uses by future generations (revised Forest Plan p. 9). The DEIS recognizes the unique role of the GMNF in providing a wilderness resource (DEIS p. 3-257).
SC 62000-23f	FOR BACKCOUNTRY RECREATION, INCLUDING HIKING, SKIING, SNOWSHOEING, HUNTING, FISHING, AND OVERALL ENJOYMENT OF NATURE
	Response: Recreation activities, such as hiking, skiing, snowshoeing, hunting, and fishing are available across the entire Forest. Wilderness areas do provide a unique setting for backcountry versions of these activities, for those who value solitude and remote settings. Remote settings for backcountry recreation are also provided in other management areas, however, including Remote Backcountry Forest, Ecological Special Areas, and the Appalachian Trail and Long Trail. The Semi-primitive Non-motorized

	class of the Recreation Opportunity Spectrum, which provides a remote, non-motorized experience for Forest visitors outside of Wilderness, is available on 21 percent of the GMNF (FEIS Table 3.10-10).
SC 62000-23g	TO PROTECT AGAINST AIR POLLUTION AND PROVIDE CLEAN AIR
Jay 2/8/06	Response: The quality of the air that passes over the Forest is largely determined by where the air originates. Off-Forest influences have the greatest potential affect on air quality and are outside of the control of Forest Service management (DEIS p. 3-45). Increasing the acreage of land recommended for wilderness may or may not protect against air pollution and provide clean air. A wilderness designation would protect the acres from being developed with such things as permanent roads, structures, and ski areas, and prevent access by motorized vehicles, all of which contribute to air pollution. If the acreage is not designated wilderness but still retains a roadless or undeveloped character, the air quality benefits could be nearly that of designated wilderness. Future potential acreage designated as wilderness would not receive any additional legal protection from air pollution than other NFS lands unless the wilderness is designated a Class I area per the Clean Air Act. This designation is the purview of the governor of the State in which the wilderness is located.
SC 62000-23h	TO PROTECT WATERSHEDS AND WETLANDS AND PROVIDE CLEAN WATER
SC 62000-23i	TO PROVIDE HEALTHY SOILS, PROTECT SOILS STRESSED BY ACID DEPOSITION, AND PREVENT EROSION
	Response: Watersheds and wetlands on lands in the Wilderness Study Area (WSA) management area would have a higher level of protection because almost no soil-disturbing land management activities would occur. Watersheds and wetlands on lands assigned to other management areas would also be protected through the application of Forest Service Manual Direction, standards and guidelines, and project-specific mitigation measures, although some minor temporary degradation may occur due to soil-disturbing activities (DEIS pp. 3-27-31). As with other areas on the GMNF, watersheds and wetlands in WSAs and designated Wilderness areas are not protected from the effects of acid deposition. Lye Brook Wilderness is a good example, since its waters are impaired due to acid deposition (Donna 2004, pp. C-23-24).
SC 62000-23j	TO HELP FIGHT GLOBAL WARMING AND INCREASE CARBON DIOXIDE ABSORPTION
	Response: See responses to SC 31000-5 and SC 62000-27d on carbon sequestration (absorption). The main cause of global warming is the increased production of greenhouse gases, most importantly carbon dioxide. The world-wide loss of forested land is a contributing factor. Lands on the GMNF will remain forested, and the ability of trees to hold carbon dioxide and give off oxygen would be maintained, regardless of the management area designation. Insufficient scientific information exists to characterize the extent to which management on the GMNF influences global warming, climate change, and carbon sequestration.
SC 62000-23k	TO FIX OR CLARIFY WILDERNESS BOUNDARY PROBLEMS
	Response: Boundary management was one of the issues addressed in the 2004 Roadless Inventory process. Many of the Wilderness Study Areas around the Breadloaf Wilderness, for example, were allocated for boundary management purposes. Some of the comments on this topic praised the Wilderness Study Area recommendations on boundary issues, which the

	Forest Service appreciates. Other specific boundary concerns mentioned by the public included the "open jaw" at the north end of the Peru Peak Wilderness. This area was studied during the Roadless Inventory and Evaluation process but was found not to contain the potential for wilderness designation, due mainly to the proximity to roads and snowmobile trails (DEIS Appendix C). The area east of Lye Brook Wilderness was also mentioned as a boundary management concern. This area will be managed as Remote Backcountry Forest and an Ecological Special Area, which the Forest Service believes will appropriately retain the area's ecological values. The current southeastern boundary of the Lye Brook Wilderness is off-set from FR 70 and is easily managed. Boundary management was therefore not a Forest Service concern at either Peru Peak or Lye Brook Wilderness.
SC 62000-23l	TO PROMOTE BIODIVERSITY AND PRESERVE NATURAL HABITATS, WILDLIFE CORRIDORS, AND GENETIC RESERVOIRS OF FLORA AND FAUNA
SC 62000-23n	TO PREVENT FRAGMENTATION OF FOREST LANDS AND TO PRESERVE REMOTE CHARACTERISTICS IN A WILDERNESS CORRIDOR IN THE NORTHEAST
	Response: Designated Wilderness is inherently neither "good" nor "bad" for wildlife habitat, biological diversity, or genetic variability of plant and animal species that occur on the GMNF or in northeastern North America. The diverse species of plants and animals that occur on the GMNF inhabit diverse combinations of upland and wetland habitats; however, no single management direction or set of habitat conditions can be optimal for all species. Particular habitat conditions and trends typically provide greater or lesser benefit for individual species or suites of species. As forest stands mature, they provide improved conditions for species that occur in mature forest habitats, but provide deteriorating conditions for species that occur in open fields, shrubby areas, or regenerating forest stands. The relative benefits and disadvantages provided by habitat conditions reverse where disturbance creates openings in mature forest. DeGraaf et al. (1992) and DeGraaf and Yamasaki (2001) provide comprehensive reviews of the vertebrate wildlife of New England and the habitat conditions in which they occur. Many of New England's wildlife species occur in mature and older forest habitats (described as "sawtimber," "large sawtimber," or "uneven-aged northern hardwood" in the references cited above); however, some of these species also occur in regenerating or sapling stage habitats as well, particularly for foraging. Conversely, other species occur in, or depend on, regenerating forest, shrubby openings, and other conditions collectively described as early successional habitat. Designation of Wilderness, allocation of other MAs, and the associated management actions and emphases affect current and future habitat conditions on the GMNF. Diversity of habitat in the forest setting is created in large part by diversity in species and age composition of vegetation and the resulting diversity in horizontal and vertical structure of forest communities. Land use history and abiotic features, such as elevation, slope, aspect, soil, and climate, also are integral components of habitat; however, altering composition and structure of vegetation is the most effective and direct means to affect habitat conditions. Designated Wilderness emphasizes forest lands that are subject to forces of nature with minimal evidence of human impact. Vegetation management is not allowed

	(or extremely limited) in other MAs, such as Wilderness Study Areas, Remote Backcountry Forest, Research Natural Areas, and Ecological Study Areas. Changes to forest structure in these areas will occur through natural ecological processes. Because substantial alteration of forest structure typically occurs rarely and on a limited geographical scale in these areas, habitat diversity likely will be less pronounced than in MAs where active timber and vegetation management takes place. Designated Wilderness will be dominated by mature and old forest habitats that provide abundant suitable habitat conditions for species that occur in mature forest habitats, but limited suitable habitat for early successional species. Habitat conditions in designated Wilderness are not "better" or "worse" for wildlife than conditions in more actively managed forest land; however, these management regimes do produce landscapes of very different habitat conditions, which support very different flora and fauna. Management decisions, including those related to designation and management of Wilderness are not based exclusively on considerations of wildlife habitat or any other single resource. Many other factors are relevant and must be considered, including social, economic, and political needs, as well as concerns related to other natural resources. Public comments related to Wilderness designation received by the Forest Service throughout the Plan revision process illustrate the high level of public interest and concern over Wilderness from diverse viewpoints and interests.
SC 62000-23m	TO PROTECT ENDANGERED, THREATENED, AND RARE PLANTS AND ANIMALS
	Response: The Forest Service is bound by laws, regulations, and policy to protect federally listed, threatened and endangered species, and those species thought to be at risk of becoming federally listed under the Endangered Species Act. In addition, the Forest Service is required to provide habitat to ensure viability of plant and animal species (see response to SC 22000-18s). The revised Forest Plan includes Forest-wide standards and guidelines that specifically address "Threatened, Endangered, Proposed, and Sensitive Species; Rare and Exemplary Natural Communities." These protections, policies, and obligations inherent in federal law apply Forest-wide in all management areas (revised Forest Plan pp. 30-32). Designated Wilderness does not provide additional protection or benefit to endangered, threatened, and rare plants and animals. Wilderness designation does prevent active habitat management, except for suppression of non-native invasive species where they threaten federally listed endangered or threatened species. Accordingly, some management activities designed to benefit threatened, endangered, or rare species are not allowed within designated Wilderness. The response to SC 62000-23l provides a more general discussion of designated Wilderness as it relates to diversity of wildlife habitat and to diversity of plant and animal species.
SC 62000-23o	TO PROVIDE AN UNDISTURBED ECOLOGICAL LABORATORY AND SCIENTIFIC CONTROL FOR EXAMINING ENVIRONMENTAL CHANGE
	Response: While allocating Wilderness Study Area MAs could address ecological laboratory concerns, it is not necessarily the most appropriate, effective, or only way to address these concerns. The Forest Service has established a reference area network, consisting of various management

	areas which are designed to provide an "ecological laboratory" from which to study environmental change. The Forest Service has allocated a little more than one third of its land base to this "ecological laboratory." Examples of management areas in this network are Research Natural Areas, Ecological Special Areas, Wilderness, and Remote Backcountry Forest. These are lands that will acquire old growth characteristics over time. For more information on the reference area network concept, see FEIS Chapter 3.11. See also response to SC 32600-5a for further explanation of reference areas.
SC 62000-23p	TO EXCLUDE MINERAL EXTRACTION AND OTHER SOIL-DISTURBING ACTIVITIES
	Response: The effects of mineral extraction and other soil-disturbing activities on the Forest are considered in the FEIS Chapter 3.2. Regardless of management area allocation, GMNF standards and guidelines and other protection measures are designed to minimize impacts on soil quality. As the analysis demonstrates, nearly 40 percent of the Forest in the Selected Alternative is in an MA allocation least subject to ground disturbing activities. This percentage includes not only Wilderness Study Areas, but also MAs such as Remote Backcountry Forest and Ecological Special Areas that also prohibit activities such as mineral extraction.
SC 62000-23q	TO EXCLUDE BUILDING OF ADDITIONAL ROADS
SC 62000-23r	TO EXCLUDE LOGGING
SC 62000-23s	TO EXCLUDE MOTORIZED AND MECHANIZED RECREATION USES
SC 62000-23y	BECAUSE INCREASING WILDERNESS WILL NOT NEGATIVELY AFFECT MOTORIZED RECREATION
	Response: The Wilderness Act of 1964, as well as individual enabling legislations and Forest Service policies, guides GMNF wilderness management and stewardship. Road building, timber management, and motorized and mechanized recreation uses are thus prohibited in Wilderness Management Areas. Wilderness is not the only management area where these activities are prohibited. Allocations such as Remote Backcountry Forest and Ecological Special Areas are also off-limits to such activities (revised Forest Plan pp. 54-57 and pp. 94-97). Fifty-four percent of the Forest is not open to road building, and 53 percent of the Forest prohibits commercial timber harvest (FEIS, Chapters 13 and 20). The DEIS describes the transportation analyses that have taken place and notes that changes in the road system on the GMNF are likely to be minimal because the current system is adequate to meet needs for access (DEIS p. 3-336). Appendix D Proposed and Probable Practices in the revised Forest Plan indicate less than five miles of roads may be built on the Forest over the next planning period. The Multiple-Use Sustained-Yield Act of 1960 states that, "It is the policy of the Congress that the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes." This means that the National Forests will be managed to provide for the use of all the various renewable surface resources in a combination that best meets the needs of the American people. The Selected Alternative and revised Forest Plan provide a balance between competing concerns while managing for biological diversity, off-road vehicles, timber harvest, and non-motorized recreation. Road building, timber harvesting, and motorized recreation activities are legitimate uses of the

	Forest which must be balanced with other interests such as Wilderness Study Areas.
SC 62000-23t	BECAUSE WILDERNESS IS GOOD FOR TOURISM AND THE LOCAL ECONOMY
SC 62000-23u	BECAUSE INCREASING WILDERNESS WILL NOT NEGATIVELY AFFECT TIMBER PRODUCTION OR THE TIMBER ECONOMY
	Response: Economic considerations of the alternatives are discussed in section 3.21 of the FEIS, and the effects of Wilderness Management Area allocations on resources such as timber can be found in the FEIS in the respective resource sections. The Forest Service recognizes public support for wilderness designation, including values such as tourism. Further discussion of wilderness considerations can be found in the Assessment of Need for Additional Wilderness in Appendix C of the FEIS. The overall amount of recommended wilderness reflects an attempt to balance the various needs, uses, and public values of NFS lands. See Chapter 3.21 in the FEIS for analysis of the social and economic costs and benefits of National Forest System land.
SC 62000-23w	TO PROMOTE OLD GROWTH AND PRISTINE FORESTS WHERE NATURAL PROCESSES WILL DOMINATE
	Response: There are other areas of the Forest, in addition to designated wilderness, where old growth can develop and where natural processes will dominate. See also response SC 32600-5a.
SC 62000-23x	BECAUSE DESIGNATED WILDERNESS IS PERMANENT
	Response: The permanence of congressionally designated wilderness has been the source of positive as well as negative comments. While some feel permanent land use designations are the only preservation solutions in a changing world, others see permanent allocations as “locking up” resources and a management decision that can never be reversed. Like many other aspects of the wilderness debate, permanence is one factor that needs to be considered as both an asset and drawback. The Selected Alternative is based on the roadless evaluations. Factors and considerations were used to recommend the best areas for designated wilderness. Areas not recommended for wilderness can be considered for future wilderness designation at a later date. Eligibility criteria for roadless and wilderness areas east of the Mississippi allow a degree of road-building and evidence of harvesting to occur in an area (DEIS Appendix C, p. C-3).
SC 62000-23aa	BECAUSE WILDERNESS PROVIDES A PROTECTIVE BUFFER ALONG THE APPALACHIAN TRAIL AND LONG TRAIL
	Response: The Forest Service did make a change in Wilderness Study Area allocation around the Appalachian Trail and Long Trail on the South Half of the Forest. Subsequent to new information received on road conditions in the area, the Forest Service made a change in the Roadless Inventory and Wilderness Study Area allocation in the southern portion of the Glastenbury Wilderness Study Area. Once this change was made (see responses to SCs 62000-19d and 62000-24a), the logical management choice for the area was to include the AT/LT in the Wilderness Study Area. See also responses to SC 62000-16b and SC 62000-19c.
SC 62000-23bb	AS DETERMINED BY RESOURCE VALUES AND NEEDS REGARDLESS OF OPPOSITION FROM TOWNS OR OTHER GOVERNMENT ENTITIES
	Response: Wilderness has been a major issue in the revision of the Forest Plan and was included as such in the Forest Service’s Notice of Intent to

	revise the Plan (DEIS p. 1-8). The topic remains a focus of public opinion, and the Forest Service has received comments from individuals, groups, and governmental bodies, both in support of and in opposition to additional wilderness on the Forest. The comments here state that the Forest Service should not consider official opposition of towns to additional wilderness when determining Wilderness Study Area MA designations. The comments suggest that the Forest Service unfairly considers these opinions, as they assert the Forest Service does not consider such opinions in other GMNF land transactions. A goal of the revised Forest Plan is to coordinate Forest planning and implementation with various entities, including town governments (revised Forest Plan p. 18). Furthermore, the National Forest Management Act requires the Forest Service to coordinate Forest Service planning efforts with local governments, as well as other State and federal agencies. The Forest Service considers the opinion of towns in a variety of transactions, including land purchases and wilderness recommendations, as one factor amidst many in making management decisions. Alternative B did not propose recommend Wilderness Study Area MAs in towns that officially opposed wilderness (DEIS section 3.12). All other alternatives, including the Selected Alternative, include some WSAs in towns opposed to wilderness.
PC 62000-24:	**The Forest Service should designate Wilderness Study Areas.**
SC 62000-24a	AT GLASTENBURY MOUNTAIN
	Response: The Glastenbury Mountain area on the South Half of the Forest is proposed as a Wilderness Study Area. The Selected Alternative proposes a Glastenbury Wilderness Study Area that is 22,425 acres. The Selected Alternative includes 9,658 more acres of recommended wilderness at Glastenbury than the Preferred Alternative. The changes to the Glastenbury Wilderness Study Area resulted from new information received between the Proposed Revised Forest Plan and the revised Forest Plan. Subsequent to the release of the proposed Plan and completion of the Roadless Inventory, the Forest Service received new information about road conditions in the area south of the Glastenbury WSA surrounding Bolles Brook. Based on this new information, the Glastenbury Roadless Area was expanded to include the area around Bolles Brook. The Wilderness Study Area was then expanded accordingly, including an expansion to the east that includes the Appalachian Trail and ends at a snowmobile trail boundary.
SC 62000-24b	AT LAMB BROOK
SC 62000-24c	AT ROMANCE/MONASTERY/WORTH MOUNTAIN
SC 62000-24d	AROUND STRATTON POND
	Response: The Lamb Brook area, Romance Mountain, and Stratton Pond area were all evaluated in the 2004 Roadless Evaluations (FEIS Appendix C). The Forest Service allocated these areas to the Remote Backcountry Forest Management Area in the Selected Alternative. Remote Backcountry Forest MAs are similar to Wilderness Study Area MAs in that they will be managed with no motorized recreation access and no timber harvesting. Minimal management will be allowed in order to assist natural processes. See also responses to PC 62000-26 and PC 62000-37.

	The Lamb Brook area was not recommended for wilderness designation due to its proximity to relatively high motorized use and complications due to a town road bisecting the area. Part of the Lamb Brook area will be managed as Remote Backcountry Forest MA, described above, and part will be managed as Remote Wildlife MA. The area around Stratton Pond was not recommended for wilderness designation due to a high intensity of current uses, including snowmobile trails, private inholdings, and proximity to noise and visual disturbances from roads. This area will also be managed as Remote Backcountry Forest.
SC 62000-24e	AROUND GROUT POND
	Response: The area around Grout Pond was not a roadless area in the 2004 Roadless Inventory, and it was not evaluated for wilderness potential. Accordingly, it could not be recommended for wilderness designation. Ground Pond is managed under the Ecological Special Area MA. See also response to SC 62000-26d for further discussion of the Grout Pond area.
SC 62000-24f	ON ALL LANDS ADJACENT TO DESIGNATED WILDERNESS OR WILDERNESS STUDY AREA RATHER THAN ALLOCATE THEM TO THE GREEN MOUNTAIN ESCARPMENT MA
	Response: These comments focus on the needs of the escarpment natural community and suggest that the Wilderness Study Area MA serves it better than the Green Mountain Escarpment MA. Many of the areas mentioned were evaluated for wilderness potential in the 2004 Roadless Inventory, such as the escarpment communities adjacent to the Bristol Cliffs Wilderness. These areas were determined not to possess the attributes necessary to provide a wilderness experience (DEIS Appendix C). The Forest Service believes that the escarpment requires management activities that would be more difficult to achieve with a wilderness designation. For a complete discussion of the needs of the escarpment, see response to PC 62000-48.
PC 62000-25:	**The Forest Service should recommend expansion of existing Wilderness areas.**
	Response: Expansion is recommended at the Breadloaf, Big Branch, Peru Peak, and Lye Brook Wilderness Areas through Wilderness Study Area MA allocation in the Selected Alternative. Expansions are not recommended at the Aiken or Bristol Cliffs Wilderness Areas. Recommended expansion acreages are: Big Branch, 42 acres; Breadloaf, 3,977 acres; Lye Brook, 155 acres; and Peru Peak, 874 acres.
SC 62000-25a	AT BREADLOAF WILDERNESS AREA
	Response: The Wilderness Study Area MAs that are adjacent to the Breadloaf Wilderness Area recommended in these locations were designed to address boundary management concerns such as delineating boundaries on the ground that are more easily identifiable and to improve maintenance of management area boundaries. Breadloaf Wilderness is recommended to expand by 3,977 acres. See also response to SC 62000-29a for an explanation of changes made to the Breadloaf Wilderness boundary.
SC 62000-25b	AT LYE BROOK WILDERNESS AREA
	Response: Lye Brook Wilderness Area is recommended to expand by 155 acres in the Selected Alternative (DEIS Table 3.12-2). Many comments proposing additional wilderness study areas around the Lye Brook Wilderness focused on the area to the east of the current wilderness around Stratton Pond. The 2004 GMNF Roadless Inventory and Evaluation found

	the Stratton Roadless Area has low to moderate potential to provide the attributes and values appropriate for wilderness designation, due partly to its proximity to well-used roads, with their associated noise and visual disturbances, as well as other more intense uses and management (DEIS Appendix C, p. C-47-48). Consequently, this area will be managed as Remote Backcountry Forest MA in the Selected Alternative. See response to SC 62000-26e.
SC 62000-25c	AT BRISTOL CLIFFS WILDERNESS AREA
	Response: The Bristol Cliffs Wilderness Area is not proposed for expansion in the Selected Alternative. The only NFS lands adjacent to the Bristol Cliffs Wilderness are on the western boundary of the area. These lands were not recommended for expansion of the wilderness due to large perimeter to size ratios and proximity to private homes. NFS lands adjacent to Bristol Cliffs Wilderness Area have been allocated to the Green Mountain Escarpment Management Area. The emphasis of the Green Mountain Escarpment MA is on the unique natural communities along the Green Mountain escarpment. The MA prohibits new motorized trails, and prohibits all motorized trail vehicles except snowmobiles, unless they are required by law to provide access to private land. Vegetation management in this MA will focus on perpetuating the oak forest communities unique to the escarpment (revised Forest Plan p. 86).
SC 62000-25d	AT BIG BRANCH WILDERNESS AREA
SC 62000-25e	AT PERU PEAKS WILDERNESS AREA
SC 62000-25f	AT GEORGE D. AIKEN WILDERNESS AREA
	Response: Big Branch and Peru Peak Wilderness Areas are recommended to expand by 42 acres and 874 acres, respectively (DEIS Table 3.12-2). These expansions primarily reflect boundary management needs. The Aiken Wilderness Area is not recommended for expansion in the Selected Alternative. Roadless areas on the eastern and western edges of the Aiken Wilderness were evaluated for wilderness potential during the 2004 Roadless Inventory Process. It was determined that these areas had limited potential to provide the attributes and values appropriate for wilderness designation due to significant bordering motorized uses, as well as noise and visual disturbances from private land uses.
SC 62000-25g	TO FIX LYE BROOK WILDERNESS BOUNDARY ERRORS FROM PREVIOUS WILDERNESS BILLS
	Response: The commenter is concerned with particular boundaries of the Lye Brook Wilderness and the ecological features on those boundaries. Wilderness boundary decisions are a congressional prerogative and take into account a variety of factors including ecological concerns, but also incorporating, for example, recreation, aesthetic, and management factors. Forest Service staff did not identify any boundary management concerns at Lye Brook Wilderness. Regarding the commenter's concern about the Winhall River on the northeast boundary of Lye Brook, that section of the Winhall River will be managed as an eligible Wild River from the end of Kendall Farm Road to the headwaters, in an area one-quarter mile out from each bank. See also responses to SCs 62000-18d and 62000-59. The commenter was also concerned about wetland features on the southeast boundary of the Wilderness. The Forest Service recognizes the importance of these features and consequently has placed them in either Remote Backcountry or Ecological Special Area MAs (FEIS Table 2.1.6).

SC 62000-25h	TO ELIMINATE THE "CHERRY STEM" ALONG FOREST ROAD 25 IN THE BREADLOAF WILDERNESS AREA
	Response: The Forest Service tries to avoid creating "cherry stems" wherever possible in order to avoid creating areas that are very difficult to manage (FEIS Appendix C). In general, corridors of non-wilderness lands within designated wilderness tend to compromise wilderness values in undesirable ways. The "cherry-stem" along Forest Road 25 in the Breadloaf Wilderness Area, however, was created at the time of the 1984 Vermont Wilderness Act, for reasons involving access and existing uses. Austin Brook Road, part of the RARE II Breadloaf Inventoried Roadless Area, was re-examined pursuant to public comments on the proposed revised Forest Plan. As a result, the 143 acres of land surrounding this road will remain in the 2004 Forest Roadless Area Inventory (FEIS Appendix C). Although this road is part of the 2004 Roadless Inventory, the Forest Service has chosen not to alter the original 1984 decision regarding wilderness recommendation for FR25.
PC 62000-26:	**The Forest Service should allocate all lands that do not qualify for Wilderness Study Area to the Remote Backcountry MA or other management areas with minimal human intervention.**
	Response: Allocation of lands that were inventoried roadless areas but not recommended for wilderness was done on a case-by-case basis considering resource information and the desired management emphasis of the land. Ssome of these areas are allocated to MAs with minimal human intervention, such as Remote Backcountry Forest. Other areas not recommended for wilderness study are in management areas that anticipate timber harvest and needed road improvement in order to achieve desired future conditions. The management allocations for roadless areas not recommended for wilderness can be found in Appendix C of the FEIS.
SC 62000-26a	AT GLASTENBURY MOUNTAIN
	Response: The majority of the Glastenbury Mountain area is designated as a Wilderness Study Area MA in the Selected Alternative. The remainder is allocated to Diverse Backcountry, Escarpment, Diverse Forest Use, and Appalachian Trail MAs. See response to SC 62000-24a.
SC 62000-26b	ADJACENT TO LYE BROOK WILDERNESS AREA
	Response: These comments were concerned with the area to the east and to the southwest of the Lye Brook Wilderness Area. The area to the east of Lye Brook Wilderness will be managed as a Wilderness Study Area MA. The region to the southwest of Lye Brook has been allocated to a mixture of Diverse Forest Use and Escarpment Management Areas. The commenter is concerned about landscape continuity between the Lye Brook Wilderness here and the Glastenbury WSA MA. The block of Escarpment MA between Lye Brook Wilderness and Glastenbury WSA MA in this area will emphasize ecological values in the region and address the commenter's concern. There is also a block of Diverse Backcountry MA more directly south of Lye Brook. This area was not appropriate for a Remote Backcountry or WSA MA due to the number of snowmobile trails in the region.
SC 62000-26c	AT ROMANCE/MONASTERY MOUNTAIN
	Response: See response to SC 62000-37a.
SC 62000-26d	AROUND GROUT POND
	Response: The area around Grout Pond is an Ecological Special Area. Ecological Special Areas have limited management activities; for example, logging is prohibited at Grout Pond, although vegetation management may

	occur to maintain or protect values associated with the special area, such as recreational values associated with camping there. Furthermore, standards and guidelines for the Ecological Special Area MA have been adjusted to reflect the recreational values associated with Grout Pond and several other Ecological Special Areas (revised Forest Plan p. 96). The Forest Service has also enlarged the Ecological Special Area surrounding Grout Pond to ensure that its ecological values are protected. See also response to PC 30000-2.
SC 62000-26e	AROUND STRATTON POND
	Response: The area around Stratton Pond is in the Remote Backcountry Forest Management Area in the Selected Alternative. Remote Backcountry Forest is a management prescription with minimal human intervention. It excludes motorized uses, including snowmobiles, and focuses on allowing natural processes to dominate with minimal management (revised Forest Plan p. 54).
SC 62000-26f	AROUND SOMERSET RESERVOIR
	Response: The area around Somerset Reservoir is not owned by the Forest Service. Should these lands ever be acquired, the lands surrounding the reservoir would be managed as Diverse Forest Use MA on the west side of Somerset Reservoir, and the east side would be managed primarily as Remote Wildlife Habitat MA (FEIS Appendix G). The Forest Service did make an adjustment in land allocation to federal lands and to other lands within the proclamation boundary in the northeastern portion of the area. This adjustment changed the allocation from Diverse Forest Use to Remote Wildlife Habitat, in recognition of the remote character of the landscape in this area, and in order to connect the important wildlife corridor east of Somerset Reservoir to the Stratton Mountain area to the north. With this management area change, most of the east side of Somerset Reservoir would be in allocations that do not allow additional motorized recreational uses, although timber harvesting would be allowed on long rotations for wildlife habitat management. The Diverse Forest Use MA was retained on the west side of Somerset Reservoir due to the higher level of development and recreational use on that side. See also response to PC 30000-2.
PC 62000-27:	**The Forest Service should minimize or eliminate recommendations for additional Wilderness.**
SC 62000-27a	BECAUSE WILDERNESS IS EQUIVALENT TO “PRIVATIZATION” OF PUBLIC LANDS FOR THE BENEFIT OF A MINORITY, WHICH IS CONTRARY TO MULTIPLE USE
SC 62000-27b	BECAUSE WILDERNESS IS REMOVED FROM THE SUITABLE LAND BASE, PRECLUDING SOUND MANAGEMENT OF FOREST RESOURCES
SC 62000-27e	BECAUSE THE DESIRED REMOTE CONDITIONS CAN BE ACHIEVED UNDER EXISTING MANAGEMENT AREAS, STANDARDS AND GUIDELINES, AND OTHER MANAGEMENT AUTHORITIES WITHOUT THE PERMANENCY OF CONGRESSIONAL DESIGNATION
SC 62000-27g	BECAUSE CONTINUING POPULATION GROWTH WILL INCREASE THE DEMAND FOR PUBLIC LANDS TO PROVIDE FOREST PRODUCTS AND THE GMNF CAN PROVIDE HIGHER QUALITY FOREST PRODUCTS THAN PRIVATE LAND
SC 62000-27h	BECAUSE WILDERNESS REDUCES DOMESTIC CAPACITY FOR PRODUCTION OF WOOD FIBER AND TRANSFERS THE DEMAND FOR RESOURCES TO COUNTRIES CAUSING ECONOMIC LOSS AND A LACK OF ENVIRONMENTAL PROTECTION
SC 62000-27i	BECAUSE WILDERNESS PREVENTS ACCESS TO MANY CITIZENS,

	PARTICULARLY THE DISABLED, HANDICAPPED, AND ELDERLY
SC 62000-27k	BECAUSE WILDERNESS IMPINGES ON THE RANGE OF RECREATIONAL USES, INCLUDING MOTORIZED OR MECHANIZED USES, HUNTING, AND FISHING
SC 62000-27j	BECAUSE WILDERNESS EXCLUDES LOGGING
	Response: The Forest Plan revision process follows the 1982 planning regulations (36 CFR Part 219) for developing Forest Plans pursuant to the National Forest Management Act (NFMA). One of the six key decisions that NFMA requires a Forest Plan to make is recommendations to the Congress, such as wilderness designations (36 CFR 219.17) (DEIS p. 1-3). Forest Plans require that the Forest Service allocate lands to particular management areas, including analyzing suitability for recommended wilderness. The Forest Service's multiple-use mandate does not mean that all land allocations on the Forest should, or can, provide all things to all people. Rather, the intent is to achieve an appropriate mix of uses across the Forest landscape. While certain activities are deemed incompatible with wilderness values, wilderness areas are open to a range of uses and interests, from hunting and fishing to backcountry hiking, even motorized wheelchair access. The Forest Service recognizes that recommending GMNF land for wilderness designation involves numerous tradeoffs and effects (see FEIS Appendix C). These effects, including the amount of GMNF land that is currently suitable for timber harvesting, as well as effects to recreation, are detailed in the various respective resource sections in Chapter 3 of the FEIS. In the Selected Alternative, the ASQ is higher than in the 1987 plan, 58 percent of the Forest is in a motorized ROS class, and 49 percent of the Forest is suitable for timber production. The Multiple-Use Sustained-Yield Act of 1960 states that, "It is the policy of the Congress that the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes." This means that the National Forests will be managed to provide for the use of all the various renewable surface resources in a combination that best meets the needs of the American people. The Selected Alternative and revised Forest Plan provide a balance between competing concerns while managing for biological diversity, timber harvest, and non-motorized recreation.
SC 62000-27c	BECAUSE WILDERNESS NEGATIVELY AFFECTS THE QUALITY AND DIVERSITY OF WILDLIFE HABITAT AND THE DIVERSITY OF PLANT AND ANIMAL SPECIES
SC 62000-27v	BECAUSE THERE IS NO ECOLOGICAL OR SCIENTIFIC NEED FOR MORE WILDERNESS
	Response: See response to SC 62000-23l.
SC 62000-27d	BECAUSE MANAGED FORESTS PROVIDE BETTER PROTECTION TO THE ENVIRONMENT AGAINST CARBON DIOXIDE BUILDUP, GLOBAL WARMING, AND CLIMATE CHANGE
	Response: See responses to PC 31000-5, SC31000-5a, and SC31000-5b.
SC 62000-27o	BECAUSE A RESOLUTION FROM THE VERMONT HOUSE OF REPRESENTATIVES AND FROM OTHER GROUPS AND ORGANIZATIONS REQUESTS NO ADDITIONAL WILDERNESS
	Response: The Forest Service has received and considered proposals for

	and against additional wilderness (FEIS Appendix C). The Vermont House Resolution and other issues are discussed in the FEIS Appendix C. See also response to SC 62000- 23bb.
SC 62000-27q	BECAUSE ECOSYSTEMS ARE DYNAMIC AND IT IS NOT POSSIBLE TO RETURN THE FORESTS TO PRIMEVAL CONDITIONS
	Response: Wilderness areas are established, according to the Wilderness Act of 1964, for a variety of reasons. Returning forests to primeval conditions is not a reason the Forest Service recommends wilderness areas, particularly in the Eastern United States. The primary purpose of wilderness designation is not typically ecological restoration. See also PC 21000-5 for further discussion of recovery and restoration of dynamic ecosystems.
SC 62000-27s	UNTIL THE FOREST SERVICE IS ABLE TO ADEQUATELY MANAGE EXISTING WILDERNESS AREAS
	Response: The Forest Service continues to sufficiently manage existing wilderness areas according to the Wilderness Act, accompanying legislation and policy, and the standards and guidelines of the 1987 Plan. The GMNF Monitoring Report for fiscal year 2004 indicates continued following of Forest Plan standards and guidelines (S&Gs) when planning projects, assessing impacts, and analyzing effects on the wilderness resource. As a result of the use of these S&Gs, Forest projects had no effect on wilderness. The Forest Service will continue to prioritize wilderness management in the next planning period, as reflected in Goal 13 of the revised Forest Plan (p. 16).
SC 62000-27u	BECAUSE THE PROPOSED BOUNDARY ADJUSTMENTS ARE NOT ADEQUATELY JUSTIFIED IN THE DRAFT EIS OR THEY WILL CREATE GREATER PROBLEMS THAN THEY SOLVE
	Response: See response to SC 62000- 23k, and PC 62000-25 and its subconcerns.
SC 62000-27f	BECAUSE MANAGED FORESTS SUPPORT THE VERMONT ECONOMY BETTER THAN WILDERNESS
SC 62000-27l	BECAUSE THERE IS ENOUGH WILDERNESS IN VERMONT AND IN THE NORTHEAST UNITED STATES
SC 62000-27m	BECAUSE THE EXISTING DESIGNATED WILDERNESS IS USED AT LOW LEVELS, EMPHASIZING THAT THERE IS NO PUBLIC OR SOCIAL NEED FOR MORE WILDERNESS
SC 62000-27n	BECAUSE WE NEED TO KEEP THE LAND AVAILABLE FOR USE BY FUTURE GENERATIONS
SC 62000-27p	BECAUSE REAL VERMONTERS DO NOT DESIRE MORE WILDERNESS
SC 62000-27r	BECAUSE DEMANDS FOR MORE WILDERNESS ARE UNREALISTIC AND SOME GROUPS WILL DEMAND CONTINUALLY DEMAND MORE
SC 62000-27t	BECAUSE WILDERNESS IMPINGES ON TRADITIONAL VERMONT USES
SC 62000-27w	BECAUSE WILDERNESS IMPINGES ON THE AESTHETIC APPEAL AND DIVERSITY OF LANDSCAPES, INCLUDING SMARTLY MANAGED WOODLOTS
SC 62000-27y	BECAUSE WILDERNESS PROHIBITS WIND TOWERS AND OTHER PUBLIC-BENEFIT USES
SC 62000-27z	BECAUSE WILDERNESS CREATES AN AREA OF MINIMAL HUMAN PRESENCE THAT COULD BECOME A BASE OF OPERATIONS FOR ILLEGAL ACTIVITIES OR TERRORIST ORGANIZATIONS
SC 62000-27aa	BECAUSE EXISTING CONDITIONS ON THE GMNF ARE WHAT MOST PEOPLE THINK OF AS WILDERNESS AND MORE RESTRICTIVE DESIGNATION IS NOT WANTED OR NECESSARY

	Response: See response to PC 62000-27 and its subconcerns. Forest Plans require that the Forest Service allocate lands to particular management areas, including analyzing suitability for recommended Wilderness. The Forest Service recognizes that recommending Forest land for Wilderness designation involves numerous trade-offs and effects. These effects, including the amount of GMNF land that is currently suitable for timber harvesting, as well as effects to recreation, are detailed in the FEIS and in FEIS Appendix C. For some people management areas such as Remote Backcountry Forest or an Ecological Special Area serve the same purposes as Wilderness designation; for others there is a notable difference. The objectives for each MA, including standards and guidelines for managing recreation and invasive species, are shown in the Forest Plan. While Wilderness designation would prohibit most motorized and mechanized access, wheelchairs, including motorized wheelchairs, are allowed within designated Wilderness. The Record of Decision states what roadless areas are recommended for Wilderness designation and the rationale for that recommendation. The FEIS analyzed a wide variety of alternatives with different outcomes and with varying management area allocations, addressing Forest Plan revision issues. Each alternative meets the intent of relevant laws, including the Multiple Use Management Act, under which the national forests are managed. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. The Selected Alternative represents what Forest managers believe to be the best balance of outcomes in achieving sustainable ecosystems and meeting the intent of relevant laws, as well as addressing the issues and concerns specific to the GMNF and wilderness.
SC 62000-27x	BECAUSE WILDERNESS INHIBITS SEARCH AND RESCUE EFFORTS
	Response: See response to PC 10000-5.
SC 62000-27bb	IN TOWNS OPPOSED TO ADDITIONAL WILDERNESS
	Response: See response to SC 62000-23bb.
SC 62000-27cc	UNLESS AN EQUIVALENT ACREAGE OF EXISTING WILDERNESS IS UN-DESIGNATED
	Response: Wilderness areas are congressionally designated in perpetuity; “un-designation” of them is beyond the scope of Plan revision and beyond the authority of the Forest Service (DEIS p. 1-5). The Forest Service has no plans to propose declassification to the Congress. The comment further notes that current wilderness areas on the GMNF are no longer serving their purpose. The Forest Service believes that there are many reasons for wilderness as stated in the Wilderness Act of 1964 and the Eastern Wilderness Act of 1975, and that the GMNF Wilderness Management Areas are indeed still meeting them (DEIS p. 3-245).
PC 62000-28:	**The Forest Service should not recommend designation of new Wilderness areas.**
SC 62000-28a	AT GLASTENBURY MOUNTAIN
	Response: See response to PC 62000-24a. The Forest Service is recommending designation of a new wilderness area at Glastenbury Mountain. The Selected Alternative recommends a Glastenbury Wilderness Study Area that is 22,425 acres. Some concerns expressed about wilderness designation of Glastenbury Mountain were the history of timber management in the area, potential wind power uses, and a history of

	snowmobile use. The Forest Service took these comments into consideration and designed the Glastenbury Wilderness Study Area (WSA) MA to address competing concerns, including motorized use in the area and timber harvest potential. One way that the Forest Service addressed these competing concerns was by preserving snowmobiling opportunities in the area. The MA allocation of this WSA will not result in the closure of any snowmobile trails in the Glastenbury area. Snowmobile trails in the area that will remain open include the "Up and Down" trail on the northern border of the WSA, the Little Pond Trail southeast of the WSA, and the McIntyre trail north of the WSA. In addition, while there are acres of suitable timber lands that are unavailable for harvest in the Glastenbury Wilderness Study Area, the area north of the WSA boundary to Kelley Stand Road is managed as Diverse Backcountry MA, preserving timber harvest opportunities.
SC 62000-28b	AT ROMANCE/MONASTERY/WORTH MOUNTAIN
	Response: The Forest Service is not recommending designation of any new wilderness area at Romance Mountain in the Selected Alternative. The area will be managed as a combination of Remote Backcountry Forest MA and Diverse Forest Use MA. See also response to PC 62000-24c.
PC 62000-29:	**The Forest Service should not recommend Wilderness Study Areas as expansions to existing Wilderness.**
SC 62000-29a	AT BREADLOAF WILDERNESS AREA
	Response: The Forest Service received several comments about proposed boundary adjustments to the Breadloaf Wilderness. Many of these comments focused on the Patterson Brook, Texas Gap, and Steam Mill Clearing areas on the edges of the Breadloaf Wilderness. The Wilderness Study Area MAs proposed in these locations were designed to adjust wilderness boundaries for improved manageability. Concerns expressed regarding these areas included past harvest investments, a possible town road erroneously included, and existing trailheads and openings that would be lost with wilderness designation. The Forest Service examined these issues and concluded that the road mentioned is not a town road according to town highway maps. The existing trailhead and opening mentioned by the commenter is along a boundary road and maintaining these features would be addressed at the time of designation. The Forest Service adjusted one Wilderness Study Area that would expand Breadloaf Wilderness based on new information. The proposed boundary adjustment on the west side of Breadloaf Wilderness near Blue Bank Brook was moved from FR54 to along the brook to further improve boundary management and accommodate property access needs.
PC 62000-30:	**The Forest Service should provide an implementation plan for eliminating existing uses from Wilderness Study Areas if they are designated Wilderness.**
	Response: The focus of the Wilderness Study Area MA is to provide for the management and protection of Wilderness Study Areas and to manage these areas to protect wilderness characteristics pending potential Congressional designation. Current activities are allowed to continue where they do not adversely impact the potential for future wilderness designation (revised Forest Plan p. 110). Once Wilderness Study Areas are designated by Congress, existing uses may be allowed to continue indefinitely if determined by Congress to be compatible with the designated wilderness' management

	direction (DEIS p. 2-13). The existing uses in GMNF recommended Wilderness Study Areas that are inconsistent with the Wilderness Act in the Selected Alternative are three trailheads and 7.8 miles of roads (FEIS Chapter 3.10). There are no existing designated motorized trails in the Wilderness Study Area MAs. An implementation plan for eliminating existing wilderness study area uses is outside the scope of Plan revision and will follow Forest Service policy after specific legislation is enacted.
PC 62000-31:	**The Forest Service should develop a specific management plan for each wilderness area.**
	Response: The Forest Service has developed and signed management plans for the Lye Brook and Aiken Wilderness Areas. Work on the Big Branch and Peru Peaks Wilderness Areas is near completion. Management plans for the remaining wilderness areas is ongoing and will be completed as funding and resources allow.
PC 62000-32:	**The Forest Service should rule that shelters, bridges, and trail blazing are compatible with Wilderness.**
	Response: Wilderness management is guided by the principle that there will be little evidence of human development. Site-specific decisions will be made with this guidance in mind. There are exceptions to this principle, however, including trails, trail shelters, trail blazes, and limited trail signing. Regarding shelters, the revised Forest Plan's Wilderness Management Area standards and guidelines prohibit the construction of new overnight facilities, but allow retention of existing facilities that are identified in the enabling legislation (revised Forest Plan p. 51). Although bridges are not strictly prohibited under Forest Service wilderness policy, they are not automatically allowed either. Bridges can be permitted in wilderness in certain cases where allowed by Forest Service Manual direction (FSM 2323.13f.2). Finally, trail blazing and other directional indicators such as cairns may be used in the Wilderness MA in certain cases, such as for resource protection or when the summer trail tread is not easily discernable.
PC 62000-33:	**The Forest Service should prevent people from disposing trash in wilderness areas.**
	Response: The revised Forest Plan is a programmatic document that does not address site-specific implementation such as trash disposal. Forest Service policy utilizes a "pack-in, pack-out" policy for solid waste management in wilderness. Burying of garbage is not permitted, and past accumulations of debris are removed (FSM 2323.13a). The Forest Service relies upon visitors to adhere with this policy and emphasizes information and education as the primary tools for achieving this goal.
PC 62000-34:	**The Forest Service Should allow sled dogs in wilderness areas.**
	Response: See responses to PC 22000-32 and PC 54000-3.
PC 62000-35:	**The Forest Service should preserve the remote and wilderness qualities in the Romance/Monastery/Worth Mountains area by excluding motorized uses, including snowmobiles.**
	Response: The area around the Romance Mountain range on the North Half of the Forest will be managed to retain its remote and wilderness qualities in the Selected Alternative. Almost 12,000 acres of this region will be managed as Remote Backcountry Forest MA, which excludes motorized uses, including snowmobiles, and focuses on allowing natural processes to dominate with minimal management. See also responses to SCs 62000-14c and 62000-37a.
PC 62000-36:	**The Forest Service should preserve roadless areas not recommended**

	for wilderness while retaining their existing snowmobile trails.
	Response: The management allocations for roadless areas not recommended for wilderness can be found in Appendix C of the FEIS. These areas will be managed according to the management area designated in the plan. Some of these management areas allow motorized uses and others do not. The Selected Alternative does not propose closing any existing snowmobile trails. See also response to PC 62000-42d.
PC 62000-37:	**The Forest Service should retain the Remote Backcountry management area as an alternative to congressionally designated wilderness.**
SC 62000-37a	AT ROMANCE/MONASTERY/WORTH MOUNTAIN
	Response: The Forest Service agrees. The Remote Backcountry Forest (RBF) Management Area is a useful tool in the GMNF management toolbox. As the commenter points out, the RBF MA is largely similar to a wilderness management area where natural processes dominate the changing landscape. Unlike a wilderness management area, however, Remote Backcountry Forest allows the potential for limited management activities that would help restore or maintain those natural processes. In the Romance Mountain area, Remote Backcountry Forest MA has increased almost 800 acres in response to new information received subsequent to the proposed Forest Plan release. See also response to PC 62000-14c for further discussion of MA allocation changes in that region.
PC 62000-38:	**The Forest Service should seek de-classification by Congress of some designated Wilderness and allocate those lands to less restrictive MAs.**
	Response: Wilderness areas are congressionally designated in perpetuity; “un-designation” of them is beyond the scope of Plan revision and beyond the authority of the Forest Service (DEIS p. 1-5). The Forest Service is not seeking congressional de-classification of any GMNF wilderness area (DEIS p. 1-5). Wilderness areas are just one in a spectrum of management options available to the Forest Service as a multiple-use agency. Wilderness Management Areas are as responsibly managed as any others on the Forest; they are just managed differently. Part of responsible management for the Forest Service means upholding the agency’s multiple-use mandate. The Multiple-Use Sustained-Yield Act of 1960 states that, “It is the policy of the Congress that the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes.” This means that the National Forests will be managed to provide for the use of all the various renewable surface resources in a combination that best meets the needs of the American people. The Selected Alternative and revised Forest Plan provide a balance between competing concerns while managing for biological diversity, timber harvest, and non-motorized recreation. Some of the concerns expressed in this comment were focused on the use of Wilderness Management Areas for hunting and fishing purposes. It is worth reiterating that hunting and fishing are allowed in wilderness. See also responses to SC 62000-27k and SC 62000-27cc.
PC 62000-39:	**The Forest Service should revise its assessment of need for additional wilderness.**
SC 62000-39a	TO CORRECT INCONSISTENCIES IN LOGIC, ANALYSIS, AND DECISION MAKING
SC 62000-39c	TO ELIMINATE BIAS AGAINST WILDERNESS
SC 62000-39d	TO ANALYZE EACH AREA THROUGH A PHYSICAL ASSAY AND SOUND,

	PROFESSIONAL, SCIENCE-BASED ASSESSMENT
	Response: These comments are concerned with the general discussion of wilderness designation trade-offs contained in the DEIS Appendix C. Points of contention range from discussions of heritage resources to stream restoration. While a commenter suggests that discussion of a "wilderness need overview" is a "warning," the wilderness decision requires a careful, balanced consideration of the trade-offs involved in wilderness designations. This consideration is presented in DEIS Appendix C as the wilderness need overview. It is not intended to be an in-depth assessment of the factors considered in site-specific roadless evaluations. The commenter is concerned about the Forest Service's discussion that wilderness demands are largely being met on the GMNF; the perception is that this statement ignores other values of wilderness, such as existence value. The statement regarding wilderness demand has been revised to read existing "wilderness opportunities appear to be largely meeting current wilderness recreation demand" (FEIS Appendix C). Other non-recreation, non-use values such as bequest or existence are in fact discussed in this appendix and considered in the mix of values that is the wilderness debate (FEIS Appendix C). One comment notes the reference to the Adirondack Park Agency in Appendix C is inaccurate. The discussion of the regional wilderness resource in Chapter 3.12 of the DEIS correctly identifies acreage of wilderness within the Adirondack Park as 1 million acres. The incorrect reference in Appendix C has been fixed. Another concern for the commenters is the discussion of heritage concerns in wilderness areas (DEIS p. 3-309). While it is true that heritage resources across the Forest in all MAs (as well as on private lands) suffer damage from time to time through human actions and natural processes, many sites benefit from maintenance and stabilization activities undertaken by the Forest Service or its partners. Sites can be and are undermined, destabilized, and obscured by encroaching vegetation, and can be severely damaged by unchecked erosion. Some of the activities to prevent or counteract these effects are facilitated by motorized access and/or equipment, which would certainly be inhibited by Wilderness designation. In addition, it is generally acknowledged that on-site interpretation within Wilderness is inappropriate, thus limiting (though not eliminating) the range of options for doing so. Finally, there may be some question in the future as to the limits of acceptable disturbance that could be introduced into a Wilderness ecosystem through research-driven archaeological excavation. As noted in the FEIS, however, the only instance where the Forest Service concluded that any of the alternatives would have such an inhibiting effect on Heritage Resources management is a single locality along Bolles Brook in the Glastenbury Wilderness Study Area (FEIS section 3.16.2). Concerns were also expressed about the Appendix C wilderness discussion accurately representing the ecological values of wilderness on the Forest. Ecological Land Types (ELTs) do not change much over time, because they are based on underlying physical characteristics that do not change. The commenter's premise that because an ecological type is common now does

	not mean it will be common through the long lens of designated wilderness timeframes is therefore inaccurate. Finally, commenters were concerned with the methods of assessment used in the roadless evaluation process. The roadless inventory and evaluation process used a variety of field and inventory data sources in assessing wilderness resource trade-offs. These assessments were not based solely on "statistical modeling," as the commenter suggests; staff knowledge of ground conditions were incorporated into every roadless evaluation.
PC 62000-40:	**The Forest Service should preserve and protect all inventoried roadless areas from logging, motorized uses, and other disruptive activities.**
	Response: See response to SC 23000-1l, and PC 62000-26 and related subconcerns.
PC 62000-41:	**The Forest Service should correct or clarify apparent discrepancies in background maps of roadless areas and ROS inventory.**
	Response: Appendix B of the revised Forest Plan documented the Recreation Opportunity Spectrum (ROS) inventory for the GMNF. It catalogs the current recreation condition on the Forest, but does not reflect desired or potential conditions. Thus, for example, if an area is identified as Semi-primitive Motorized on the ROS maps, it does so because the condition on the ground met the description of that ROS class. These maps are therefore consistent with the Roadless Area maps referenced by the commenter, as the Roadless Inventory can include lands mapped in a variety of ROS classes. See also response to SC 62000-42f.
PC 62000-42:	**The Forest Service should redo the Roadless Area Inventory.**
SC 62000-42a	TO INCORPORATE BETTER OR MORE RECENT SCIENCE AND OTHER INFORMATION
SC 62000-42i	BECAUSE THE FOREST SERVICE PROVIDED INADEQUATE DOCUMENTATION AND EXPLANATION OF DECISION CRITERIA
	Response: Explanation of the Forest Service's 2004 Roadless Inventory process can be found in Appendix C of the FEIS. The Forest Service has added more supporting documentation to this Appendix that addresses the commenters' concerns regarding full documentation of the roadless inventory process. This additional information explains how the original candidate roadless area list, which was designed to be as inclusive as possible, was refined to its current size of 124,321 acres. Appendix C is a lengthy document, however, and efforts were made to make the wilderness and roadless information contained in it as concise and readable as possible. All data used in the process, and in the Roadless Inventory contractor's report that is referenced by the commenter is part of the planning record, and is available upon request. Occasionally map data is only available electronically, and in those cases the hard copy maps are available for public viewing upon request in the GMNF Supervisor's Office in Rutland, Vermont. Information has also been added to the FEIS (Chapter 3.12) to more fully explain the roadless inventory process. Commenters were also concerned about the Forest Service's discussion of biodiversity literature, and in particular, science used in the Environmental Impact Statement of the Roadless Area Conservation Rule. Extensive discussions of biodiversity and of the Forest Plan's effect on biodiversity can be found in Sections 3.1.4 and 3.11 of the FEIS.

SC 62000-42b	BECAUSE THE LOCATION OF SNOWMOBILE TRAILS SHOULD NOT INFLUENCE THE IDENTIFICATION OF ROADLESS AREAS
SC 62000-42g	TO INCORPORATE DIFFERENCES BETWEEN SUMMER AND WINTER SEMI-PRIMITIVE NON-MOTORIZED ROS CONDITIONS
	Response: The purpose of the Roadless Inventory was to identify and describe areas to be evaluated as roadless areas for potential wilderness recommendation. Part of this process was to determine ROS classes that were used in assessing roadless areas. The ROS maps used for the purposes of the 2004 Roadless Inventory were developed by the roadless inventory contractor, following national and regional guidance, and did not include a seasonal analysis of the ROS inventory. Had the ROS mapping for the purposes of establishing a roadless inventory been based on areas inventoried for summer ROS, as the commenter suggests, an extensive existing use of the Forest, snowmobiling, would not have been taken into account.
SC 62000-42c	BECAUSE THE INVENTORIES AND EVALUATIONS DO NOT COMPLY WITH APPROPRIATE LAWS AND REGULATIONS
SC 62000-42e	BECAUSE THE FOREST SERVICE DID NOT FOLLOW CONGRESSIONAL INTENT
SC 62000-42f	BECAUSE THE FOREST SERVICE OVERSTATED SOLITUDE VALUES, AND WAS INCORRECT IN USING THE ROS AS A MEANS TO ASSESS IT
	Response: These comments were primarily concerned with the Forest Service's use of the Recreation Opportunity Spectrum to help interpret the solitude criteria of roadless evaluations. Forest Service Handbook direction in 1909.711b #4 states that "...The location of the (roadless) area is conducive to the perpetuation of wilderness values. Consider the relationship of the area to sources of noise…" This direction relates to Section 2(c)(2) of the Wilderness Act, which states that wilderness "…has outstanding opportunities for solitude or a primitive and unconfined type of recreation." The Regional Forester provided guidance for Eastern Region Forests in 1997 to use the Recreational Opportunity Spectrum system as a means to map areas that would meet the above descriptions of solitude. Areas more than half a mile from sources of motorized use were identified as core areas for experiencing solitude. Based on regional direction, to be included in the roadless inventory these areas should be approximately 2,500 acres or more in size, unless they were adjacent to existing wilderness areas. Although the GMNF used this regional "core of solitude" guidance as part of its decision-making process regarding roadless areas, potential roadless areas were not eliminated based solely on this criteria. See FEIS Appendix C for further explanation. For example, subsequent to the release of the proposed revised Forest Plan, the 2004 Roadless Inventory was adjusted to add a new roadless area. Roadless Area 92037, Abbey Pond, was added in response to new information received that related to opportunities for solitude in the area. Further analysis indicated that the Abbey Pond Candidate Roadless Area contained 1800 acres of "Semi-primitive Non-motorized (SPNM) Small" ROS class, which the Forest Service judged to have solitude potential. SPNM Small is an ROS category used in the 2003 National ROS Mapping Protocol to describe areas of SPNM smaller than 2,500 acres (USDA 2003). The Forest Service also discovered that a snowmobile trail running north-south through the area was no longer being used as a snowmobile trail. For further

	discussion of changes to the Roadless Inventory, see the Record of Decision.
SC 62000-42d	BECAUSE THE FOREST SERVICE DID NOT ADEQUATELY ASSESS THE EFFECTS OF EXCLUDING INVENTORIED ROADLESS LANDS FROM WILDERNESS STUDY AREA DESIGNATION
	Response: See FEIS Chapter 2, Alternatives Eliminated from Detailed Study. The Forest Service is committed to protecting and managing roadless areas as an important component of the National Forest System. Toward this goal, the Forest conducted roadless inventories using Forest Service Handbook 1909.12 Chapter 7 and Regional direction. These inventoried areas were then evaluated based on several criteria to determine if they should be recommended for Wilderness designation. Based on Forest Service evaluation, 27,473 acres of roadless areas were recommended for designation in the Selected Alternative (see FEIS section 3.12). See also responses to SC 62000-42f and 62000-42i. National guidance points out that the primary purpose for the roadless inventory is to identify lands with the potential for wilderness designation. Restricting management activities solely because an area is in the roadless inventory goes beyond the purpose of the inventory. If areas are not designated Wilderness Study Areas, Forest Plan decisions identify appropriate management area designations. These decisions are made considering the various trade-offs between conflicting needs for production of products, access, recreational use, and other resource management needs. The Forest Service believes the mix of management area designations identified in the Selected Alternative does the best job of balancing competing needs. The areas that were not recommended for wilderness designation were allocated to a variety of management areas to provide for a diversity of recreational opportunities, including non-motorized, non-consumptive uses that are consistent with management objectives. The list of these management areas can be found in Appendix C of the FEIS. Potential impacts to various resources from different MA area allocations are discussed throughout Chapter 3 of the FEIS. The Forest Service understands that these decisions could impact roadless values for the next planning period. Proposed site-specific projects within inventoried areas (124,321 acres) will require an environmental analysis that will address the impact of the proposed actions on the roadless characteristics for the area.
SC 62000-42h	TO PROVIDE A FULL SUMMARY OF THE PUBLIC INPUT USED
	Response: The commenter is concerned that local management input was the basis for eliminating roadless areas from the 2004 Roadless Inventory. As Appendix C of the FEIS states, local management input was used in the final stages of the Roadless Inventory to refine roadless area boundaries. It was not used to eliminate any roadless areas from the inventory. Lines drawn on maps with GIS technology can often be improved upon with local management knowledge, and this is how the referenced information was used. This knowledge would include such items as natural features or exact road locations, and was used to improve roadless area boundaries, as Appendix C in the FEIS suggests.
SC 62000-42j	BECAUSE SOME BOUNDARIES WERE INCORRECTLY OR IMPROPERLY ESTABLISHED

	Response: The Forest Service followed regional and national direction for delineating roadless area boundaries (FSH 1909.12, Chapter 7). The boundary criteria for the Roadless inventory process are explained in Appendix C of the FEIS. The process followed by the Forest Service is further documented in the planning record, and this information is available on request.
SC 62000-42k	BECAUSE THE FOREST SERVICE OVERSTATED USE LEVELS OF IMPASSABLE AND ABANDONED ROADS
	Response: Documentation of the steps taken by the Forest Service in the 2004 Roadless Inventory can be found in Appendix C of the FEIS. In response to comments, the 2004 Roadless Inventory was reviewed, and a planned field verification of Improved Roads was completed during the summer of 2005. As a result of this verification process and other new information, 6,730 acres were added to the Inventory. Part of this acreage came from changes in boundaries to reflect more consistent application of inventory criteria, and from field verification of Improved Roads reducing the road density to a level that would meet roadless criteria. For example, Bolles Brook Road south of the Glastenbury Wilderness Study Area MA was investigated and determined not to be an improved road. In addition, Austin Brook Road, as a comment points out, is one area that was included in the RARE II inventory; it has been added back into the 2004 inventory.
PC 62000-43:	**The Forest Service should protect Research Natural Areas from disturbance, including recreation.**
	Response: Forest Service policy requires that Research Natural Areas (RNAs) be maintained in perpetuity as unmodified examples of forest types representative of the region (DEIS p. 3-218). RNAs are protected from disturbances such as recreation use, and if this use is found to be impacting the RNA's values, the area can be officially closed to recreation. Modification through natural disturbances is tolerated because such disturbances are representative of natural ecological processes associated with particular forest types. If natural disturbances destroy much or all of an existing RNA, often the RNA designation is removed because it no longer provides the values for which it was designated.
PC 62000-44:	**The Forest Service should allocate more land to Research Natural Areas or candidate Research Natural Areas.**
SC 62000-44a	AT MOUNT HORRID
SC 62000-44b	AT BLUE RIDGE BOG
	Response: The Forest Service thanks the commenters for their appreciation of agency designation of Mount Horrid and Blue Ridge Bog (Fen) as candidate RNAs.
SC 62000-44c	AT DUTTON BROOK
	Response: Dutton Brook Swamp is designated as an Ecological Special Area in the revised Forest Plan, and not a candidate RNA or RNA, because it has not undergone the necessary assessment. The Forest Service Manual requires that areas designated as RNAs have a comprehensive assessment, which addresses specific questions about the area, and that designation of the area requires agreement among the Directors of the Northeastern Area State and Private Forestry branch, and the Northeastern Research Station branch of the Forest Service (DEIS p. 3-218). The only areas which have had this level of assessment and agreement among scientists at the three branches of the agency on designation as RNAs are Mount Horrid and Blue Ridge Bog. Designating these two areas as RNAs at this time would make

	the conversion to RNAs a purely administrative activity. All Ecological Special Areas are considered potential candidates for RNA designation, but these ESAs have not had the comprehensive assessment required, or they have not been reviewed or approved by researchers at the other two branches of the agency. Once such assessments and reviews are initiated, boundaries could change, or researchers may not agree that an area qualifies as an RNA. Consequently, Dutton Brook Swamp was not placed into the candidate category.
SC 62000-44d	TO INCLUDE THE LYE BROOK HEADWATERS
	Response: See response to SC 62000-46a.
SC 62000-44e	AT BEAVER MEADOWS AND ABBEY POND
	Response: An evaluation of the Beaver Meadows/Abbey Pond Special Area for its potential as a Research Natural Area was completed in 1995. The evaluation determined that the area would not be as good a candidate for RNA designation as other areas, due to intensive land use history in the area (DEIS pp. 3-223 and 3-233). Management of the Beaver Meadows and Abbey Pond area as an Ecological Special Area would not preclude a future re-evaluation of the area's potential for designation as an RNA.
PC 62000-45:	**The Forest Service should not allocate more land to Research Natural Areas or candidate Research Natural Areas.**
SC 62000-45a	BECAUSE RESEARCH NATURAL AREAS ARE TOO RESTRICTIVE
SC 62000-45b	BECAUSE RESEARCH NATURAL AREAS PROHIBIT SOUND MANAGEMENT
SC 62000-45c	BECAUSE RESEARCH NATURAL AREAS RESTRICT THE RANGE OF RECREATIONAL USES, INCLUDING MOTORIZED OR MECHANIZED USES, HUNTING, AND FISHING
SC 62000-45d	BECAUSE THERE IS NO SCIENCE-BASED NEED FOR RESEARCH NATURAL AREAS
	Response: The Code of Federal Regulations (36 CFR 219.27) provides for identification of RNAs during the Forest Plan revision process. The scientific basis for designation of RNAs is discussed in the Chapter 3, Section 3.11 Areas of Special Significance in the DEIS. Additional references to the scientific basis for research natural areas and other similar areas have been added to the discussion. RNAs are designated into perpetuity, and so generally their designations are not removed unless they have been catastrophically altered or otherwise lost the values for which they were designated. The alternatives identify only the one existing RNA (The Cape) and two candidates (Mount Horrid and Blue Ridge Fen). The two candidates have been assessed by various researchers, and both the Northeastern Research Station and the Northeastern Area State and Private Forestry branch of the Forest Service have agreed that these two areas qualify as RNAs. Hunting and fishing are not restricted in RNAs and candidate RNAs based on Forest Service Manual direction (FSM 4060), and this has been noted in the FEIS. See also response to 62000-45.
PC 62000-46:	**The Forest Service should allocate more land to Ecological Special Areas.**
	Response: Additional land was added to the Ecological Special Area management area in the Grout Pond and French Hollow areas. See also responses to subconcerns.
SC 62000-46a	AT THE SOUTH END OF LYE BROOK

SC 62000-46i	TO INCLUDE THE LYE BROOK HEADWATERS
	Response: The area at the south end of Lye Brook has been identified as an area of ecological significance. During the process of allocating lands to management areas, one of the constraints was that the Forest Service would try to avoid co-designations, or overlapping designations, in particular when such designations would overlap congressionally designated areas, or where two types of designations had similar management restrictions. When an area of ecological significance is part of a management area of similar restrictions, such as Wilderness, National Recreation Area, Research Natural Area, Wilderness Study Area or Remote Backcountry Forest, the area does not also receive an Ecological Special Area designation. These areas of similar restrictions are considered part of the ecological reference area network, and are managed for similar purposes (see list in Table 3.11-6 of FEIS for how all significant ecological features were allocated to management areas). In all action alternatives except B, the Lye Brook Headwaters area is allocated to Remote Backcountry Forest, which has a management philosophy similar to an ESA. Consequently, it was unnecessary to designate it separately as an Ecological Special Area in those alternatives. It will continue to be tracked by the Forest Service and the State as an area of ecological significance. Language was added to the desired future condition for Remote Backcountry Forest to clarify that areas of ecological significance will be protected and maintained within that designation (revised Forest Plan p. 54).
SC 62000-46b	AT GROUT POND
	Response: Grout Pond is established as an Ecological Special Area and was in the revised Forest Plan. In the Selected Alternative, the Forest Service has expanded the boundaries to the height of land surrounding the pond to enhance the ecological integrity of the special area. (See also response to PC 30000-2.) Revisions and additions to management guidance for Ecological Special Areas have been made to ensure ongoing recreational uses can be effectively managed to maintain both ecological resources and recreational experiences (revised Forest Plan p. 96). Monitoring will take place for rare and uncommon plants. The use of a caretaker is consistent with the educational and interpretive activities emphasized in Ecological Special Areas.
SC 62000-46c	AROUND SOMERSET RESERVOIR
	Response: See response to PC 30000-2.
SC 62000-46d	AT BURNT MOUNTAIN RIDGE AND BRYANT MOUNTAIN
	Response: The Forest Service thanks the commenters for their appreciation of designation of Bryant Mountain Hollow as an Ecological Special Area, and recognizes the important ecological features of the adjacent Burnt Mountain ridge and Bryant Mountain. In the Selected Alternative, designation of these areas within the Green Mountain Escarpment Management Area will ensure that rare flora and fauna will be protected, and the natural communities there will be maintained and enhanced (revised Forest Plan p. 86).
SC 62000-46e	TO PROTECT LIVING THINGS FROM DISTURBANCE
	Response: The ecological reference area network, which includes the management areas Wilderness, Wilderness Study Areas, Existing and Candidate Research Natural Areas, Ecological Special Areas, Remote Backcountry Forest, and Eligible Wild Rivers, are designed to conserve ecological systems and associated organisms where natural processes dominate and where management activities are limited to those which

	restore or maintain these systems. Recreational activities in these areas also are restricted to non-motorized uses, and new trail construction is limited. Wilderness, Wilderness Study Areas, and Research Natural Areas provide for the highest levels of restrictions on disturbances related to human activities. Many ecosystems, however, experience natural disturbances periodically that are part of the natural range a variation one would expect in these systems. In addition, many types of disturbances induced by or contributed to by humans, such as maintenance of existing trails, human uses such as hiking, hunting, or fishing, broad environmental impacts such as acid deposition and climate change, and historical species extinctions, affect ecosystems regardless of management designation. Further discussion on how the ecological reference area network conserves ecosystems, and how the different management areas that comprise it are managed, is discussed in Chapter 3, Section 3.11 Areas of Special Significance of the FEIS.
SC 62000-46f	AROUND ABBEY POND
	Response: An area surrounding Abbey Pond, including the original Beaver Meadows/Abbey Pond Special Area in the 1987 Forest Plan, and extending north and west to include the cliffs of Elephant Mountain, and extending south to include the eastern border of Battell Preserve, has been designated an Ecological Special Area in the Selected Alternative. Federal ownership south and east of this area offers opportunities for other types of management emphases consistent with Diverse Forest Use and Green Mountain Escarpment MAs, and does not harbor natural communities considered of ecological significance. Much of the land base within the Diverse Forest Use MA has a long history of forest management, and so ecological conditions in these places are not consistent with Ecological Special Area qualities. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. The Selected Alternative represents what Forest managers believe to be the best balance of outcomes in achieving sustainable ecosystems and meeting the intent of relevant laws.
SC 62000-46g	AROUND THE CAPE RESEARCH NATURAL AREA
	Response: In the revised Forest Plan, The Cape Research Natural Area is surrounded by the Diverse Backcountry Forest MA, not the Diverse Forest Use MA as one commenter thought. Emphasis in the Diverse Backcountry Forest MA is for a semi-primitive motorized recreational experience, and forests are managed in this area using long rotations. There are currently no known significant ecological features on the lands surrounding The Cape RNA, which has been surveyed by the Vermont Nongame and Natural Heritage Program several times prior to designation of The Cape as an RNA. Consequently, the area surrounding The Cape RNA does not meet the purpose of the Ecological Special Area management area designation. During designation of The Cape RNA, several concerns were raised about buffering The Cape from adjacent activities. At the time, the size of The Cape was enlarged to its established size to accommodate these concerns and include the buffer within the RNA. Subsequently, forest management has occurred adjacent to the RNA to the south, with no negative consequences observed. The western and eastern boundaries of The Cape are physiographic (a stream and a ridgeline) and provide ecological boundaries for the RNA. The RNA is bounded to the north by private land. Given that The Cape RNA was established to include buffers and

	accommodate adjacent management, an assessment of special areas for the Forest Plan revision concluded that no additional allocations to this RNA were required (Burbank 2004). There has been no information presented during alternative development or through public comments to suggest an ecological basis for designating the surrounding lands as an Ecological Special Area.
SC 62000-46h	ACROSS A FULL TOPOGRAPHICAL GRADIENT OF THE GREEN MOUNTAIN ESCARPMENT TO PROTECT HABITATS FROM LOW WETLAND TO MOUNTAINTOP
	Response: The escarpment landscape does not include low elevation valley bottoms or high elevation mountain tops, but represents an extensive and distinctive landscape formed by geological folding that marks the transition from the Champlain Valley to the Green Mountains. Most of the escarpment that is within the Escarpment Management Area encompasses the full topographical gradient available for that landscape within the federal ownership of the GMNF. In addition, several portions of the escarpment, again representing the full topographical gradient available in federal ownership, have been placed under restrictive management where no harvesting will occur, to ensure that some areas are allowed to revert to late successional conditions. These areas include Elephant Mountain Ecological Special Area, Rattlesnake Point Ecological Special Area, Bryant Mountain Hollow Ecological Special Area, and portions of Bristol Cliffs Wilderness, Lye Brook Wilderness, and Glastenbury Wilderness Study Area.
PC 62000-47:	**The Forest Service should change the pre-designation of lands around Somerset Reservoir that are currently owned by Trans Canada Corporation to Remote Backcountry.**
	Response: Trans-Canada Corporation owns the lands that directly surround Somerset Reservoir. These lands are governed by a 40-year FERC license agreed to by numerous governmental and non-governmental organizations, as well as a permanent easement held by the Vermont Land Trust. The license allows motorized recreation, wildlife habitat improvements, and recreational improvements, and requires a forest management plan. The Forest Service considered the resources around Somerset Reservoir, the existing uses, the licensing agreement, and Vermont Land Trust easement when pre-designating the lands around Somerset Reservoir. Some of the existing uses and resources include: the area is a nesting habitat for loons; there are hiking, cross country skiing and snowmobile trails; motor boats are allowed on the reservoir; there is an important bear corridor between Wardsboro and Dover; and there are wetland complexes near the reservoir. Based on public comment, the Forest Service re-examined the pre-designation and in concert with changes made to the Selected Alternative, most of the area on the east side of Somerset Reservoir would become Remote Wildlife Habitat Management Area if purchased by the Forest Service. The pre-designation for the West side has not changed due to road access and snowmobile activity in the area (see DEIS Appendix G).
PC 62000-48:	**The Forest Service should not allocate lands to the Green Mountain Escarpment Special Area.**
SC 62000-48a	BECAUSE THE DESIRED FUTURE CONDITION CAN BE ACHIEVED IN THE DIVERSE FOREST USE MA
	Response: The need for a different management approach to the oak and hickory forests along the escarpment has been discussed informally among Forest staff since 1997. These discussions centered on the desire to

	conduct a broader assessment of the entire "oak belt" because there were issues associated with this area that do not occur elsewhere. For years foresters on the Forest have been working with research and others on techniques for regenerating oak that have been tested and applied almost exclusively in the escarpment (Lamson et al. 1992, USDA 2002c). In the late 1990s, foresters and ecologists identified areas along the escarpment where fire could be used to restore pine-oak communities that were rare and fire-adapted, primarily those that included red pine and pitch pine. Several areas were identified, and discussions among staff noted then that the escarpment as a whole had some unique attributes that meant that management in this area had to be conducted carefully. These attributes included steep slopes, limited water availability, limited access to places that needed treatment, and proximity of homes at the base of the escarpment. It was also recognized that these communities occurred nowhere else on the Forest. During the species viability analysis for the Plan revision, it became clear that there were a number of rare plant species that were restricted to the escarpment on the Forest, and that in many cases shading was a limiting factor (Burbank 2004). Taken together, it seemed logical to approach management in this area holistically by considering the escarpment as a landscape with unique attributes that should be managed with a unique approach. This management area could be part of the Diverse Forest Use MA, but it would tend to focus management on the limited amount of productive lands, and away from related ecosystems that had no commercial value. Managing this area as part of the Diverse Forest Use MA would then forgo an opportunity to manage this area holistically, recognizing the related natural communities and similar disturbance regimes that have established and maintained these communities on this landscape.
SC 62000-48b	BECAUSE THE GREEN MOUNTAIN ESCARPMENT SPECIAL AREA WILL HAMPER PROPER FOREST MANAGEMENT
	Response: Some of the lands within the Green Mountain Escarpment Special Area MA are adjacent to State lands, particularly in the Otter Creek area. State land and wildlife managers are concerned about how access to State lands might be affected by such a designation. Language has been added to the revised Forest Plan stating that access to non-federal lands using existing roads is not prohibited under this management area (revised Forest Plan p. 89). Construction of new roads may be prohibited, unless it is the only means to access a particular parcel of State lands.
PC 62000-49:	**The Forest Service should amend its management of White Rocks National Recreational Area.**
SC 62000-49a	TO COMPLY WITH CONGRESSIONAL INTENT
	Response: The White Rocks National Recreation Area (NRA) was established in 1984 for the purposes of preserving and protecting the area's "existing wilderness and wild values and to promote wild forest and aquatic habitat for wildlife, watershed protection, opportunities for primitive and semi-primitive recreation, and scenic, ecological, and scientific values" (PL 98-322; DEIS p. 3-263). The law creating White Rocks NRA mandated development of a management plan to promote these values, and in 1986 the White Rocks National Recreation Area management Objectives and Direction was signed by the Regional Forester. This management plan was approved following a public involvement process where discussion of alternative

	management approaches took place. The existing White Rocks NRA management plan therefore is the authority that guides management of the National Recreation Area. Although congressional reports and other information that led to the creation of the law may help guide Forest Service management in times of unclear direction, management of White Rocks NRA proceeds under the authority of the public law and the management plan. The White Rocks NRA MA direction is taken directly from the White Rocks NRA plan (revised Forest Plan p. 79). That said, however, the Forest Service believes its management of White Rocks NRA is fully in keeping with the spirit of its creation as an area promoting habitat and recreation values.
SC 62000-49b	TO RESTRICT USE OF ROADS, SNOWMOBILES, AND HABITAT MANAGEMENT TO THE INTENDED LOW LEVELS
	Response: Management direction for White Rocks National Recreation Area is guided by the public law that created it, the White Rocks management plan, and Management Area 8.3 standards and guidelines (revised Forest Plan pp. 79-81). See also response to SC 62000-49a. As one commenter states, the intent was that there would be no new road construction in the White Rocks NRA except for relocations for environmental purposes or for turnout to provide access to trailheads. All roads except those shown on the official map were to be closed. The transportation standards of MA 8.3 (p. 81) do prohibit road construction and close to public travel all roads other than FR 10, 20, 31, 60, 253, 301, and FR 30 to Lake Brook. The standards allow other roads to be used for administrative purposes, as provided for in the White Rocks management plan. Existing snowmobile trails are allowed to remain, consistent with the intent and letter of the law. Finally, the intent of the NRA was to permit limited habitat management, including the use of commercial timber harvest for wildlife reasons, and the revised Forest Plan is consistent with that intent as well. See also response to SC 62000-49c.
SC 62000-49c	TO PROHIBIT COMMERCIAL LOGGING AND MAINTENANCE OF WILDLIFE OPENINGS
	Response: Commercial timber sale activities are allowed in the White Rocks National Recreation Area, but can only be conducted to achieve recreation, endangered species or wildlife habitat, or vista purposes (revised Forest Plan p. 80). The Office of General Counsel has concurred on this management direction, finding that commercial timber sales are an acceptable management tool in the NRA when used for wildlife or recreation purposes (USDA 1997). Wildlife openings may be maintained in the White Rocks NRA (revised Forest Plan p. 80). Responses to SC 22000-5f and SC 22000-5g provide a general discussion of: permanent upland openings and their function; the Forest Service's objective to create and maintain acreage of permanent upland openings on the GMNF at slightly higher frequency and abundance than would occur by ecological tendencies; and whether the Forest Service should increase or decrease the percent of permanent openings in that objective.
SC 62000-49d	TO INCREASE ROTATION AGES
	Response: The White Rocks NRA is considered unsuitable timberlands, however commercial logging may be used to achieve recreation and wildlife management objectives (DEIS p. 3-270). The desired wildlife habitat objectives for the White Rocks NRA are to maintain or create desired wildlife habitat conditions for interior area and edge species. The rotation lengths of

	60 years for aspen, 120 years for hardwoods, and 100 years for softwoods are appropriate to meet the desired wildlife habitat objectives within the NRA. See also response to SC 62000-49a.
SC 62000-49e	TO CONTINUE TO ALLOW MOUNTAIN BIKES
	Response: Bicycles have been an acceptable use of the White Rocks National Recreation Area and will remain so in the revised Forest Plan. Designation of additional bicycle trails and uses will be done using site-specific environmental analysis.
SC 62000-49g	TO LIMIT MANAGEMENT OF VISTAS TO THE FEW EXISTING VISTAS ALONG FOREST ROUTE 10
	Response: The White Rocks NRA management plan calls for the maintenance of existing vistas along FR 10, but also states that trees will be cut in the MA for certain reasons, one of which is to maintain or create vistas (revised Forest Plan p. 80). Maintenance and possible creation of vistas is in keeping with the desired future condition of the NRA to provide a range of recreational opportunities and to maintain and enhance White Rocks NRA's outstanding scenic qualities. Possible points of desired vistas would include travel routes such as FR10, as well as the Appalachian Trail. See also response to SC 62000-49a for a discussion of the intent of the White Rocks NRA.
PC 62000-50:	**The Forest Service should change the designation of the White Rocks National Recreational Area to Wilderness Study Area.**
	Response: The White Rocks National Recreation Area was evaluated as part of the plan revision roadless inventory process, as Roadless Area 92012, the Homer Stone Roadless Area (DEIS Appendix C). The roadless area evaluation determined that RA 92012 had limited potential to provide the attributes and values appropriate for wilderness designation. The Forest Service feels the White Rocks National Recreation Area will be appropriately managed under the standards and guidelines of MA 8.3, White Rocks National Recreation Area. Timber harvesting is allowed to maintain or create edge species habitat along roads and uplands. See response to SC 62000-49c.
PC 62000-51:	**The Forest Service should change the designation of the Moosalamoo area.**
SC 62000-51a	TO A NATIONAL RECREATION AREA
	Response: The Congress designates National Recreation Areas (DEIS p. 3-263). The adequacy of the current NRA designations on the GMNF was considered during Plan revision. It was determined that National Recreation Area designation is recognition of a nationally significant recreation resource, and that there were currently no additional resources of that significance to consider on the Forest. The Forest Service also feels that the Moosalamoo Recreation and Education Area MA will maintain and enhance this area's resources and showcases its value. Therefore, no new NRAs were proposed for designation at this time.
PC 62000-52:	**The Forest Service should not include the Moosalamoo Recreation and Education Area in the Final Revised Plan.**
	Response: The commenter is concerned that the Moosalamoo Recreation and Education Area MA will be managed as another White Rocks National Recreation Area. The Moosalamoo Recreation and Education Area is included in the Selected Alternative, but it is not proposed as a National Recreation Area. Management of the Moosalamoo Recreation and Education Area will be governed by its own Management Area, which is

	separate from that of the White Rocks National Recreation Area (revised Forest Plan pp. 100-102). Management of the Moosalamoo Area is not intended to be a substitute for a National Recreation Area, and the standards and guidelines of the two areas demonstrate this. For example, forested lands within the Moosalamoo MA will be fully considered part of the suitable timber base, and a variety of management practices may occur, including both even-aged and uneven-aged silvicultural systems (revised Forest Plan p. 101).
PC 62000-53:	**The Forest Service should prohibit creation of additional upland openings in the Moosalamoo Recreation and Education Area or Moosalamoo National Recreational Area.**
	Response: A general discussion of permanent upland openings, their function, the Forest Service's objective to create and maintain acreage of permanent upland openings on the GMNF at slightly higher frequency and abundance than would occur by ecological tendencies, and whether the Forest Service should increase or decrease the percent of permanent openings in that objective, is contained in responses to SC 22000-5f and SC 22000-5g. As described in the major emphasis and desired future condition for this MA in the revised Forest Plan, "The intent of the Moosalamoo Recreation and Education Area (REA) is to emphasize the educational and recreational values for present and future generations.... The Moosalamoo (REA) will provide a unique opportunity to educate visitors (and local residents including school children) through service learning (and other volunteer programs) and through demonstration of sustainable forest management, wildlife habitat enhancement, and other practices.… Permanent upland and temporary openings will occur across the landscape in shapes and sizes that are consistent with visual objectives in an area" (revised Forest Plan p. 101). A wildlife-related guideline for this MA specifically states that, "Vegetation may be managed to provide both species diversity and a variety of major vegetation types, such as grasslands, shrublands, and forests" (revised Forest Plan p. 101). In other respects, Forest-wide guidelines for permanent and temporary openings apply to the Moosalamoo REA. Upland openings are compatible with the intent and emphasis for this MA for wildlife habitat and other uses, and for demonstration and education of their ecological functions. Designation of a Moosalamoo National Recreation Area (NRA) is the prerogative of the Congress. Should the Congress pass an Act to create a Moosalamoo NRA, management of permanent openings would conform to direction contained in the Act and in the subsequent NRA management plan.
PC 62000-54:	**The Forest Service should designate numerous small Special Management Areas.**
	Response: The Forest Service has designated numerous special management areas of various sizes. Many are small, while a few are large. These special areas are described in the revised Forest Plan under the Ecological Special Area management area (p. 94), and the Alpine/Subalpine Special Area management area (p. 82).
PC 62000-55:	**The Forest Service should not allocate the Alpine/Subalpine Special Area adjacent to existing commercial alpine ski areas.**
	Response: The concern with the Alpine/Subalpine Special Area MA being

	adjacent to commercial alpine ski areas is that it may impair the ability to operate an economically viable ski area. Sugarbush Ski Resort is the only commercial ski area adjacent to this Special Area. The Alpine/Subalpine Special Area MA does not fall within the long-term special use permit area of the Sugarbush Ski Resort, and none of the three commercial ski areas expressed an interest in expanding either the ski areas or the ski area expansion areas. After 13 years of monitoring on the summit of Mount Abraham and along the associated ridgelines, the Forest Service has found no evidence that ski area management or users are having an impact on the rare flora or fauna associated with the high elevation forests outside of the ski area permit areas (Diane Burbank, unpublished data; Rob Hoelscher, personal communication, November 2005).
PC 62000-56:	**The Forest Service should limit expansion or addition of Special Management Areas**
	Response: All lands on the Green Mountain National Forest are allocated to management areas with considerations of site capabilities, opportunities, and unique characteristics. Of the many sites on the Forest identified as having a significant ecological feature, several met criteria for designation as special management areas to protect unique or sensitive resources within their boundaries (Burbank 2004). Such an allocation is consistent with the mission and multiple-use mandate of the Forest Service, which requires that some areas be identified for protection or preservation, while other areas be identified for active management for purposes such as ecosystem restoration, production of goods, motorized recreation, and maintaining or improving productivity and forest health. All management is geared toward providing for future generations' use, enjoyment, and needs. The Regional Forester considered all of the alternatives, and the Record of Decision (ROD) describes his rationale for the Selected Alternative. The Selected Alternative represents what Forest managers believe to be the best balance of outcomes in achieving sustainable ecosystems and meeting the intent of relevant laws.
PC 62000-57:	**The Forest Service should provide a corridor around eligible Wild, Scenic, and Recreational Rivers greater than one-quarter mile.**
	Response: Management of Eligible Wild Scenic and Recreational Rivers follows Forest Service Handbook 1909.12, Chapter 8.12, Interim Management of Study Rivers. This policy suggests that the corridor for an eligible river should cover the length of the river segment authorized for study and an area one-quarter mile in width from each bank of the river. The policy further states that adjacent river areas beyond one-quarter mile from each river bank may be studied if their inclusion could facilitate management of the resources of the river area. The resources of eligible Wild and Scenic Rivers on the Green Mountain National Forest, however, are additionally protected within the corridor by management area standards and guidelines, and beyond the corridor by adjacent management areas, as well as Forest-wide riparian area standards and guidelines. Decisions regarding specific management activities will be made using a site-specific environmental analysis and public involvement.
PC 62000-58:	**The Forest Service should reconsider evaluation and designation of eligible Wild, Scenic, and Recreational Rivers**
SC 62000-58a	BECAUSE DESIGNATION IS UNNECESSARY
	Response: The intent of the 1968 Wild and Scenic Rivers Act was to preserve certain rivers that possess outstandingly remarkable characteristics

	in a free-flowing condition (DEIS p. 3-258). The National Wild and Scenic Rivers System is a federal program. As with similar national programs, such as the National Wilderness Preservation System, designation of Wild, Scenic, and Recreational Rivers is the prerogative of the Congress. The Forest Service is required by the Wild and Scenic Rivers Act, however, to identify eligible Wild and Scenic Rivers during their planning processes. Appendix D of the FEIS identifies eligible rivers on the GMNF. These rivers will be managed to protect and enhance the values for which they were determined eligible pending further study of their potential designation (revised Forest Plan p. 105).
SC 62000-58b	BECAUSE SOME RIVERS DETERMINED ELIGIBLE ARE DRY AT TIMES
SC 62000-58c	BECAUSE NATIONAL DESIGNATION MAY BE A HINDRANCE TO LOCAL RESTORATION EFFORTS
	Response: These comments were focused in particular on the White River. The concerns are based on the fact that some rivers determined eligible Wild, Scenic, and Recreational Rivers are dry at certain times of the year, and that federal protected status may hinder private river restoration work. The White River was originally studied for eligibility in the Nationwide Rivers Inventory (NRI), conducted by the National Park Service in 1982 (DEIS p. 3-261). It was classified as a Recreational River in the 1987 Plan. The Forest Service did not revisit this classification during Forest Plan revision. The White River was originally determined by the NRI to be eligible due to its historic, scenic, and fish values, including a variety of regionally significant historic and cultural features, a high range and diversity of views, and fisheries value due to Atlantic Salmon restoration efforts and a regional federal fish hatchery. These values are not influenced by the occasionally low flow of a small section of the river. Furthermore, the National Wild and Scenic Rivers System is intended to be a partnership model of protection, where public and private organizations cooperate to achieve river conservation goals. Classification and potential designation of a river in this system should help local restoration efforts rather than hinder them. The Forest Service staff's observations concur with the commenter that in a small section of the White River in Granville, there are some areas of dry river bed during extreme low-flow periods. This situation does not negate the White River's eligibility for other values.
SC 62000-58d	TO CONSULT WITH TRAIL GROUPS PRIOR TO DESIGNATION
	Response: Before eligible Wild, Scenic, and Recreational Rivers can be recommended for designation by the Congress, a suitability study is required. A suitability study is a congressionally directed process involving assessment of potential alternative uses, significant pubic input, and extensive public/private exchanges of information (DEIS p. 3-259). Management direction for the Appalachian Trail and Long Trail Management Areas dictates that all management actions that affect Appalachian Trail or Long Trail values require consultation with the relevant trail group or partner (revised Forest Plan pp. 68, 74).
SC 62000-58e	TO RECONSIDER THE OUTSTANDINGLY REMARKABLE VALUE RANKINGS
	Response: This commenter is particularly concerned about the Outstandingly Remarkable Value (ORV) rankings for recreation value on eligible Wild, Scenic, and Recreational Rivers. There are currently six

	eligible Wild and Scenic Rivers on the GMNF that possess outstandingly remarkable values in the recreation category. These were rivers originally inventoried by the National Park Service in their Nationwide Rivers Inventory (DEIS p. 3-261). The Forest Service also studied other rivers, listed as Significant Streams in the 1987 Forest Plan, Amendment 1. Of these 38 river segments studied, none were determined eligible based on their ORV recreation rankings. To receive an "A" recreation ranking in Outstandingly Remarkable Values, a river must meet one of the following "or" statements to be considered as meeting the standards of that criterion: • Visitors are willing to travel from outside the geographic region (ecoregion) to use the river resources for recreational purposes. Information on the river is routinely included in national publications. • Or: The river provides unusual opportunities for canoeing and boating, containing a variety of rapids and sufficient access points to provide a variety of trip lengths. • Or: Fishing success rate, size of take and game species composition is unusual for the geographic region (DEIS Appendix D-4). Forest Service specialists found, based primarily on local knowledge of the rivers, that the Significant Streams did not qualify as destination rivers or unusual boating or fishing rivers.
PC 62000-59:	**The Forest Service should designate Wild River status for sections of the Winhall River.**
	Response: The Winhall River from the end of Kendall Farm Road to the headwaters is an Eligible Wild River. This segment of the river, in an area one-quarter mile out from each river bank, is protected under the standards and guidelines of MA 9.4, Eligible Wild, Scenic, and Recreational Rivers (revised Forest Plan p. 108). Commercial timber harvest activities and new motorized trails, for example, are prohibited in this management area, in order to preserve a primitive experience and allow natural forces to dominate. See also response to SC 62000-18d.
PC 62000-60:	**The Forest Service should clarify the length of the eligible National Wild and Scenic River designation on the Ottauquechee River.**
	Response: This comment is directed at the section of the Ottauquechee River that crosses the Appalachian Trail Management Area. The Ottauquechee River is an Eligible National Recreation River from its headwaters to Woodstock. Along this length of river, on lands that the Forest Service owns, an area one-quarter mile in width from each river bank will be managed under MA 9.4, Eligible Wild, Scenic, and Recreational Rivers. In this area, the river will be managed to preserve its outstanding recreation value. The Ottauquechee Eligible Recreation River corridor crosses the Appalachian Trail Management Area in Killington, east of Kent Pond. At that point of intersection, the more restrictive management area standards and guidelines would apply. The comment also mentioned the Appalachian Trail corridor and Ottauquechee River in Woodstock. To Forest Service knowledge, these two elements do not cross in Woodstock. The Ottauquechee in Woodstock is still an eligible river, but is not under Forest Service jurisdiction in that area.
PC 62000-61:	**The Forest Service should continue land uses currently in effect on Newly Acquired Lands.**

	Response: Management area allocation is one of the six decisions made in a Forest plan. Existing uses, resource conditions and desired future condition were all considered in the management area allocation of the 1987 Newly Acquired Lands MA. In the 1987 Plan, the major emphasis of the Newly Acquired Lands MA was to protect the natural resources and management options of these lands until studies were done to determine the desired future condition of these lands. Management activities were also limited to the protection and inventory of existing resources and facilities until such studies were completed and a decision could be made. Newly acquired lands (existing MA 9.2) have been assigned a new MA designation except in the current management alternative (Alternative A), which provides a true baseline alternative. For the remaining alternatives, all Newly Acquired Lands are allocated to one of the other MAs. The relative allocation of these lands varies depending on the emphasis of each alternative. In the Selected Alternative 71 percent of the 1987 Plan Newly Acquired Lands MA have been assigned to management areas that will allow most existing uses to continue.
PC 62000-62:	**The Forest Service should retain the Newly Acquired Lands MA.**
	Response: The Newly Acquired Lands MA is retained in the Revised Forest Plan unchanged from the 1987 Plan, but only in Alternative A. For the remaining alternatives, all Newly Acquired Lands are allocated to one of the other MAs. The relative allocation of these lands varies depending on the emphasis of each alternative. Alternatives to Alternative A were developed in response to public concerns raised about the Newly Acquired Lands Management Area. See also responses to SC 62000-65c and 62000-62b.
SC 62000-62a	TO GUARANTEE FULL NEPA ANALYSIS FOR EACH PARCEL
	Response: See response to SC 62000-65b.
SC 62000-62b	TO CONTINUE CURRENT USES FOR AT LEAST ONE FOREST PLAN REVISION CYCLE
	Response: Nothing in the National Forest Management Act (NFMA) requires the Forest Service to hold lands in a holding pattern for 10 to 15 years. NFMA requires the establishment of goals and objectives in plans that provide for multiple use and sustained yield of goods and services from National Forest System lands. The Forest Service is required by law to meet the goals and objectives in the revised Forest Plan. Appendix G of the DEIS discloses the information sources used in the analysis (p. G-2). See also response SC 62000-65b.
SC 62000-62c	THAT INCLUDES A NEW STRATEGY FOR ANALYZING AND DESIGNATING LANDS IN A TIMELY MANNER
	Response: See responses to SC 62000-65a and SC 62000-65c.
PC 62000-63:	**The Forest Service should justify, adjust, or redo the MA allocations of Newly Acquired Lands.**
SC 62000-63a	TO REDUCE THE EMPHASIS OF THE DIVERSE FOREST USE MA
SC 62000-63b	TO REDUCE EMPHASIS OF MOTORIZED USES
SC 62000-63c	TO INCREASE EMPHASIS ON WILDERNESS
	Response: Newly acquired lands were allocated to management areas using the same information used to allocate other lands. This information included Forest Service on-the-ground knowledge, GIS data and inventories, and public knowledge and comments. In the Selected Alternative, 31 percent of these lands are allocated to Diverse Forest Use MA, 38 percent

	have an ROS of Semi-primitive Non-motorized, and 9 percent are allocated to the Wilderness Study Area MA. Allocations of newly acquired lands have changed from the Preferred Alternative to the Selected Alternative based on public comments and new information on specific allocations.
PC 62000-64:	**The Forest Service should proceed with the Proclamation Boundary mapping as presented in Appendix G.**
	Response: The Forest Service appreciates your comment and intends to continue with the pre-designation of proclamation boundary lands using the Selected Alternative proclamation boundary map. This map has been modified from the preferred alternative. Changes from the draft proclamation boundary mapping have been around the Bingo Brook area, near the Town of Dorset, and around Grout Pond and Somerset Reservoir. See FEIS Appendix G.
PC 62000-65:	**The Forest Service should not pre-designate or should revise the pre-designation of lands within the Proclamation Boundary map.**
SC 62000-65a	TO DO A FULL NEPA REVIEW ON EACH PARCEL
SC 62000-65b	BECAUSE THE FOREST SERVICE HAS NO AUTHORITY TO PRE-DESIGNATE
	Response: See Appendix G of the forest plan Draft Environmental Impact Statement, which describes the analysis conducted to designate lands within the proclamation boundary. . Specifically refer to pages G-2-3 which describes the Information Sources used and Mapping Strategy that occurred. This analysis is part of the programmatic decision making that comprises the Forest Plan revision process. These management designations in and of themselves do not result in irretrievable resource commitments or permanently impair the productivity of the land. But rather the guideline of assigning a new parcel of land to a management area which had been previously determined as suitable for an area within which the land is located, will help to achieve the goals and objectives of the Plan (see National Forest Management Act of 1976, (Sec 6.(g) (3)(A-F). Any project decisions to be made on newly acquired lands will be accompanied by a site-specific disclosure of environmental effects in accordance with the procedures of the National Environmental Policy Act (NEPA-40 CFR Parts 1500-1508). The site-specific NEPA analysis will identify any significant issues, which could lead to considering alternative management designations for a parcel of newly acquired lands. This is in compliance with 36 CFR Part 254.3(F) Land Exchanges. This concept could apply to purchases and donations.
SC 62000-65c	BECAUSE THE FOREST SERVICE MIS-REPRESENTED THE NEED TO PRE-DESIGNATE
	Response: As described in the Purpose and Need for Change section in the revised Forest Plan (pp. 1-4), the third primary reason for revising the Forest Plan is to address new issues and trends, which were derived from a report entitled “Implementing the Green Mountain National Forest Land and Resource Management Plan…” Page 6 of this report describes the ineffectiveness of the 9.2 Management Area. The concern is then identified as Issue #10 in the Purpose and Need Section of the DEIS (p. 1-11). See page 3-357 of the DEIS and page 42 of the revised Forest Plan for further detail, including how the issue led to the rationale for developing the Forest Plan Proclamation Boundary map. Also see the guideline on page 42 of the

	revised Forest Plan which states "Newly acquired land should be assigned a management area classification shown on the Forest Plan Proclamation Boundary map." The introduction in Appendix G of the FEIS Appendices explains the designation approach to all lands within the proclamation boundary which was developed in response to public, State, and municipal concern with the current status of newly acquired lands which stemmed from having 90,000 acres of land in MA 9.2 that had been in a "holding pattern" for a long time.
SC 62000-65d	TO INCREASE EMPHASIS ON WILDERNESS
	Response: In the next Forest Plan revision process all National Forest System lands will be studied for roadless inventory, wild, scenic, and recreation river eligibility and wilderness evaluation. These studies are required as part of the Forest Plan revision process.
SC 62000-65e	TO PREVENT THE LIKELY PUBLIC INTERPRETATION THAT THE FOREST SERVICE IS TRYING TO TAKE PRIVATE LAND
	Response: The Forest Service will not be making any decisions in the revised Forest Plan that affects private lands. These management area designations would only apply to future land acquisitions from willing sellers, as directed by Forest-wide standards and guidelines (revised Forest Plan p. 41).
SC 62000-65f	TO REDUCE THE EMPHASIS OF THE DIVERSE FOREST USE MA
	Response: The process and mapping strategy used in the pre-designation of Proclamation Boundary Lands is described in Appendix G of the DEIS. Much of the non-federal land in the proclamation boundary is accessible and near developed areas. These lands were generally allocated to Diverse Forest Use (DFU) MA because they can readily be managed to provide the major emphasis of the DFU MA. Concerns have also been expressed that too many restrictions on federal lands make the sale of the land to the Forest Service more difficult for communities to support. For this reason, the Forest Service used an approach for pre-designating non-federal lands that provided the most appropriate level of management while keeping most management area allocations in the less restrictive management areas such as Diverse Forest Use and Diverse Backcountry. Two areas mapped as Diverse Forest Use in the Preferred Alternative Proclamation Boundary have been changed to other management areas. The lands on the northeast side of Somerset Reservoir were changed to Remote Wildlife Habitat to provide consistent management on the east side of the reservoir. Another small area of land in the French Hollow area was changed to an Ecological Special Area MA to provide for a contiguous area of potential old growth development based on new information from field investigations.
PC 62000-66:	**The Forest Service should provide more information about pre-designation of lands within the Proclamation Boundary.**
SC 62000-66a	TO DESCRIBE POLICIES AT OTHER FORESTS AND AT THE REGIONAL AND NATIONAL LEVELS
	Response: This process was based on with consultation with other National Forests within Region 9, as well as the Regional Office. To the best of Forest Service staff knowledge, there is no one national policy that sets direction for this and the Forest Service chose to follow the process from Forest Plans that are currently in place on other National Forests within the

	Region. In the 1987 Plan, the GMNF was unique by establishing a management area for Newly Acquired Lands.
SC 62000-66b	TO PROVIDE INFORMATION THAT THE FOREST SERVICE WITHHELD DURING PUBLIC MEETINGS
	Response: The Forest Service presented the two options for newly acquired lands at five public meetings held at different locations during the month of January, 2004. Please see the Forest Service website (www.fs.fed.us/r9/gmfl/nepa_planning/plan_revision) for handouts, slideshow, notes, dates, and locations of these meeting. Also, refer to Appendix G of the DEIS, which provides information on why this proposal was developed, and the information and analysis process used, as well as maps for each alternative.
SC 62000-66c	TO CORRECT ERRORS IN PRE-DESIGNATION OF LANDS ALONG THE APPALACHIAN TRAIL
	Response: As stated on page G-1 of the DEIS Appendices, "Option 2 allows flexibility for management area validation prior to, and following, the acquisition of lands… Moreover, if further analysis generated more information, the GMNF can amend the Forest Plan after acquisition or during project specific NEPA analysis." See response to PC 22000-2e for further clarification.

Social and Economic (70000)

PC 70000-1:	**The Forest Service should clarify the economic analysis.**
SC 70000-1a	TO DISCLOSE WHAT IS INCLUDED IN THE CATEGORY OF ASSIGNED VALUES
	Response: The activities included in assigned values are listed in the DEIS Appendix B table B-6 on page B-13. The methodology for determining the Economic and Financial Efficiency through Present Net Value (PNV) is described on pages B-10 and 11 of DEIS Appendix B.
SC 70000-1b	TO DISCLOSE THE LENGTH OF STAY FACTORS USED TO ESTIMATE THE ECONOMIC IMPACTS OF RECREATION
	Response: Length of stay was not used as a factor in the economic impact analysis. In the DEIS Appendix B on page 10, the explanation of the economic impact analysis erroneously used the term Recreation Visitor Days (RVDs) instead of visits. Visits used in the economic analysis do not have a length of stay factor but are based on whether the visitor is local or non-local and overnight or day use. This has been clarified and corrected in the FEIS (Appendix B p. 10). For the Present Net Value (PNV), economic efficiency analysis, length of stay was converted into Recreation Visitor Days (RVD). The number of visits and the length of stay were obtained from the 2000 National Visitor Use Monitoring. The length of stay was calculated through a statistical model for different types of forest uses: day use developed site (3.9 hour length of stay), overnight use developed site (45.5 hour length of stay), general forest area (7.1 hour length of stay) and wilderness (13.7 hour length of stay). These lengths of stays were then calculated as RVDs. Please see pages B-9, 10, and 12 of FEIS Appendix B for a complete explanation.
PC 70000-2	**The Forest Service should provide a full assessment of socio-economic impacts associated with expanded summer ORV use on the GMNF.**
	Response: Summer ORV use on the GMNF has not been expanded in the revised Forest Plan. Standards and guidelines for summer ORVs are more

	restrictive than in the 1987 Forest Plan (revised Forest Plan p. 37). The revised Forest Plan also restricts summer ORV use to Diverse Forest Use and Diverse Backcountry Forest Management Areas, and to Recreational River Corridors located within these two MAs. The number of acres available for potential summer ORV trail development is less in the Selected Alternative than in the 1987 Plan (Alternative A) (FEIS Table 3.10-12). The level of existing snowmobile use was incorporated in the economic effects analysis generated using IMPLAN, an economic input-output model. These effects are provided on pages 3-368 and 3-369 of the DEIS. The actual FEAST Spreadsheet inputs for snowmobiling are provided on page B-12 of the DEIS Appendix B. FEAST is an electronic spreadsheet tool that uses the results from IMPLAN in its calculations. No values were generated for summer ORV use since there are currently no designated summer ORV trails on the GMNF, and the revised Forest Plan does not designate any summer ORV trails.
PC 70000-3	**The Forest Service should consider Net Public Benefits in its economic analysis in order to comply with the 1982 Planning Rule.**
	Response: The Forest Service considered net public benefits through a combination of quantitative measures and non-quantitative information gathered through public involvement, studies, existing forest data, and other information relating to public benefits from managing the Green Mountain National Forest. The Forest Service conducted meetings, invited comments, and used published information to evaluate the net effects in a wide variety of public benefits, over and above the quantitative information that forms the basis for Forest Service work (see Indicator 1, FEIS Section 3.21). According to the 1994 Congressional Research Service report "Below Cost Timber Sales: Overview," social investment analyses have most of the problems of a financial investment analyses, compounded by the difficulties in assessing the timing, level, and value of future effects that are difficult to quantify. Net public benefits cannot be calculated, and are assumed to be determined through public participation in national forest planning."
PC 70000-4	**The Forest Service should adjust the growth rate used to calculate wilderness visits because the nation-wide rate used is inappropriate for Vermont.**
	Response: The Forest Service used the growth figures form Chapter IV of "Outdoor Recreation in American Life: A National Assessment of Demand and Supply Trends" to provide the growth trends for all of the recreation use categories (Bowker et al. 1999). The Forest Service does not have any GMNF-specific growth trend data for Wilderness use on the GMNF. Benchmarks show that the current Wilderness capacity of 614,655 Recreation Visitor Days (RVDs) supplied by 59,001 Wilderness acres exceeds the demand for Wilderness use (revised Forest Plan p. A-21).
PC 70000-5	**The Forest Service should clarify its accounting methods used in the financial and economic efficiency analysis, including how non-priced benefits were considered.**
	Response*:* As stated on page B-11 of the DEIS Appendix B, the Forest Service used "market-clearing price" which approximates the price that a good would sell for in a competitive market.
PC 70000-6	**The Forest Service should consider alternative methodologies of calculating benefits in its economic efficiency analysis, such as a Willingness To Pay analysis.**
SC 70000-6a	BECAUSE THE FOREST SERVICE'S METHODOLOGY IS NOT CONSISTENT WITH MAINSTREAM ECONOMICS

	Response: The Forest Service 1990 RPA Resource Pricing and Valuation Procedures provides a comparison of Willingness To Pay (WTP) valuations with Market-Clearing Prices. While WTP values are generally larger, the groupings available from various studies generally do not coincide with the RPA aggregation of recreation activities. Since the recreation assigned values clearly overwhelm the timber and other values from the forest, just making them larger would not reveal any additional differences among alternatives.
PC 70000-7	**The Forest Service should consider additional values in its economic efficiency analysis, including non-priced benefits such as aesthetic value, the value of ecosystem services, and the economic value of wilderness.**
	Response: According to Forest Service Handbook 1907.17 (now under revision), the Forest Service calculates financial efficiency using only those things bought and sold in the impact area as part of Forest Service land management activities. Then, as part of economic efficiency calculations, additional economic values are added in the form of non-priced benefits associated with such things as recreational experience, over and above dollars spent in the local area when visiting to get the experience. The financial and economic efficiency figures for each alternative have been added to FEIS Table 3.21-24: Present Net Value and are described in Social and Economic Factors section 3.21. While the Forest Service recognized that there are even more benefits, such as aesthetics, derived from the GMNF, quantifying those benefits can be both expensive and time consuming. These values, without numbers, make up important non-quantitative considerations in the responsible official's decision process.
SC 70000-7a	BECAUSE THE ANALYSIS ONLY CONSIDERS RECREATION, THUS UNDERESTIMATING THE TRUE WORTH OF THE FOREST
	Response: In performing analyses for Plan revision, the Forest Service attempted to evaluate the differences among alternatives. The Forest Service could have placed a high value on clean water, for example. All of the alternatives, with required mitigation, would produce the same high-quality water. While the responsible officials recognize the high value of clean water, no value would be added to the decision process by placing a dollar value on it. The Forest Service considered recreation values because of issues brought up by the public during scoping and subsequent public involvement. The Forest Service shifted some of the recreational use to Wilderness use on a per acre basis, which does provide for slight differences in the economic efficiency figures for some alternatives (see FEIS Appendix B).
SC 70000-7b	BECAUSE GOVERNING LAWS AND REGULATIONS REQUIRE THE FOREST SERVICE TO CONSIDER THE VALUES OF NON-TIMBER RESOURCES, SUCH AS ENHANCING THE QUALITY OF LIFE OF NEIGHBORING TOWNS
	Response: Through the extensive public involvement process for the GMNF Forest Plan revision, the Forest Service received much input on the qualitative value of the GMNF. The Forest Service recognizes the extent to which the public values such things as quality of life, clean water, high-quality scenery, wildlife and wildlife habitats, special forest products such as mushrooms and herbs, other flora, and other resource benefits. Placing a precise dollar value on each would not disclose potential impacts. For these valued things, such as quality of life, the Forest Service considers them as presently un-quantified, along with other multiple uses such as developed recreation and vegetation management for which the Forest Service has well developed and accepted quantitative means of valuing

SC 70000-7c	TO ADDRESS THE NON-RECREATION BENEFITS OF WILDERNESS, SUCH AS IMPROVED REAL-ESTATE VALUES
	Response: Based on public comment, the Forest Service added information on the potential enhanced property values due to proximity to a Wilderness area (see FEIS section 3.21.1, Existing Condition – Economic, Housing Values). Current median housing values by county were provided on page 3-352 of the DEIS. The projections required in order to add the potential increase in property values, such as number of parcel sales and property tax assessments, are difficult to obtain. As described in PC 70000-3, the Forest Service considered many aspects when determining Net Public Benefit, including the potential economic benefits to communities and area residents. The addition of this information would not affect the economic impact analysis.
PC 70000-8	**The Forest Service should include a wider range of economic costs in its economic efficiency analysis.**
SC 70000-8a	TO COMPLY WITH FEDERAL LAND MANAGEMENT LAWS AND FOREST SERVICE REGULATIONS
	Response: Forest Service evaluation considered both quantitative and non-quantitative analyses. Quantitative analysis was directly applied to timber and recreation activities as explained in Appendix B of the DEIS. All Forest Service program expenditures for the GMNF were included in the FEAST spreadsheet (DEIS p. B-12). This does not mean that the deciding official considered the timber dollars more than other amenities. Many human values have no dollar values, or there are highly variable opinions on what the dollar values attributed to them should be. The Forest Service gathered that information through public involvement and listening, then considered those multitude of things for which the Forest Service does not have dollar values, along with those things for which the Forest Service does have dollar values and costs. Also see response to SC 70000-8d.
SC 70000-8b	TO DISCLOSE THE IMPACT OF LOGGING ON NON-TIMBER VALUES, SUCH AS LOSS OF RECREATIONAL OPPORTUNITIES, DEGRADED HABITATS, ECONOMIC IMPACTS TO COMMUNITIES, INCREASED FLOODING, DISRUPTION OF WATER FLOW, OR INJURY AND DAMAGE ASSOCIATED WITH LOGGING
	Response: In evaluating the alternatives, the Forest Service considered all of the appropriate steps taken to mitigate or avoid effects of logging on non-timber values. Implementation of Forest-wide standards and guidelines described throughout the FEIS will provide protection for non-timber resources, and Vermont's "Accepted Management Practices" will be followed. Timber contracts include safety requirements intended to protect those employed under that contract. If Forest Service site-specific environmental analysis determined that any timber harvest actions, regardless of any income to the government, were to result in downstream human injury or property damage, the Forest Service would not authorize that activity.
SC 70000-8c	TO CONSIDER THE IMPACT OF SKI AREAS ON THE LOCAL ECONOMY
	Response: New proposals associated with ski areas under Special Use Permit would be subject to a site-specific environmental analysis and public involvement. The analysis would include socio-economic effects from any changes to existing ski area management activities on the Forest.
SC 70000-8d	BECAUSE A FULL AND FAIR ANALYSIS OF TIMBER-RELATED BENEFITS AND COSTS WAS NOT PROVIDED FOR EACH ALTERNATIVE, AS REQUIRED BY NEPA AND THE 1987 FOREST PLAN
	Response: NEPA does not require that a monetary value to be placed on the

	environmental impacts of each alternative. NFMA requires that the Forest Service estimate the costs and values of all outputs attributable to each alternative using quantitative and qualitative criteria when monetary values may not be reasonably assigned. Economic costs and benefits for each alternative were analyzed using IMPLAN (DEIS p. B-9). Non-priced costs and benefits of each alternative were evaluated through analysis completed by Forest Service specialists, in combination with public involvement and participation, throughout the planning process. The Forest Service is not required to use any particular quantitative method, nor is it required to analyze economic costs and benefits associated with non-timber values. The revised Forest Plan updates and replaces the 1987 Forest Plan and therefore does not have to comply with the 1987 Forest Plan.
PC 70000-9:	**The Forest Service should address the relative importance of the wood product manufacturing sector to the Vermont economy.**
	Response: Please see page 3-351 of the DEIS where this is discussed.
SC 70000-9a	IN THE SOCIAL AND ECONOMIC ANALYSIS OF THE FINAL EIS
	Response: The commenter is concerned that the economic data that was used in the economic analysis overstates the relative importance of the wood products industry to the economy of the six counties with NFS lands. The GMNF economic impact analysis was based on 2000 data using the Standard Industrial Classification (SIC). Newer 2002 IMPLAN data using the newer North American Industry Classification System (NAICS) was not available when the analysis was initiated. Software conversion and writing new data processing algorithms required a few years. While the 2002 data are available now, the Forest Service does not normally re-run all of the analyses between the DEIS and FEIS as new data become available unless there is reason to believe that the new information will make a significant change in the effects analysis. The Forest Service uses the latest data available at the time of the analysis. The following equation directly addresses the question: IMPLAN labor income is the sum of “wage and salary disbursements” + “other labor income” + “proprietor’s income” + an estimate of employer contributions to social insurance. This last value is most likely the difference between the commenter’s value and the DEIS. Since Forest Service values come from a combination of Bureau of Economic Analysis (BEA), Bureau of Labor Statistics (BLS), and other sources, the Forest Service cannot just arbitrarily change a total value and not change the thousands of values in the database contributing to that value. The Forest Service did not assume that 100 percent of the sawlogs are processed in the impact area. The Forest Service estimated that 60 percent of softwood sawlogs and 90 percent of hardwood sawlogs are processed within the impact area. These estimates were based on past experience. This information has been added to the FEIS section 3.21.2 (see Indicator 2), to clarify this analysis.
SC 70000-9b	BY CONSIDERING AN ALTERNATIVE ANALYSIS APPROACH SUCH AS TIMBER INCOME AS A PERCENT OF PERSONAL INCOME
	Response: Personal income by employment sector is presented in Table 3.21-19 on page 3-365 of the DEIS. This table shows the percentage of personal income for the six counties with NFS lands and the State of Vermont for the employment sectors of Wood Processing, Forestry, Farming and Fishing, Tourism and the Income for all employment sectors.
SC 70000-9c	BY PROVIDING CONTEXTUAL EMPLOYMENT DATA

	Response: Contextual employment data is provided in the DEIS as described in SC 70000-9b.
SC 70000-9d	BY DISCLOSING RECENT REDUCTIONS IN LOCAL TIMBER DEMAND
	Response: The volume of timber processed in the analysis area is stated on page 3-351 of the DEIS. The volume processed decreased from 134,194 thousand board feet (mbf) in 1997 to 127,686 mbf in 2002.
PC 70000-10	**The Forest Service should re-evaluate the effects of alternatives in the employment-related economic analysis (Table 3.21-20).**
	Response: See response to PC 70000-13.
SC 70000-10a	TO ADJUST THE RECREATION FACTOR USED IN THE ANALYSIS
	Response: Recreational use on the GMNF is not currently limited by carrying capacity. The present recreational use is the level of demand for that particular use. The Forest Service did make adjustments to use based on the acres of Wilderness recommended in each alternative. All recreational activities that occur in Wilderness are Wilderness use. The inputs in Table B-5 (DEIS Appendix B, p. B-12) show an increase in Wilderness visits in Alternatives C, D, and E and a decrease in hiking and backpacking. These decreases reflect the shift of those activities into Wilderness. The increase in Wilderness visitor days did increase the Recreation Employment values in Alternatives C, D, and E in Table 3.21-20 and the Recreation labor income values in Alternative D in Table 3.21-21 (DEIS p. 3-369). The overall demand for recreation use is not expected to change with different alternatives.
SC 70000-10b	TO ADJUST THE WILDLIFE AND FISH FACTORS USED IN THE ANALYSIS
	Response: Wildlife and fish values were included in recreation values through hunting, fishing, and other non-consumptive wildlife related recreation activities (DEIS Appendix B Table 5, p. 12).
SC 70000-10c	BECAUSE THE ECONOMIC IMPACT AREA USED IS TOO NARROW AND UNREALISTIC
	Response: In attempting to describe economic impact in the context of the GMNF, the Forest Service chose to only include the six-county area that is most directly affected by Forest Service management (DEIS p. 3-341). Amounts of timber processed inside the area is 60 percent of the softwood sawlogs and 90 percent of the hardwood sawlogs (FEIS section 3.21.2, Indicator 2). This reflects the fact that some products are shipped to other counties, other states, and other countries. In order to make this analysis meaningful in the context of the ecological systems evaluated in other parts of the analysis, these counties are appropriate. The Forest Service acknowledges that not all potential ecological, economic, or social impacts of sawlogs processed in other areas of the Vermont or other areas were evaluated.
SC 70000-10d	TO ADJUST THE JOB MULTIPLICATION FACTOR USED IN THE ANALYSIS
	Response: Forest Service analysis did not use simple employment multipliers. They were derived out of a model specific to the counties in the impact area as reflected in direct, indirect, and induced employment resulting from a change in final demand economic information. TSPIRS is a long abandoned system and the Forest Service does not feel that very old national-level numbers are appropriate for this impact area. The Roadless Conservation Rule EIS was also based on national numbers with a different analysis emphasis
SC 70000-10e	TO PROVIDE A REGIONAL CONTEXT FOR THE ESTIMATED GMNF LEVEL OF EMPLOYMENT
	Response: Please see Table 3.21-18, DEIS page 3-363. The top row of this table provides the total 2000 employment figures in each of the six counties in the analysis area. The total number employed as of the year 2000 was

	145,025.
PC 70000-11	**The Forest Service should address errors, inconsistencies, and omissions in the economic analysis.**
	Response: The economic analysis is described in Appendix B of the DEIS. Data used in this analysis was obtained from a number of different sources and is correct to the best of the Forest Service's knowledge.
SC 70000-11a	TO CORRECT PRESENT NET VALUE CALCULATIONS ACROSS ALTERNATIVES, SUCH AS THE LEVEL OF VARIOUS RECREATION USES
	Response: Recreation use values were calculated from the 2000 National Visitor Monitoring survey (NVUM) data (DEIS p. B-11). Recreational use on the GMNF is not currently limited by carrying capacity. The present recreational use is the level of demand for that particular use. The Forest Service did make adjustments to use based on the acres of Wilderness proposed in each alternative. All recreational activities that occur in Wilderness are Wilderness use. The inputs in Table B-5 (DEIS Appendix B, p. B-12) show an increase in Wilderness visits in Alternatives C, D, and E and a decrease in hiking and camping categories. These decreases reflect the shift of some of those activities into Wilderness. The difference in acreage for Alpine Ski Areas in Alternative B, C, D, and E is based on GIS calculations of the Management Area, not a change in the management area boundaries. This minor change does not affect the number of downhill skiing visitor days. Hunting and fishing did have the same percentage of forest users translating into the same number of users.
SC 70000-11b	TO INCORPORATE AVAILABLE VERMONT TREND DATA
	Response: Income trends for "0101 Forestry and Logging" and "0537 Pulp Manufacturing" for Washington County, Vermont were not disclosed by the Bureau of Economic Analysis. These values, however, were used successfully in the IMPLAN database. Since the counties are aggregated together, disclosure is no longer an issue and analysis can proceed. Overall, the decreasing value of forest products industry is disclosed on page 3-351 of the DEIS. In response to public comment, the information and tables for Income from Wood Products and Income from Tourism-related Industries have been changed to constant dollars (FEIS Tables 3.21-8 and 3.21-9). This change shows the contribution of these industries in 2000 dollars and should make comparison of the contributions easier for the reader.
PC 70000-12	**The Forest Service should change the calculation of the economic impact analysis.**
SC 70000-12a	BECAUSE RECREATION ACTIVITIES SHOULD NOT BE ASSUMED TO OCCUR AT THE SAME LEVEL OF USE PER ACRE ACROSS DIFFERENT MANAGEMENT AREAS
	Response: Wilderness use was calculated to occur at 0.967 RVDs per acre (57,083 Wilderness RVDs divided by 59,001 acres of Wilderness). This calculation supplied a per acre estimate of Wilderness use. The rate for Wilderness use was then calculated for proposed Wilderness and added to the RVD figure for existing Wilderness use. The additional Wilderness per acre use amount was then subtracted from the general activities use levels for backpacking and hiking. The explanation on page B-10 of the DEIS Appendix B has been revised to clarify this assumption.
PC 70000-13	**The Forest Service should clarify the estimations of labor income produced by the alternatives.**
	Response: The analysis points out that there are not many economic impact differences among alternatives. In revising a forest plan, this is often the case

	and may be considered a valid outcome of analysis. The Forest Service has provided the information requested and would like to point out that showing impacts associated primarily with timber does not mean that other resources were not considered. It only means that changes among alternatives for these other resources are minimal. Also see SC 70000-13a.
SC 70000-13a	TO EXPLAIN WHY ONLY TIMBER OUTPUTS WOULD INCREASE ACROSS ALTERNATIVES
	Response: Currently, budget and forest capability limit timber harvesting to some level below the 1987 Plan's ASQ. These limits do not affect recreation and most other programs to the same degree. As alternatives were evaluated, the Forest Service was required to compare them in terms of their desired future conditions. These conditions were the basis for much of the biological evaluation of the alternatives. If each alternative was evaluated as a complete, integrated management plan, the Forest Service would have to evaluate the vegetation management, including logging, at the highest level. Otherwise the limits to which the Forest Service may go would not be fairly disclosed, given changes in forest budget and capability. Comparing these upper limits to the current lower level of activities creates the incorrect impression that only increased timber activities are examined. Recreational use on the GMNF is not currently limited by carrying capacity. The present recreational use is the level of demand for that particular use. The Forest Service did make adjustments to use based on the acres of Wilderness proposed in each alternative. All recreational activities that occur in Wilderness are Wilderness use. The inputs in Table B-5 (DEIS Appendix B p. B-12) show an increase in Wilderness visits in Alternatives C, D, and E and a decrease in hiking and backpacking. These decreases reflect the shift of those activities into Wilderness. The increase in Wilderness visitor days did increase the Recreation Employment values in Alternatives C, D, and E in Table 3.21-20 and the Recreation labor income values in Alternative D in Table 3.21-21 (DEIS p. 3-369). The overall demand for recreation use is not expected to change with different alternatives.
SC 70000-13b	TO PROVIDE REGIONAL CONTEXT FOR THE FOREST-BASED INCOME
	Response: See response to SC 70000-13a. The analysis points out that there are not many economic impact differences among alternatives. In revising a forest plan, this is often the case and may be considered a valid outcome of analysis. Regional context for income is provided in Table 3.21-19 on DEIS page 3-365.
SC 70000-13c	BECAUSE LIMITING THE LABOR INCOME ANALYSIS TO TIMBER IS MISLEADING AND ILLEGAL
	Response: See responses to SC 70000-13a and b.
PC 70000-14	**The Forest Service should change projected budget expenditure inputs in the economic analysis to reflect the likelihood that funding will remain below the level needed for Plan implementation.**
	Response: The Forest Service cannot compare the desired future conditions of the proposed Forest Plan alternatives and how those conditions would be achieved without comparing the alternatives as though each alternative was fully funded. If alternatives were compared at a variety of percentages of full funding, only a portion of the desired future condition would be disclosed, which would not accurately analyze the effects of the Forest Plan if implemented to attain the desired future condition.
PC 70000-15	**The Forest Service should consider the economic benefits of timber**

	management in comparison to the potential gain from wilderness areas.
	Response: The Forest Plan revision analysis of multiple-use management was not meant to explore the single use effect of wilderness or timber management. These activities were incorporated into the economic analysis as described in Appendix B of the DEIS.

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Comments from Agencies and Elected officials

Comments received from federal, State, local agencies, and elected officials are represented in the public concern statements. This section presents the comments from these agencies and officials in their entirety (FSH 1909.15.24.1.3).

Name	Organization
Federal	
Andrew L. Raddant	United States Department of the Interior
Robert W. Varney	United States Environmental Protection Agency
State	
Thomas W. Torti	State of Vermont Agency of Natural Resources
Representative Mary Morrissey	Vermont House of Representatives
Senator Mark Shepard	Vermont State Senate
County	
Rex Burke	Bennington County Regional Commission
John Bennett	Windham Regional Commission
Matt Jensen, Jennifer Ely	Winooski Valley Park District
Town	
Norman Arseneault, Rodney Brown, Kristi Tate	Town of Granville
Don Mayo, Ethan Ready, Will Sipsey	Town of Lincoln
Allyson Frederick	Salisbury Planning Commission
Trafton Crandall, Tara Hamilton, Erin Russell Story, Glenn Thomas, Margo Wade	Warren Conservation Committee