White Mountain National Forest

United States
Department of
Agriculture

Forest
Service

**Eastern
Region**

Land and Resource Management Plan

This document is available in large print.

Contact the

White Mountain National Forest

Supervisor's Office

1-603-528-8721

TTY 1-603-528-8722

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Land and Resource Management Plan

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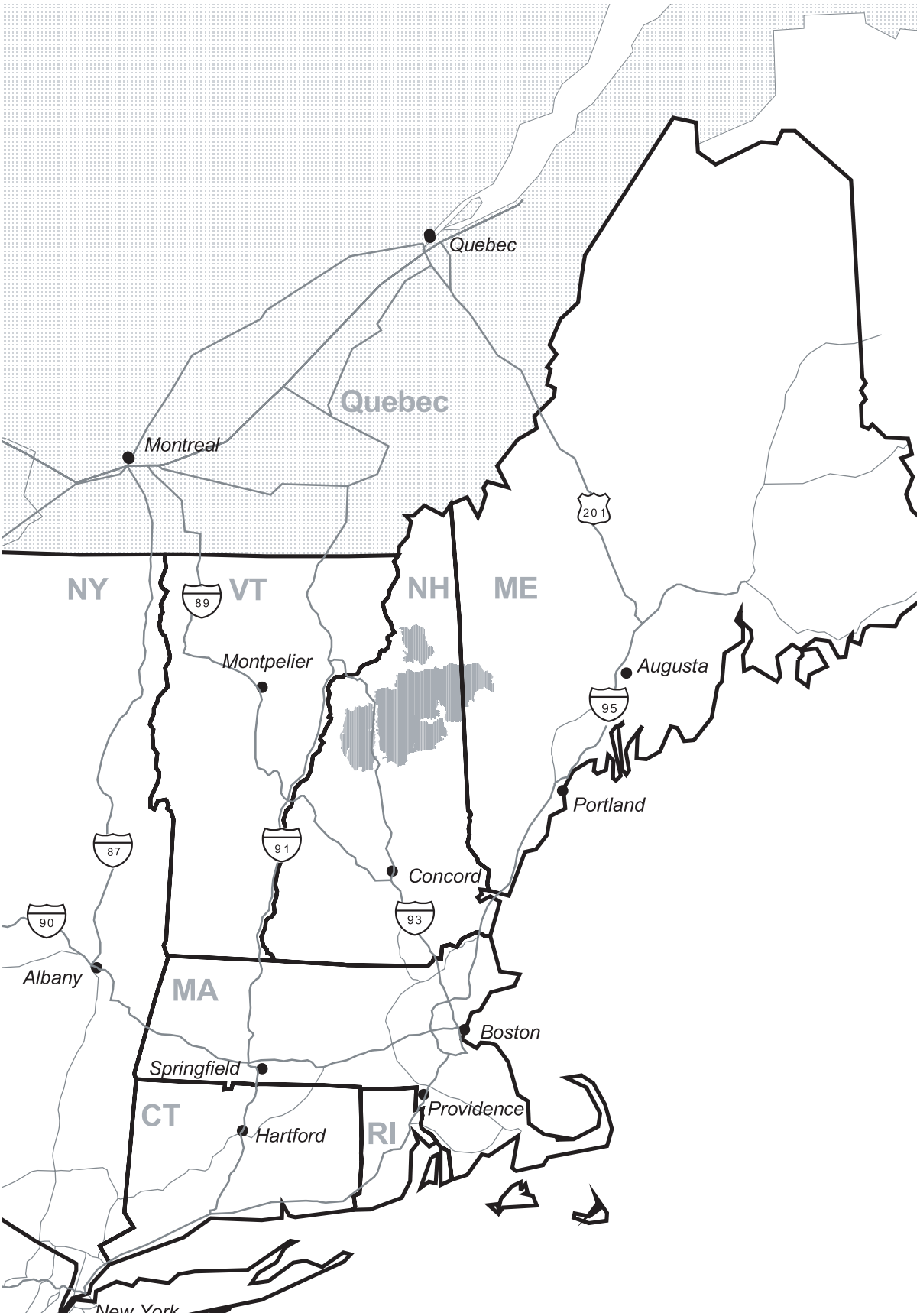
Responsible Agency	USDA Forest Service
Responsible Official	Randy Moore, Regional Forester 310 W. Wisconsin Avenue Suite 580 Milwaukee, WI 53203 414-297-3600
Forest Supervisor	Thomas G. Wagner White Mountain National Forest 719 Main Street Laconia, NH 03246 603 528-8774
For further information contact	Barbara Levesque, Forest Planner White Mountain National Forest 719 Main Street Laconia, NH 03246 603-528-8743
White Mountain National Forest	Carroll County, New Hampshire Coos County, New Hampshire Grafton County, New Hampshire Oxford County, Maine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Preface

Purpose of the Forest Plan

The White Mountain National Forest's Land and Resource Management Plan (Forest Plan) provides guidance for managing and protecting natural resources and our visitors' experiences on all Forest lands. Six programmatic decisions are made in the Forest Plan that will govern the landscape-scale management of the Forest. Project-level decisions are made within the established framework of the Plan.

1. Forest-wide multiple-use goals and objectives (36 CFR 219.11(b)).
2. Forest-wide management standards and guidelines (36 CFR 219.13-27).
3. Management area direction (36 CFR 219.11).
4. Lands suited for timber production (36 CFR 219.14), and establishment of an allowable sale quantity (36 CFR 219.16).
5. Monitoring and evaluation requirements (36 CFR 219.11(d)).
6. Recommendations to Congress (e.g., recommendations for Wilderness (36 CFR 219.17)).

Management Direction

The Forest Plan provides guidance for managing resources and uses on the National Forest. All applicable laws, regulations, policies, and national and regional direction, as detailed in the Forest Service Manual and Forest Service Handbook, are part of Forest Plan management direction. This higher-level direction is only occasionally repeated in the Forest Plan.

In the Forest Plan, goals, objectives, and desired future conditions present a picture of what the Forest will look like, and what services, products, and experiences it will provide, in years to come. These are not absolute; rather they are a conceptual framework within which decisions can be made. Standards and guidelines provide more concrete direction for implementing projects and activities. Monitoring evaluates whether the goals and objectives are being met, and determines if additional or different management direction is necessary.

Chapter 1 — Goals and Objectives

Goals are broad statements that describe the conditions the Forest Service will strive to achieve through implementation of the Forest Plan. They are generally timeless and not measurable, and their achievement is not required. Goals should be considered when planning projects and activities, and management should move the Forest toward these desired conditions.

Objectives are measurable accomplishments intended to move the Forest toward the desired conditions described in the goals. Objectives are generally achieved through site-level projects or activities.

Three Forest Plan goals were developed to provide overall guidance to Forest management. More specific Forest-wide goals and objectives are presented by resource, such as recreation or wildlife, in alphabetical order.

Chapter 2 — Forest-wide Management Direction

Standards and guidelines are the specific, technical direction for managing resources. They provide another link in moving toward the desired conditions. Forest-wide standards and guidelines apply across all White Mountain National Forest lands and management activities, regardless of management area, unless more restrictive direction exists for a management area (see Chapter 3). They are presented by resource in the same alphabetical order used for goals and objectives.

A standard is a course of action that must be followed, or a level of attainment that must be reached, to achieve management goals and objectives. In general, standards limit project-related activities. Standards are preceded by the identifier S-# for each resource, and include words or phrases such as *must*, *is prohibited*, or *will* to indicate that adherence to the direction is mandatory. Deviations from standards must be analyzed and documented in a Forest Plan amendment.

A guideline also is a required course of action or level of attainment. It is intended to move the Forest toward desired conditions in a way that permits operational flexibility to respond to variations in conditions. Guidelines can be modified or not implemented if site-specific conditions warrant a deviation. This greater flexibility is indicated by the words *should* and *may*. The rationale for deviating from a guideline must be documented in a project-level analysis and signed decision. Guidelines are preceded by the identifier G-# for each resource.

In some cases, a standard or guideline will make a general prohibition, such as "Chainsaws are prohibited." This may appear at odds with a more specific standard or guideline that says something like "Use of chainsaws may be allowed." These standards and guidelines are not in conflict. The intent with the more specific direction is to identify exceptions to the general direction.

Chapter 3 — Management Area Direction

The Selected Alternative in the Final Environmental Impact Statement (FEIS) allocates National Forest land among 15 management areas (MAs). The Forest Plan identifies a purpose, desired condition of the land, and standards and guidelines for each of these MAs. The purpose and desired condition for each MA describe the role of the MA in moving the Forest toward the Forest-wide goals. Management Area standards and guidelines are defined the same way as their Forest-wide counterparts, except that they apply only to land allocated to a specific MA. When conflicting direction is given in Forest-wide and MA standards and guidelines, the more restrictive direction applies. Standards and guidelines are presented by resource in the same alphabetical order used for Forest-wide direction. If there is no direction specific to an MA for a resource, there is a reminder that Forest-wide standards and guidelines still apply, which is true for all resources. When a given piece of land is allocated to more than one MA (e.g., Wilderness, Research Natural Area), all standards and guidelines for both MAs apply. If any standards or guidelines are in conflict, the more restrictive direction applies.

The Appalachian National Scenic Trail management area (MA 8.3), the Alpine Zone (MA 8.1), and Alpine Ski Areas (MA 7.1) will not overlap. Although the AT management area will not overlap the Wildcat Ski Area (MA 7.1), the recreation values of the Appalachian National Scenic Trail that runs along the upper boundary of the Wildcat Ski Area must be considered in management actions in the Wildcat Ski Area management area. Although the AT management area will not overlap the Pinkham Notch Scenic Area, the recreation values of the Appalachian National Scenic Trail that runs within the scenic area must be considered in management actions in the Pinkham Notch Scenic Area management area.

Chapter 4 — Monitoring and Evaluation

Monitoring and evaluation are necessary to determine whether Forest Plan management direction is being met, if standards and guidelines are achieving the desired results, and whether the Forest Plan needs amending or revision. Chapter 4 provides a strategic plan that identifies the broad monitoring items and questions to be addressed. This monitoring plan can only be changed through a Forest Plan amendment. A separate Monitoring Guide, that accompanies the Forest Plan, details specific monitoring efforts and protocols.

Relationship of the Forest Plan to Site-level Projects

The Forest Plan is a strategic, programmatic document that does not make project-level decisions. All Forest management, including project plans and decisions, outstanding and future contracts, agreements, and permits, must comply with the Forest Plan as soon after it is issued as practical.

Site-level project planning would start with evaluation of how the site can contribute to meeting the Forest-wide goals and objectives and the purpose and desired condition of the management area within which the project is proposed. Projects that would move the Forest toward those goals and desired conditions would be developed with Forest-wide and MA standards and guidelines included. The site-level project environmental analysis would tier to the Final Environmental Impact Statement (FEIS) for the Forest Plan. This means that a project's environmental analysis document would incorporate, by reference, the information in the FEIS without having to repeat it. Project-level analysis may indicate the need for site-specific mitigation in addition to Forest Plan standards and guidelines, and these additional measures would be detailed in the project-level analysis.

Forest Plan Amendment and Revision

Most proposed activities will be consistent with Forest Plan direction. However, adjustments may be required when necessary management actions are determined to be inconsistent with the Plan or if an error in the Plan is identified. The goal is to keep the Plan up-to-date with new information and the changing needs of the Forest over time. Adjusting the Forest Plan requires an amendment, and the need to amend may result from:

- Changes in physical, biological, social, or economic conditions or information.
- Results of monitoring and evaluation.
- Determination by the Forest Supervisor that existing or proposed projects permits, contracts, etc. are appropriate and necessary, but not consistent with Forest Plan management direction.
- Identification of errors in the Forest Plan.

The Forest Supervisor is required to review conditions of the land at least every five years to determine if the Forest Plan needs to be revised. If conditions or monitoring indicate that changes are too substantial to be handled through an amendment, the Forest Plan may need to be revised before the required 10 to 15 year planning cycle.

Note:

The Forest Service uses the most current and complete data available. GIS data and product accuracy may vary. They may be: developed from sources of differing accuracy, accurate only at certain scales, based on modeling or interpretation, incomplete while being created or revised, etc. Using GIS products for purposes other than those for which they were created may yield inaccurate or misleading results. The Forest Service reserves the right to correct, update, modify, or replace GIS products without notification.

Note also that, generally, numbers used have been rounded, and this may yield some inconsistencies.

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White Mountain National Forest

Chapter 1
Goals and Objectives

Chapter Contents

Cover

Ice Climber (WMNF Photo by John Williams)

Goals of the White Mountain National Forest

The role of the White Mountain National Forest is expressed through goals that align with the legal context and social and ecological setting of the Forest.

Forest Plan Goals

We will manage to sustain a healthy forest and use the latest scientific knowledge to restore the land and forest where needed. Rather than focus on individual species, we will manage for ecosystem viability within the context of New England.

The White Mountain National Forest will provide recreation and other opportunities, experiences, and benefits, some of which are not readily available elsewhere.

Management will recognize the Forest's support to local economies while realizing the importance to society of a natural appearing landscape distinct from the human altered environments otherwise dominant in the East.

Accessibility

Goals

The Forest will provide a variety of recreation opportunities for people with disabilities (without fundamentally altering the non-motorized policy), and will continue to improve accessibility to recreation sites and programs through specific capital investment proposals as sites are reconstructed or rehabilitated. Priority will be given to developed sites (camp and picnic grounds), but accessibility is also considered each time a trail or more remote site is maintained or reconstructed. The goal of the Forest is to provide as many recreational opportunities as possible, in as many varying degrees of difficulty as possible, that are barrier free.

Public use of ATVs (all-terrain vehicles, sometimes referred to as OHVs) on the Forest is prohibited except in the winter on snow cover. This restricted use applies equally to people with disabilities and to the general public. Individuals who use an assistive device for mobility purposes may use their device as long as it meets the definition of a wheelchair in the Glossary. Motorized wheelchairs are also allowed in Wilderness and in other areas signed as "Foot Travel Only."

Whenever possible, the Forest Service will continue to strive towards creating experiences that are a higher standard than the minimums required by law.

Air Quality

Goals

Forest ecosystems are not adversely affected by air pollution, and Forest management activities are conducted to protect or maintain air quality.

The White Mountain National Forest is involved with, and provides input to, local, regional, and national air quality groups where possible.

National Forest management activities, including permitted activities, are conducted in a manner that meets 1) National Ambient Air Quality Standards and 2) applicable provisions in the State Implementation Plan.

Objectives

1. The White Mountain National Forest assesses major new sources of air pollution to determine if they would have an adverse affect on Air Quality Related Values (AQRVs) in Class I airsheds and advises the Regional Forester and appropriate air quality regulators.
2. The Interagency Monitoring of Protected Visual Environments (IMPROVE) or similar substitute technology site at Camp Dodge is maintained to monitor air quality in Class I airsheds.

Alpine Ski Areas

Goals

The White Mountain National Forest will maintain and provide quality alpine skiing and related opportunities on the Forest through partnerships with the private sector.

Objectives

1. Loon Mountain, Waterville Valley, Attitash/Bear Peak, and Wildcat ski areas will continue to be operated by the private sector under special use permit authority, consistent with permit language and the Forest Plan.
2. The Forest retains the areas identified in the current Plan, as amended by the approved Loon Mountain Ski Resort Development and Expansion EIS, for potential ski area expansion (MA 9.2). This includes land adjacent to Loon Mountain, Attitash/Bear Peak, and Snows Mountain in Waterville Valley, as well as the former Mittersill Ski Area adjacent to Cannon Mountain Ski Area.
3. The Forest Service does not consider developing any new alpine ski areas.

Conservation Education

Goals

The White Mountain National Forest will continue to work internally and externally with partners and volunteers to connect people to the land by providing the public with the tools, experiences, training, and information they need to understand, appreciate, and enjoy their National Forest, and to participate effectively in sustaining natural and cultural resources.

The Forest Service will continue to interact with educators, researchers, partners, visitors, and urban audiences to learn and share information about the social, ecological, and economic factors that bind people to natural communities. Materials will correlate with state education standards and provide information that can be effectively incorporated into curricula and public programs.

The Conservation Education program will involve all Forest employees and incorporate national recreation and education programs that emphasize the dynamic nature of ecosystems, the role of humans in those systems, and the consequences of human actions.

Objectives

1. Promote the Forest Service mission and program objectives through personal interactions and educational materials.
2. Incorporate all available technologies and methods into the Conservation Education program, including on-line information sharing, school and public presentations, publication in local and partner magazines, displays at local visitor centers, etc.
3. Establish citizen science projects to get local schools and residents active in learning about our natural and cultural resources.
4. Integrate relevant and recent information from Forest Service Research and State and Private Forestry programs into educational materials and trainings.
5. Meet annually with partners and educators to help identify ways to improve conservation education efforts and coordinate education and interpretation efforts across groups and agencies.

Geologic and Mineral Resources

General

Goals

The White Mountain National Forest will contribute toward satisfying demand for geologic and mineral resources through environmentally sound development.

Objectives

1. The Forest Service will administer its geology and minerals program to provide resources for current and future generations commensurate with the need to sustain the long-term health and biological diversity of ecosystems.
2. The Forest Service will coordinate with other federal and state agencies having authority and expertise in mineral-related activities, and will collaborate with interested public, industry, and community representatives.

Leasable (Commercial) Minerals

Goals

The Forest Service will manage the commercial mineral resources of the National Forest to ensure sustained ecosystems and maintain healthy watersheds.

Objectives

1. Lands disturbed by mineral and energy activities, both past and present, will be reclaimed using the best scientific knowledge and principles, and returned to other productive uses.
2. Exploration, development, and production of mineral and energy resources will be conducted in an environmentally sensitive manner and will be integrated with the management of other resources using the principles of ecosystem management.

Recreational Rock and Mineral Collecting

Goals

The Forest Service will contribute toward satisfying demand for hobby collecting of minerals through environmentally sound development on National Forest System Lands.

Objectives

1. The Forest Service will administer and maintain recreational mineral collecting areas.
2. Sites no longer needed for rock and mineral activities will be stabilized.
3. The potential for a recreational mineral collecting site meeting Americans with Disabilities Act (ADA) standards will be assessed and, if feasible, constructed.

Heritage Resources

Goals

The White Mountain National Forest will identify, evaluate, preserve, protect, stabilize, interpret, and when necessary, mitigate for loss of heritage resources at a Forest-wide and project level. The Forest Service will develop the heritage program utilizing guidance provided in the USFS *National Heritage Strategy*.

Objectives

1. The Forest Service will develop partnerships with local historical societies, colleges, and universities to accomplish program goals.

Lands

Goals

National Forest System lands will be accessible for public use.

National Forest System lands will be consolidated through acquisition and exchange to facilitate restoration, protection, enhancement of public benefits, and improved management effectiveness.

Special uses will be administered to provide a consistent, fair, and comprehensive application of regulations and policies to all users.

Any new or expired use of public lands will be examined to determine if the use is consistent with goals, objectives, and management area direction.

Objectives

1. Determine annually any needs for right-of-way acquisition (roads and trails) or grants necessary to meet resource management objectives.
2. Complete an annual update of the *Forest Land Adjustment Plan* with any additions or changes showing funding sources, priorities, lands proposed for acquisition, exchanges or donations, and right-of-way needs.
3. Renew permits when appropriate in a timely manner.
4. Show continuous improvement with the percentage of permits managed to standard.
5. Develop and accomplish a land corner and property line maintenance program to ensure high visibility of property lines to prevent encroachments and the need for costly resurveys.
6. Mark property lines on newly acquired tracts within a two-year period after the date of acquisition, or sooner if funds are available.

Native American Relationships

Goals

The White Mountain National Forest will maintain a government-to-government relationship with Federally-recognized Native American tribes to honor the unique legal relationship the United States has with Indian tribal governments as set forth in the Constitution of the United States, statutes, Executive Orders, and court decisions.

Non-Native Invasive Species

Goals

The Forest will remain as free of non-native invasive species (NNIS) as reasonably possible. A weed-free user's ethic will be encouraged in all resource area programs with potential to spread NNIS. While some NNIS may occasionally be found on the Forest, occurrences will not be so widespread as to cause negative impacts to native communities. Prevention is the most economical and environmentally desirable method to minimize NNIS occurrence, and planning for all activities will consider NNIS prevention and mitigation of possible effects. The Forest Service will cooperate with adjacent landowners, towns, state agencies, and private organizations to prevent NNIS from being established on the Forest. Eradication efforts will be effective and cause minimal negative effects to other resources.

The Forest Service will emphasize prevention and eradication in Research Natural Areas, Scenic Areas, Alpine, Wilderness, and wetlands to protect unique, limited, or particularly threatened ecological communities. Prevention and eradication efforts will also emphasize roads, managed

upland openings, and other disturbed sites as potential routes of invasive species spread.

Objectives

1. Prevent non-native invasive species (NNIS) not currently on the Forest from becoming established.
2. Eradicate new species infestations as quickly as possible. This may include, but is not limited to, physical/mechanical, biological, or chemical treatments.
3. For NNIS already occurring on the Forest:
   a. Prevent new infestations.
   b. Eradicate species that are known to be invasive and persistent throughout all or most of New England. These can spread into, and persist in, native communities and displace native species, thereby demonstrating a threat to the integrity of the natural ecosystem and communities. Prioritize scheduling of species whose dispersal mechanisms typically result in rapid spread of individuals over widespread areas (e.g., wind dispersed) or which are especially difficult to eradicate.
   c. Suppress species suspected or known to be invasive in limited areas of New England. These species will typically persist in the environment for long periods once established, and may become invasive under favorable conditions.
   d. Contain species about which some concern has been raised regarding their potential to become a management problem. These species have been shown to be invasive under special environmental conditions.

Rare and Unique Features

TES Species — General

Goals

The White Mountain National Forest will provide sufficient habitat and protection to preclude the need for species listing under the Federal Endangered Species Act due to National Forest habitat conditions or effects of activities.

For species currently listed under the Federal Endangered Species Act or designated Regional Forester's sensitive species, the Forest Service will contribute to conservation and recovery of species and their habitats.

Objectives

1. Within five years of listing, develop conservation approaches for all sensitive species. Biological diversity will be conserved by maintaining viable reproducing populations for all native plant and animal species. For species where the Forest alone cannot support a viable population,

species persistence will be maintained, and the Forest Service will contribute to maintaining or improving viability where possible.

Goals

Outstanding natural communities will be conserved.

Objectives

1. Continue to develop a Forest-wide natural community inventory based on botanical, geologic and landscape considerations.

Goals

Alpine communities, including areas of alpine and subalpine habitat outside the Alpine Zone management area, will be conserved.

Maintain the successful recovery of dwarf cinquefoil (*Potentilla robbinsianna*).

Bald Eagle

Goals

Contribute to bald eagle recovery efforts.

Gray Wolf

Goals

Maintain habitat opportunities for wolf colonization on the Forest.

Indiana Bat

Goals

Maintain suitable conditions for roosting and foraging.

Objectives

1. Work with the US Fish and Wildlife Service and research partners to understand the role of the White Mountain National Forest in Indiana bat recovery.

Small Whorled Pogonia

Goals

Maintain or enhance habitat conditions around known occurrences, including consideration of vegetation management to increase light levels if needed.

Canada Lynx

Goals

In Lynx Analysis Units, provide suitable lynx habitat, with an emphasis on high quality foraging habitat in proximity to denning habitat, in sufficient amounts that neither is limiting to lynx.

Plan and manage activities and special uses to protect the integrity of lynx habitat.

Maintain the natural competitive advantage of lynx by providing a landscape with large, interconnected blocks of foraging habitat where snow-compacting activities are minimized.

Maintain sufficient habitat connectivity across forested landscapes and across highway rights-of-way to allow dispersal of lynx between Lynx Analysis Units and lynx population sources.

Objectives

1. Concentrate recreational activities within existing developed areas rather than developing new recreational areas in lynx habitat.
2. Cooperate with state and other federal agencies to identify and prioritize highway crossing sites to reduce highway impacts.

Dwarf Cinquefoil

Goals

Maintain the successful recovery of dwarf cinquefoil (*Potentilla robbinsiana*).

Bicknell's Thrush

Goals

Maintain or enhance suitable breeding habitat for Bicknell's thrush.

Objectives

1. During the planning period, determine if human activity levels result in reduced breeding success.

Recreation

Goals

The White Mountain National Forest will provide a range of quality recreation activities and opportunities.

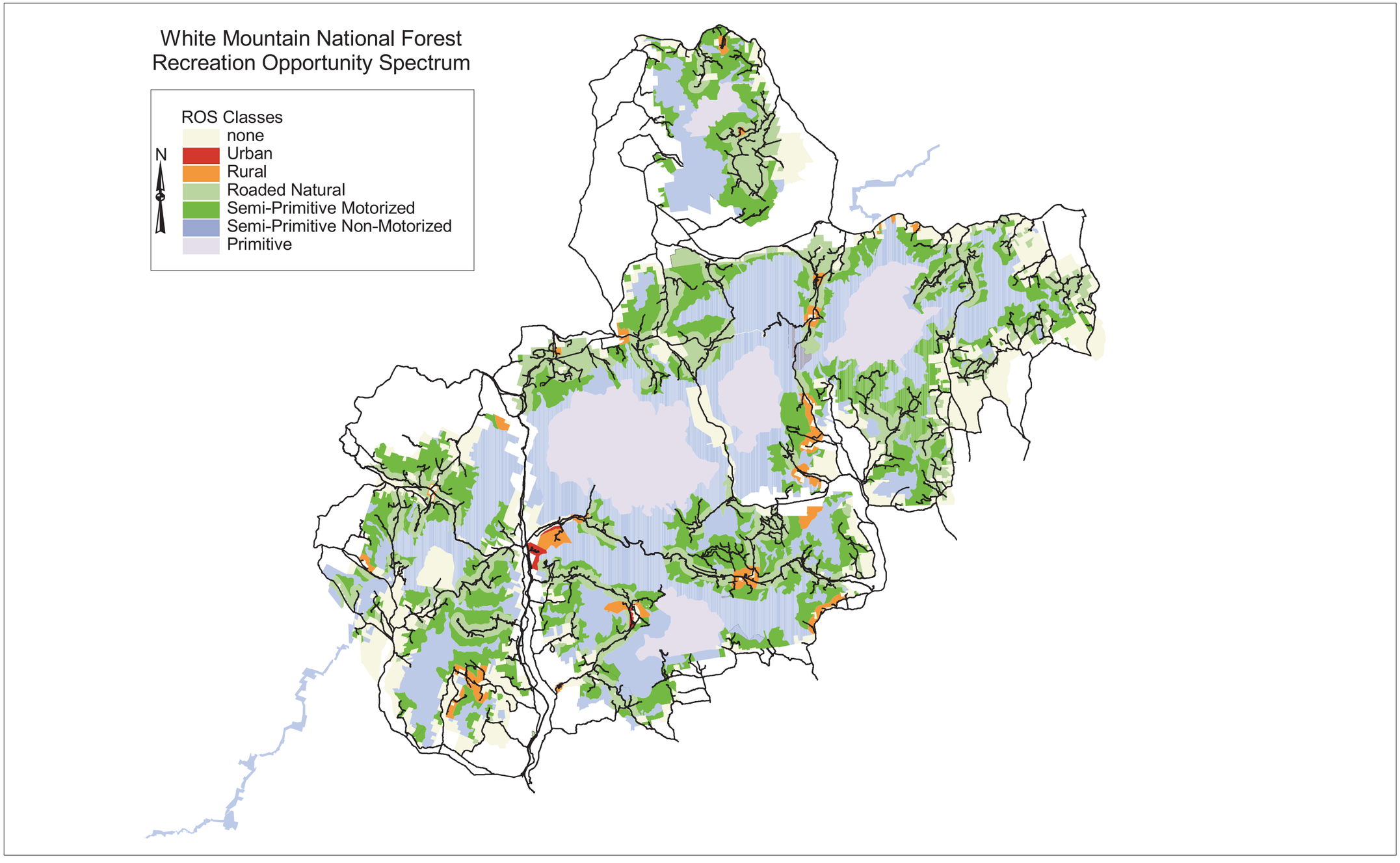
Objectives

1. Manage the Forest recreation program consistent with the Recreation Opportunity Spectrum (ROS) framework. (See Map 1-01)
2. Maintain existing ROS objectives and do not increase the number of inconsistencies.
3. Develop approaches to outline limits of acceptable change to maintain or improve the quality of the recreation opportunity.

Goals

The Forest Service will implement recreation management approaches to provide Forest recreation managers a more complete framework within which to consider management actions. Their purpose is to minimize increased development levels in the backcountry and to protect and manage both high and low use areas and facilities. The overall effect of these approaches will be to guide, and seek public support for, agency actions in response to changing or increasing use.

Map 1-01. Recreation Opportunity Spectrum (ROS) Class Allocations on the White Mountain National Forest.



Objectives

1. The Forest Service will emphasize concentrating use at specific sites or locations rather than dispersing use within the area or to other areas.
2. Forest management actions will not disperse use from high to low use areas.
3. Current development levels in the backcountry will be maintained or lowered where appropriate.
4. Current low use areas and facilities will be managed to meet visitor needs and resource requirements through education and management controls, where necessary.
5. High use areas and facilities will be managed for high use to meet visitor needs, while ensuring that they can be sustained over the long term. Appropriate mitigation will be provided to manage the effects of high use. Use will not be allowed to increase indefinitely in high use areas.
6. The Forest Service and partner organizations will collaborate to provide recreational opportunities, conservation education, and visitor information programs.

Developed Recreation

Goals

Developed recreation will provide a variety of quality campground, day use, and other roadside recreation opportunities where the natural forest setting is an important part of the visitor's experience, while ensuring the balanced protection of social and natural resources.

Objectives

1. Campgrounds and picnic areas will have lower site densities than private facilities, with ample screening between sites and more immediate access to other Forest recreational activities.

Goals

The Forest Service will provide a range of opportunities from large, more developed campgrounds and day use areas to smaller, less developed campgrounds and day use areas. These sites will generally relate to the variety of locations, design, and construction standards offered by road systems throughout the Forest.

Objectives

1. Allow for a net increase of up to 32 new campground sites.

Winter Motorized Dispersed Recreation

Goals

The Forest Service will provide for snowmobile use on designated trails in certain areas. The importance of the natural setting will be emphasized.

Objectives

1. Allow for a net increase of up to 20 miles of new snowmobile trails.

Goals

The White Mountain National Forest will maintain its role as part of the statewide and regional snowmobile trail network.

Objectives

1. The winter motorized trail system will be managed cooperatively with the states of New Hampshire and Maine.

Non-Motorized Dispersed Recreation

Goals

The Forest Service will provide a range of dispersed recreation experiences that most visitors will perceive as rustic, wild, and undeveloped. Inconsistencies with ROS objectives will be minimized. Management actions will emphasize protecting unmodified, undeveloped areas and maintaining a low development level at backcountry facilities in order to ensure the continued opportunity for this experience. Personal responsibility, risk, and challenge will be recognized as an integral part of the backcountry experience.

Objectives

1. Allow for a net increase of up to 25 miles of new hiking trails, not including trails at ski areas operating under a Special Use Permit.
2. Conduct site-specific reviews of travel corridors for inclusion into the trail system. These reviews will be guided by the recreation management approaches listed on page 2-17. Following appropriate analysis, corridors will be designated part of the Forest Trail System or closed to mountain bike use. Travel corridors designated as part of the forest Trail System are not considered in the 25 mile non-motorized trail constraint.
3. Allow for a net increase in the capacity of shelters, cabins, or tent platforms by up to 40 people at one time.

Rock and Ice Climbing

Goals

The White Mountain National Forest has both traditional and sport climbing areas. The Forest Service will recognize the value of both types of climbing areas and will continue to provide a range of climbing opportunities while protecting natural and cultural resources. It will emphasize traditional climbing over sport climbing.

Objectives

1. The Forest Service will work closely with the climbing community to locate new and developing rock climbing areas in order to address

emerging issues in a cooperative manner, track new areas, and prevent route development that will affect Threatened, Endangered, and Sensitive (TES) species.

Special Uses — Recreation Specific

Goals

The Forest Service will work with the private sector through Special Use permits to provide recreation opportunities (areas, facilities, services, and events) that the Forest Service alone is not able to offer, and that are consistent with the Desired Future Condition.

Wildlife Related Recreation

Goals

The White Mountain National Forest will provide hunting, fishing, and trapping opportunities consistent with federal and state law.

Riparian and Aquatic Habitats

Riparian

Goals

Protect, restore, or improve riparian area conditions to benefit riparian dependent resources and values.

Manage riparian areas to provide for coldwater, coolwater, and warmwater aquatic communities within the ecological capability of the landscape.

Fisheries

Goals

Restore and improve self-sustaining populations of indigenous fish and other aquatic species and their habitats.

Provide a range of recreational fishing opportunities (stocked put-and-take fisheries to non-stocked wild fisheries) in a manner that will protect self-sustaining populations of indigenous fish species.

Minimize the spread of non-indigenous stocked fish species or other aquatic invasive species through cooperative management and environmental education.

Objectives

Increase Atlantic salmon populations in streams through stocking and spawning activities, in cooperation with both the Merrimack River Anadromous Fish Restoration Program and the Connecticut River Atlantic Salmon Commission, as identified in either current or updated strategic plans for both river basins.

Restore or improve 5-10 miles of in-stream habitat per year over the planning period with emphasis on 6th level watersheds best suited for managing self-sustaining wild brook trout populations and their associated coldwater aquatic communities.

Maintain existing impoundment structures constructed for fish and wildlife management every 1-5 years to insure their long term structural integrity and prevent downstream resource damage. Decommission structures when funds are not available for proper long-term maintenance.

Scenery Management

Goals

The White Mountain National Forest will conduct all management activities to be consistent with assigned Scenic Integrity Objectives, realizing the importance to local communities and Forest users of a natural-appearing landscape, distinct from the human-made environments dominant in the East.

Soil Resources

Goals

The Forest Service will work closely with the Natural Resource Conservation Service and research entities to protect the long-term sustainability of the soil resource with an emphasis on maintaining appropriate soil nutrients.

Objectives

1. Further establish and document a network of permanent soil quality monitoring sites to measure long-term change in soil base saturation.
2. Cooperate in further development of a till source model, land use history evaluation, and soil inventory specifically to support large-scale analysis of factors affecting soil quality.
3. Cooperate in re-measurement of long-term Forest plots at Bartlett Experimental Forest.

Goals

The Forest Service will ensure soils are stabilized around management activities.

Objectives

1. Implement measures to minimize off-site movement of soil on Forest projects.

Transportation System

Goals

The Forest Roads Program will provide a safe, efficient, and seamless transportation and parking network that allows for current, continued, and projected management, use, and enjoyment of the Forest with a variety of

challenge levels. The Forest Service will continue to maintain and update the Forest road inventory and index as management decisions are made, and through monitoring and field verification. The Forest Service will also continue to look for and analyze alternative transportation opportunities to deal with projected increases in traffic and parking volumes. The White Mountain National Forest will work cooperatively with state, town, and county officials.

Objectives

1. Construct only those roads necessary to meet the management objectives of the Forest Plan.
2. Decommission all classified and unclassified roads not necessary to meet the management objectives of the Forest Plan as funding is available.
3. Maintain the classified road network to meet the requirements of the Highway Transportation Safety Act with available funding.
4. Explore opportunities for alternative transportation methods and clean fuels that would reduce resource impacts.

Vegetation Management

Goals

The White Mountain National Forest will manage vegetation using an ecological approach to provide both healthy ecosystems and a sustainable yield of high quality forest products, with special emphasis on sawtimber and veneer.

Objectives

1. Manage for commercial products using well-integrated prescriptions that protect biotic and abiotic resources and are compatible with the high level of recreational use on the Forest.

Goals

The Forest timber harvest program will function as an outdoor classroom, permitting visitors to see the benefits of sound stewardship implemented through well-executed, integrated resource management.

The Forest Service will ensure that products harvested on National Forest lands are fully accounted for, and that fair value is received for all products sold.

The Forest Service will use timber harvesting as a tool to attain wildlife habitat and other resource objectives.

Water Resources

Goals

Surface waters on the White Mountain National Forest are considered "outstanding resource waters," and water quality is maintained or improved

to protect existing and designated instream water uses such as aquatic life.

The Forest Service will use watershed assessments to help guide planning and management activities.

The Forest Service will manage streams at proper functioning condition (PFC) to dissipate stream energy associated with high water flows, thereby decreasing erosion, reducing flood damage, and improving water quality.

Watersheds will continue to provide high quality water for public water supplies, recreational activities, aquatic biota such as fish, and other purposes.

The Forest Service will work cooperatively with communities within public water supplies to maintain high quality drinking water. Management activities may occur in these watersheds consistent with management area objectives.

Objectives

1. Improve watershed and soil condition on at least 25 acres per year.

Wild and Scenic Rivers

Goals

The Forest Service will protect the wild, scenic, and recreational values of eligible rivers to maintain their potential for Wild and Scenic River designation.

Wildcat River will be cooperatively managed through the Comprehensive River Management Plan to maintain its scenic and recreation nature.

Wildland Fire

Goals

Firefighter and public safety will be the first priority in every fire management activity. Other priorities are 1) protecting human communities and community infrastructure, 2) other property and improvements, and 3) natural and cultural resources, based on the values to be protected and the costs of protection. Once people have been committed to an incident, these human resources become the highest value to be protected.

Cooperative wildland fire-related activities will be developed and maintained with other groups and agencies in the New England/New York area. Other Federal and state agencies, volunteer fire departments, and non-governmental organizations will be included as appropriate. Prescribed fire and natural ignitions will be used as tools to enhance ecosystem resiliency and to maintain desired fuel levels. Fire will play its natural role in the ecosystem, but will be actively suppressed where necessary to protect life, investments, and resources. Effects of wildland fire will be acceptable, and fire will occur within historical fire regimes appropriate to the vegetation type.

The Forest Service will use the full spectrum of fire management actions — from prompt suppression of unwanted fires to managing naturally-ignited fires — to realize and accomplish specific resource management objectives. The vast majority of wildland fires on the Forest will continue to receive a suppression-oriented response. Preparedness capabilities will meet the needs for appropriate management responses, included those needed for the wildland/urban interface areas in and around the Forest.

The Forest Service will use fire as a tool to meet management objectives, including but not limited to:

- Reducing hazardous fuel loading.
- Creating, maintaining, or improving wildlife habitat.
- Preparing sites for restoration of species (e.g., oak, pine, birch and aspen).
- Creating, maintaining, or improving plant community composition by influencing the scale and pattern of vegetation across the landscape, including changing successional patterns.
- Managing insect and disease.
- Enhancing blueberry production.
- Creating or maintaining scenic vistas.

Prescribed fire may be used in the management areas shown in Table 1-01.

The Forest Service will maintain fuels in proportion to the levels of hazards, risks, and values to be protected, and to address resource management objectives both outside and within the Wildland Urban Interface.

Table 1-01. Management Areas Where Prescribed Fire May Be Used.

MA	Description	MA	Description
2.1	General Forest Management	7.1	Alpine Ski Area
6.1	Semi-Primitive Recreation (to maintain the viability of fire-adapted communities such as pine, oak, and mixed oak-pine types)	8.2	Experimental Forests
6.2	Semi-Primitive Non-Motorized Recreation (to maintain the viability of fire-adapted communities such as pine, oak, and mixed oak-pine types)	9.2	Alpine Ski Area Expansion
6.3	Semi-Primitive Winter-Motorized Recreation (to maintain the viability of fire-adapted communities such as pine, oak, and mixed oak-pine types)		

The goal of wildland fire use (WFU) implementation will be to allow lightning-ignited fires to function as a natural ecosystem process within a maximum allowable area within the management areas indicated in Table 1-02.

Table 1-02. Management Areas Allowing Wildland Fire Use.

MA	Description	MA	Description
5.1	Wilderness	8.3	Appalachian Trail (only when adjacent MA allows WFU)
6.1	Semi-Primitive Recreation	8.4	Research Natural Areas
6.2	Semi-Primitive Non-Motorized Recreation	9.1	Recommended Wilderness
6.3	Semi-Primitive Winter-Motorized Recreation	9.3	Candidate Research Natural Areas
8.1	Alpine Zone		

Lightning-ignited fires will be managed within these areas as wildland fire use, under conditions and criteria that constitute low risk to firefighter and public safety.

Objectives

1. Use prescribed fire and mechanical methods to treat approximately 80-300 acres annually to meet a wide range of Forest objectives.
2. Within the next 10-year period, manage an estimated 4 to 8 lightning-ignited fires under wildland fire use.

Wildlife

Habitat Management

Goals

The White Mountain National Forest will use sustainable ecosystem management practices to provide a diversity of habitats across the Forest, including various forest types, age classes, and non-forested habitats.

Objectives

1. Manage forest composition for the broad habitat types of northern hardwood, mixed hardwood-softwood, and spruce-fir forest, consistent with ecological land type capability.
2. Maintain less common habitat types, such as aspen-birch and oak-pine, where ecologically feasible and desirable to provide for native and desired non-native wildlife and plant species.
3. Maintain high quality mature forest and old forest habitats on a majority of the Forest.
4. Provide regeneration age forest and open habitats to sustain biological diversity and support species that prefer those habitats.

MA 2.1 Habitat Composition Objectives

These objectives reflect land capability, with adjustments to maintain aspen-birch and wildlife opening habitats in the management area at existing levels. Forest composition changes naturally over time as the trees in the overstory die and other species grow up to take their place. Management can speed

this conversion by removing trees of one type (e.g., hardwoods) and leaving trees of the desired type (e.g., spruce or fir) to continue growing. Even with management, habitat conversion takes time. Therefore, where the current condition does not match the objective, meeting these composition objectives may take decades or even centuries (Table 1-03).

Table 1-03. Habitat Composition Objectives.

Habitat Type	Current Composition (% of MA 2.1)	Composition Objective (% of MA 2.1)
Northern Hardwood	54	45
Mixedwood	21	11
Spruce-Fir	12	32
Aspen-Birch	5	5
Wildlife opening	<1	1
Other*	7	6

*Hemlock forest, oak/pine forest, wetlands, and non-vegetated habitats.

MA 2.1 Age Class Objectives

Age class objectives are proposed primarily to provide a variety of habitat conditions for wildlife. Management Indicator Species have been identified to represent both vegetative composition objectives and the age class objectives presented in Table 1-04 (see also Chapter 3, Wildlife section).

Table 1-04. Age Class Objectives.

Habitat Type	% in Regen Age Class	% in Young Age Class	% in Mature Age Class	% in Old Age Class
Northern Hardwood	3-4	15-20	61-67	15
Mixedwood	1	5	73	21
Spruce-Fir	1-2	3-6	66-70	26
Aspen-Birch	12-15	36-45	18-30	22

The regeneration age class can be created immediately through even-aged harvest, making this a short-term objective that should be met during the first decade of implementation. The young age class objective results when regeneration habitat ages. The mature age class includes a majority of the land in this MA. It is a result of even- or uneven-aged management. After even-aged regeneration harvest, it takes 40 to 70 years for mature forest to develop, so this is a long-term objective, particularly in some habitats. The old age class objective is based on the amount of MA 2.1 lands identified as unsuitable for timber harvest.

Goals

The Forest Service will maintain the health and integrity of all habitats by protecting and enhancing within-habitat features and processes, such as snags and downed logs, minor tree species, vegetative layers, and nutrient cycling.

The Forest Service will protect sensitive habitats, such as wetlands, den and nest sites for key species, and rare communities.

Recreation-Wildlife

Goals

The Forest Service will gain an improved understanding of how recreation use may affect wildlife populations and will manage recreation use and wildlife habitat to minimize negative impacts on wildlife.

The Forest Service will recognize that visitor safety and the well-being of wildlife are both important components of National Forest management. Recreation sites will be managed to allow for wildlife viewing, where appropriate, while minimizing the potential for human-wildlife conflicts.

A Note on Wilderness

Wilderness is a management area and its goals and objectives are described under "Purpose" and "Desired Condition of the Land" in the introduction to MA 5.1 (Wilderness) in Chapter 3.

Lookout towers on Mt. Carrigain, ca. 1926. Original wood platform built by NH Timberland Owners Association in 1910. Seated at left is Col. William Greeley, third Chief of the US Forest Service (1920-1928), on a visit to the WMNF. At right is a Mr. Kneipp. Mssrs. Reed, Davis, and Belas sit at the base of a replacement tower. (WMNF photo; historical information from I.W. Baird and C. Haartz, A Field Guide to New Hampshire Firetowers*)*

White Mountain National Forest

Chapter 2
Forest-Wide Management Direction

Chapter Contents

Cover

Smarts Brook Falls (WMNF Photo by John Williams)

Standards and Guidelines

Standards and guidelines are the specific, technical direction for managing resources. A *standard* is a course of action that must be followed, or a level of attainment that must be reached, to achieve management goals and objectives, and can only be changed through an amendment to the Plan. A *guideline* also is a required course of action or level of attainment, but permits operational flexibility to respond to variations in conditions. Guidelines can be modified or not implemented, but the rationale for doing so must be documented in a project-level analysis and signed decision.

All Resources and Management Areas

General

S-1 The White Mountain National Forest must follow all applicable laws, executive orders, regulations, rules, and direction established in the Forest Service Manual.

S-2 To protect forest resources when hazardous materials are present, mitigations will be put in place at the appropriate level, depending on the amount and type of material.

S-3 Motorized administrative use will be allowed consistent with WMNF/ state agreements.

G-1 Motorized administrative use should be consistent with the management area direction. There are fewer restrictions on emergency motorized administrative use than for project-related administrative motorized use.

G-2 To make sure goals of the various agencies are considered in any management decisions, the Forest Service should work cooperatively with the states of New Hampshire and Maine to manage adjacent National Forest and State lands.

Closures

G-1 Forest Supervisor's Orders or other means may be used to restrict or close activities, uses, or areas in order to prevent, mitigate, or correct existing or potential resource impacts, trail development, health and safety issues, user conflicts, or other management concerns.

Firewood

S-1 A commercial permit is required for cutting live trees or vegetation.

S-2 Where campfires are allowed, firewood collection must be limited to dead and down wood.

G-1 Firewood permits should be issued for dead and down wood only.

Accessibility

Accessibility standards and guidelines apply to all management areas.

S-1 All Forest programs, publications, facilities, and outdoor recreation areas including trails, must meet all federal and Forest Service

accessibility guidelines (and any future revisions and policies) regarding accessibility requirements.

S-2 The Forest Service will provide opportunities in which all people can participate in the most independent and integrated way possible that does not fundamentally alter the program, and is in accordance with the Forest Land and Resource Management Plan.

S-3 Wheelchairs are allowed on all of our Forest Service roads and trails, and wilderness areas. The signs that state "Foot Traffic Welcome" also apply to devices that meet the definition of a wheelchair.

G-1 The Forest Service should maintain transition plans identifying areas that do not meet current guidelines, and identify steps that may be taken to improve the facility during scheduled maintenance or restoration activities.

Air Quality

Also see Chapter 3 for required management area-specific direction.

G-1 Air Quality Related Values (AQRVs), such as aquatic biota, vegetation, and water quality should be protected to the extent possible from adverse impacts related to air quality within the White Mountain National Forest.

Conservation Education

G-1 Signage, other educational tools, and Forest Supervisor's Orders may be used to inform and educate visitors about occurrences of threatened, endangered, and sensitive species, heritage resources, and other management concerns.

G-2 Management actions should emphasize education over law enforcement.

G-3 Education messages should emphasize programs such as "hikeSafe" and "Leave No Trace" to foster personal responsibility for safety and to promote low-impact backcountry travel, day-use activities, and commercial operations.

G-4 Public education efforts emphasizing the Forest Service mission and management, natural resource protection, safety, and personal responsibility should be encouraged.

Geologic and Mineral Resources

Also see Chapter 3 for required management area-specific direction.

Leasable (Commercial) Minerals

S-1 Surface disturbance for mineral resources is prohibited in public water supply watersheds, developed recreation and administrative sites, and where there are natural features such as open water, streams, riparian areas, floodplains, wetlands, and sensitive soil types.

S-2 Reclamation provisions and environmental protection measures of operating plans and surface use plans of operation must be adequate to reclaim the site.

S-3 Reasons for closing an area to surface-disturbing mineral exploration must be documented.

S-4 All practical means of minimizing resource impacts including best available technology must be used when surface disturbance is allowed.

G-1 Where prospecting and exploration activities are allowed, the existing access infrastructure should be used.

G-2 Surface disturbance related to the development of federal minerals should not occur within the seen area of National Forest System trails or roads.

Mineral Materials (Common Variety)

S-1 Except for administrative use, there must be no new surface disturbance activity for the development of common variety minerals in:

a. Public water supply watersheds.

b. The visual foreground of roads and National Forest System trails.

S-2 Sites must be stabilized between periods of use.

S-3 Sites must be stabilized and, if needed, revegetated when closed.

G-1 Except for administrative use, there should be no new development of common variety minerals sites.

Recreational Rock and Mineral Collecting

S-1 The collection of mineral specimens for personal use is allowed without a permit, as long as there is no surface disturbance, except within officially designated fee collecting areas, closure areas, and other restricted areas.

S-2 Collection of recreational minerals on, in, or near cultural/historic features is prohibited unless specifically allowed through designation.

S-3 Recreational mineral activities for personal use that involve limited surface disturbance are allowed through a permit, provided that the activities comply with Forest standards and guidelines.

S-4 When surface-disturbing collection activities are allowed through a permit, the following are required:

a. Only hand tools are permitted. The use of power, mechanized equipment, or explosives for recreational collecting of geologic resources, including gold recovery activities, is prohibited. This includes sluice boxes, rocker boxes, and dredges.

b. Maximum excavation at any one site must not exceed one cubic yard. Only one site may be disturbed at a time.

c. Excavated holes must not be dug deeper than three feet as measured from the bottom of the hole to a projected horizontal line drawn between the bases of trees or plants adjoining the hole. In areas where the entire site is already disturbed and the original ground level is heavily altered, an estimated projection will be made of the earth's surface for the purposes of monitoring or enforcement.

d. Prior to leaving the site, disturbed areas must be restored to as near original condition as possible.

e. No surface disturbance is allowed within developed recreation areas immediately adjacent to roads, trails, other facilities, streambanks, or in other areas where such activity may adversely affect other resources or activities.

f. Gold panning for recreational purposes may be allowed within active stream channels, provided due care is taken to protect water quality and aquatic habitat. Small trowels or similar digging tools for scooping sediment into the pan are allowed.

g. Where streams are disturbed for recreational mineral collecting such as gold panning, turbidity levels must not exceed water quality standards needed to maintain "outstanding resource waters" as defined by the water quality regulations of New Hampshire and Maine.

h. No surface disturbance is allowed on or near cultural/historic features.

i. Digging under trees or severing roots greater than ½ inch in diameter is not permitted.

j. Surface disturbance that creates or contributes to a safety hazard is not allowed.

k. Surface disturbance is not permitted on, in, or adjacent to existing safety hazards.

S-5 Recreational mineral collecting activities at fee permit sites shall adhere to guidelines specific to that area as described on the fee permit. Small drills may be allowed when specifically authorized at designated fee permit sites.

S-6 Sites may be restricted by closure or permit where there are safety or resource concerns.

G-1 A permit system may be used to manage recreational collecting activities.

Heritage Resources

Also see Chapter 3 for required management area-specific direction.

S-1 Management of heritage resources must be coordinated with State Historic Preservation Offices (SHPOs), appropriate Tribal Historic Preservation Offices (THPOs), and Federally recognized Indian Tribes and their representatives. Any mitigation plans must include the above

consultation, with the addition of The Advisory Council on Historic Preservation (ACHP) when projects might affect resources eligible for the National Register of Historic Places. Consulting parties may include local governments or other interested parties.

S-2 Any proposed Federal or Federally assisted undertaking must, prior to the approval of the expenditure of any Federal funds or issuance of any license, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register of Historic Places (Section 106, National Historic Preservation Act of 1966, as amended).

All proposed undertakings must consider the effect on any National Register listed, eligible, or un-evaluated heritage resource within the Area of Potential Effect (APE) prior to project implementation. The Forest Service must manage properties found to be eligible for National Register listing, or which remain un-evaluated, as if they were listed on the National Register of Historic Places.

S-3 Contracts, leases, or permits must include appropriate clause(s) requiring protection of heritage resources.

S-4 The nature and location of heritage resource sites must not be disclosed without line officer approval (36 CFR 296.18).

S-5 Discoveries of human remains and associated objects must remain in place and protected if encountered. They must be reported immediately to USFS Law Enforcement Officers (LEOs), who will contact Forest Heritage Resource Specialists if appropriate. Work in the area of the discovery must cease until LEO and, if applicable, Heritage evaluation is completed.

S-6 Vandalism, destruction, or unauthorized removal of Heritage resources must receive appropriate investigation under the Archaeological Resources Protection Act or 36 CFR 261 (Prohibitions).

S-7 Non-Forest Service archaeological research initiatives must be authorized and/or permitted by the Forest Service prior to implementation.

G-1 Heritage resources should be evaluated to determine their eligibility for listing in the National Register of Historic Places. Priority should be placed on situations where resources are most at risk or management options are limited. Examples include lands to be exchanged out of Federal management, lands with shallow soils where heritage resources are especially vulnerable to disturbance, and within project areas where sites may be impacted.

G-2 The Forest Service should curate its heritage resource collections and associated records in accordance with Federal standards (36 CFR 79), and through consultation with SHPO, ACHP, and other interested parties.

G-3 The White Mountain National Forest's *Heritage Resource Survey Strategy* should be followed in developing heritage surveys.

G-4 Heritage inventories and resulting data should meet current national guidance and professional standards and should be maintained in the Forest Service's corporate database and mapping systems.

Lands

Also see Chapter 3 for required management area-specific direction.

Land Status/Adjustments/Acquisition

S-1 To ensure protection of state, county, town, private, and other federal agency rights and interests, a land ownership review using land status records must be performed during early project planning stages, prior to implementation of management activities.

S-2 Acquisition of land by the United States must comply with New Hampshire and Maine state and local statutes concerning the consent to acquire lands.

S-3 Lands on which only a partial interest is acquired must be managed as directed by the easement, or as agreed to in the specific acquisition documentation.

S-4 The following procedure must be used in assigning management area prescriptions for newly-acquired National Forest System (NFS) lands:

1. The tract should have the same management area classification as the surrounding National Forest land (if it has similar attributes); or
2. If the land has attributes that are unique or different than the surrounding land, the acquired tract will be evaluated by an integrated team to decide its management area designation.

G-1 The following should be used to evaluate and track land adjustment activities. The *Forest Land Adjustment Plan* should be updated annually to reflect:

a. Acquisition, exchange, or interests in lands which have been directed by Executive or Congressional action.

b. Acquisition, exchange, or conveyance of lands needed to reduce expenses of both the Forest Service and the public in administration and utilization, including the consolidation of split estates.

c. Acquisition, exchange, or interests in lands which

1) will provide a significant recreational experience or opportunity;

2) improve riparian ecosystems on water frontage such as lakes and major streams;

3) provide critical habitat lands needed for the protection of federally-listed endangered, threatened, or sensitive fish, wildlife, or plant species;

4) provide for the protection of significant historical or cultural resources when management may be enhanced by public ownership; and

5) protect or enhance watersheds, and wetlands.

d. Acquisition, exchange, or interests in lands needed to implement other scheduled management actions such as a campground expansion, road construction, or trail construction or reconstruction.

e. Acquisition, exchange, or interests in lands needed to enhance or protect facilities or programs surrounding National Forest System lands.

f. Acquisition, exchange, or interests in lands that will consolidate existing National Forest System lands, eliminate the need for right-of-way acquisition, provide access to existing NFS lands, or meet the goals and objectives of the management area surrounding the proposed acquisition or exchange.

g. Land conveyances or exchange of lands no longer needed or suitable to meet the goals and objectives of a management area, and serve a greater public need in state, county, town, or other federal agency ownership.

G-2 Access should be acquired, exchanged, or granted with other federal agencies, states, counties, towns, and private interests to assure management objectives are met for all ownerships.

Survey/Landline/Title Claims

S-1 Boundaries shall be surveyed, marked, and posted prior to implementing land-disturbing activities adjacent to Wilderness or private land.

S-2 A professional, licensed surveyor shall supervise Forest Service personnel or administer the necessary contracts to locate and mark property boundaries.

G-1 Care should be taken to avoid damaging or destroying evidence of town boundaries when planning and executing management activities near these boundaries.

Land Use Authorizations (Special Uses)

Also see the Recreation section for standards and guidelines pertaining specifically to recreation special uses.

S-1 Special uses must be managed to best serve the public interest, in accordance with the following:

a. Private uses of National Forest System land must not be authorized when such uses can be reasonably accommodated on other lands.

b. Special use requests must be reviewed for their compatibility with Forest-wide and management area direction, as well as consideration of environmental values, economic feasibility, and determination of social and economic benefits.

c. Upon renewal or transfer of a permit, or as soon as practical, existing uses that are not compatible with the Forest Plan must be brought into compliance.

d. New landfill disposal sites or storage, or disposal of radioactive, or other hazardous substances are prohibited. Existing landfill disposal sites must be phased out and closed.

e. Permits must not be authorized that create an exclusive or perpetual right of use or occupancy that would in effect grant title to federal land to an authorization holder, or would create the appearance of granting such a right. Examples of such uses include, but are not limited to, cemeteries, monuments, memorials, or major capital improvements by municipal entities.

S-2 Special use proposals that may affect heritage resources (e.g., ground disturbance or potential for discovery and displacement or removal of artifacts) must include an archeological/paleontological clause.

S-3 To reduce the proliferation of separate rights-of-way, new transportation, utility, and communication use proposals shall be accommodated within existing corridors to the maximum extent feasible. Mitigation measures shall be determined by project level planning.

S-4 Military training activities shall be authorized only after the Department of Defense has determined and substantiated that lands under its jurisdiction are either unsuitable or unavailable in accordance with the Master Agreement between the Department of Defense and the Department of Agriculture that governs the use of National Forest lands for these purposes. When local supplemental agreements with military agencies exist, consult such agreements for additional direction. Activities must be in conformance with management area objectives.

S-5 All research permits shall include a requirement that the Forest Service receive a copy of the final report or analysis.

S-6 Contracts, leases, or permits must include appropriate clause(s) requiring invasive species control plans to minimize spread to other areas.

G-1 Special use applications may be denied if the authorizing officer determines that:

a. The proposed use would not be in the public interest.

b. The proposed use would otherwise be inconsistent with applicable federal, state, and local laws, regulations, and special orders that apply to the National Forests.

c. The proposed use may endanger public health or safety.

d. The proposed use conflicts or interferes with administrative use by the Forest Service, other authorized existing uses, or uses of adjacent non-federal lands.

e. The applicant does not or cannot demonstrate technical or financial capability.

G-2 Applicants may conduct environmental analysis and supporting activities (e.g., cultural resource surveys, biological evaluations) and submit them to the responsible official for consideration in Forest Service decisions to the extent allowed by law, regulation, and policy.

G-3 Research permits are generally authorized, but may be denied, or limited in structure to meet specific management area objectives, e.g., only non-manipulative research in Research Natural Areas, or requiring non-motorized, non-mechanized access and temporary sample area identification in Wilderness.

G-4 Electrical utility lines of 33 kilovolts or less, communication lines, or pipelines should be installed by burying unless one or more of the following applies:

a. Visual quality objectives of the area can be met using an overhead line.

b. Burial is not feasible due to geological hazards or unfavorable geologic conditions.

c. Greater long-term site disturbance would result.

d. It is not technically feasible.

Native American Relationships

Also see Chapter 3 for required management area-specific direction.

S-1 Recognized tribes must be consulted early in the planning process regarding proposed management activities that may affect the tribes in order to identify and address tribal interests.

G-1 Environmental documents should disclose potential effects on cultural resources, traditional uses, and tribal areas of special interest that include tribal cultural values, properties, uses, and species of special concern.

Non-native Invasive Species

The following direction generally applies to all Forest lands. However, see standards and guidelines in Management Areas 5.1, 8.4, 9.1, and 9.3 for exceptions.

S-1 Non-native invasive species must not knowingly be brought onto the Forest for any project, landscaping, or other purpose.

S-2 Forest projects or approvals must consider weed prevention measures to minimize the chances of new infestations occurring because of project activities. The intent is not to prohibit all ground disturbances or to require exhaustive mitigation measures for minor activities, but to take action where possible to minimize opportunities for invasive species to become established.

S-3 In revegetation or rehabilitation efforts, native or non-persistent (annual, biannual, or sterile) species must be used.

S-4 Gravel and fill must come from weed-free sources. The Forest Service will be available to work with owners of local gravel sources to identify

weed-free borrow material in their pits. The entire pit or fill area need not be identified as weed-free; material may be used that is not likely to contain invasive plants or seeds. If gravel or fill cannot be identified as weed-free, project monitoring must be conducted for three years following implementation to assure no new infestations occur. If infestations are found, eradication must occur within a suitable timeframe to prevent further spread.

S-5 When sources of certified weed-free mulch and seed are available locally at reasonable cost, they must be used on erosion control projects requiring mulch and seed.

S-6 Heavy equipment must be visibly free of seeds or plant material prior to entering the Forest for project work. In order to minimize the spread of existing invasive plants, heavy equipment must be cleaned to be visibly free of seeds or plant material when moving between project units if invasive plants exist in areas being vacated, or if units have not been surveyed for invasive plants. The Forest Service will work to educate heavy equipment operators regarding these standards prior to project implementation.

S-7 Non-native invasive plants or their parts removed during eradication efforts must be disposed of in a manner that prevents new infestations elsewhere.

G-1 Areas under existing permits should have on-site non-native invasive species control plans in place to minimize spread to other areas.

Recreation

G-1 Outfitter/guides should be encouraged to have pack animals that are free of non-native invasive species when entering the Forest. The animals' feed should be weed-free while on the Forest

G-2 The use of weed-free feed for animals used for pleasure riding on the Forest should be encouraged.

G-3 Boaters and other recreationists should be encouraged to check equipment to prevent infestations in lakes and ponds.

Transportation System

G-1 Roadside clearing widths should be minimized (without compromising safety standards) to retain shade for invasive plant suppression.

G-2 If non-native invasive plants are present, roadside maintenance operations should be scheduled to minimize spread into new areas (e.g., prior to seed set).

Wildland Fire

S-1 The risk of non-native invasive species establishment following fire suppression and prescribed fire efforts must be evaluated, and mitigation measures implemented if needed.

Rare and Unique Features

Also see Chapter 3 for required management area-specific direction.

S-1 All project sites must be investigated for the presence of TES species and/or habitat prior to beginning any authorized ground-disturbing activity at the site. TES plant surveys must be completed for all new ground-disturbing projects, unless biologists/botanists determine TES species occurrence is unlikely (e.g., no habitat exists).

S-2 Unless conservation approaches have already been developed for a species, individual site prescriptions must be developed for each identified TES plant species occurrence to provide specific habitat conservation actions for those plant species. Individual site prescriptions must similarly be developed for all fixed TES wildlife habitat features (e.g., den sites, nest sites, or other features necessary for the reproductive success of the animal). Until conservation approaches or specific site prescriptions are developed, new management actions that would negatively alter habitat conditions necessary to support the species must not be allowed within 100 feet of the plant(s) or within one quarter mile of the wildlife habitat feature(s).

S-3 Timber harvest is prohibited in old growth forest.

G-1 Outstanding natural communities should be conserved.

G-2 TES habitat that is important to species conservation should be retained in public ownership unless an exchange results in a net gain or acquisition of higher quality habitat.

G-3 Use restrictions and other mitigative measures may be implemented to protect or improve habitat for threatened, endangered, or sensitive species. See individual management areas for additional direction.

G-4 When feasible, standards and guidelines for the Alpine Zone MA (8.1) also should apply to alpine and subalpine communities outside MA 8.1.

Bald Eagle

G-1 Winter roost habitat should be protected along major rivers and water bodies with known eagle activity.

Gray Wolf

G-1 If wolves become reestablished on or near the Forest, suitable early successional habitat should be provided, especially for deer and moose.

G-2 Known winter deeryards should be protected and deeryard conditions should be improved where possible.

Indiana Bat

S-1 Standards for *wildlife reserve trees* in the Wildlife resource section apply.

G-1 Guidelines for *wildlife reserve trees* in the Wildlife resource section apply.

Small Whorled Pogonia

S-1 Known small whorled pogonia colonies must be protected from human disturbances that may be detrimental to the colony.

S-2 Evaluate projects with ground-disturbing activities to determine the potential for small whorled pogonia habitat to occur within the influence of the project area.

G-1 Known small whorled pogonia colonies should be evaluated to determine the potential for natural colonization of surrounding habitat that becomes functionally suitable over time. Actions may be taken that would benefit existing colonies or encourage additional colonization, e.g., removing trees to reduce canopy cover allowing more sunlight to reach the forest floor.

Canada Lynx

S-1 Standards and guidelines for lynx apply only to lynx habitat within a Lynx Analysis Unit (LAU).

S-2 LAUs shall not be adjusted without agreement between the U.S. Forest Service and the U.S. Fish and Wildlife Service.

S-3 Unless a broad-scale assessment of landscape patterns that compares historical and current ecological processes and vegetation patterns is developed, disturbance must be limited in the following manner:

a. If more than 30 percent of lynx habitat within a LAU is currently in unsuitable condition, no further reduction of suitable conditions shall occur because of vegetation management activities by federal agencies unless the activity is proposed specifically to improve future snowshoe hare habitat.

b. Vegetation management projects in lynx habitat should promote increases in suitable snowshoe hare habitat and retain/enhance habitat conditions for important alternate prey (particularly red squirrel) where possible. Overstory harvest treatments that retain or enhance existing softwood understories are allowed provided denning habitat within the LAU does not fall below 10 percent.

S-4 Prior to any action that may affect lynx, lynx habitat within affected LAUs must be mapped, including potential foraging and denning habitat. Mapping should also include identification of topographic features that may be important for lynx movement (e.g. major ridge systems, prominent saddles, riparian corridors).

S-5 Within an LAU, denning habitat in patches generally larger than five acres, comprising at least 10 percent of lynx habitat must be maintained. Where less than 10 percent denning habitat is currently present within an LAU, management actions that would delay development of denning habitat structure must be deferred. Projects may still move forward if other lynx habitat areas within the LAU can be identified that will not be treated (e.g., RNAs) and which will subsequently move into denning conditions at some future time.

S-6 On-the-ground management actions must not change more than 15 percent of lynx habitat within an LAU to an unsuitable condition within a 10-year period.

S-7 Existing and potential diurnal security habitat around highly disturbed recreation developments (e.g., ski areas) must be maintained.

G-1 In lynx habitat, no net increase in groomed or designated over-the-snow routes and snowmobile play areas by LAU is allowed unless:

a. The designation serves to consolidate unregulated use and improves lynx habitat.

b. Existing snowmobile trails must be temporarily rerouted to avoid conflicts around active timber sales.

c. Preexisting trails or corridors on private land come into National Forest ownership.

Groomed or designated over-the-snow routes include the following: designated winter route, groomed winter route, and authorized winter route/use area. Groomed or designated over-the-snow routes are generally compacted during the winter season, but do not include plowed roads or roads/trails accessing private land. Winter logging and alpine ski areas are not subject to this guideline. Nordic ski areas should have a "concentrated trail area" delineated by a Forest Service biologist within which existing trails are so networked that a competitive advantage for lynx does not likely exist. These "concentrated trail areas" are not subject to this guideline.

G-2 For trails constructed primarily for summer use but which may also be used in winter (e.g., hiking trails), new construction should result in no net increase in trail mileage in lynx habitat by LAU. Designating or grooming these routes for winter use should include closures of other similar routes in lynx habitat so no net increase in routes occurs by LAU.

a. Exceptions to this guideline may be considered when an increase in over-the-snow routes would not increase the potential for competitors to gain access to an area, e.g., constructing a snowmobile trail that closely parallels an existing winter road. Exceptions may also be allowed in areas where snow depth or snow condition is insufficient to limit competing predators in winter, and consistent presence by competing predators off-trail is documented. Exceptions must be recommended by a Forest Service wildlife biologist.

G-3 Following disturbances such as blow down, fire, or insects/pathogens resulting in mortality that could contribute to lynx denning habitat, salvage harvest should not occur when the affected area is smaller than five acres. Exceptions to this include:

a. Areas such as developed recreation sites or other areas of high human concentration; and

b. LAUs where denning habitat has been mapped and field-validated (not simply modeled or estimated) and comprises more than 10% of lynx habitat within a LAU. In these cases, salvage harvest may occur, if at least the minimum amount of denning habitat is maintained in a well-distributed pattern.

c. Already active timber sales where removal of blowdown trees is necessary to ensure access, reduce safety hazards, or otherwise meet the project objectives.

G-4 In lynx habitat, pre-commercial thinning may be allowed only when stands no longer provide snowshoe hare habitat (e.g., self-pruning processes have eliminated snowshoe hare cover and forage availability during winter conditions with average snowpack). However, timber stand improvement may be used in softwoods or mixed wood stands to enhance or maintain softwood regeneration. This practice would be acceptable in stands that have suitable stem density (greater than or equal to 7,000 stems per acre in softwoods or mixed woods) for snowshoe hare cover if that stem density is retained across most of the stand.

G-5 Key linkage areas must be maintained to allow lynx movement. Native plant communities and patterns, and habitat for potential lynx prey, should be maintained or enhanced within identified key lynx linkage areas where feasible. Habitat connectivity (e.g. along large riparian zones and across major ridges, and prominent saddles) should be retained across the landscape to support lynx movement. Creation of permanent linear routes (e.g., roads, fuel breaks, trails) that could facilitate increased over-the-snow access by competitors should not be built on ridges and saddles or in riparian zones. Clearcuts should be placed near softwood cover where possible.

G-6 Snow compaction off designated trails and roads should be minimized when authorizing and monitoring special uses in lynx habitat.

G-7 New temporary roads constructed in lynx habitat should be closed to public use. The ability to implement effective closures should be provided in the initial road designs. Upon project completion these roads should be reclaimed or obliterated if not needed for other forest management objectives.

G-8 Dirt and gravel roads (particularly those that could become highways) traversing lynx habitat should not be paved or otherwise upgraded (e.g., straightening of curves, widening of roadway) in a manner that is likely to lead to significant increases in traffic volumes, traffic speeds, or would contribute to development or increases in human activity in lynx habitat, unless road safety hazards exist.

Bicknell's Thrush

S-1 Projects must not result in a net decrease of suitable Bicknell's thrush habitat.

Recreation

Also see Chapter 3 for required management area-specific direction.

General

Recreation Management Approaches

S-1 Use will be focused on trails or at backcountry facilities in the backcountry. Use will be focused on roads or developed sites in the frontcountry.

S-2 Current development levels in the backcountry will be maintained or lowered where appropriate.

S-3 Current low use areas and facilities will be managed to meet visitor needs and resource requirements through education and management controls, where necessary.

G-1 Current high use areas and facilities should be managed for high use to meet visitor needs. Appropriate mitigation should be provided to manage the effects of high use to ensure that they can be sustained over the long term. Use should not be allowed to increase indefinitely in high use areas.

G-2 The Forest Service should collaborate with partner organizations to provide recreational opportunities, conservation education, and visitor information programs.

Developed Recreation

General

S-1 In order to maintain a range of developed recreation opportunities, any construction, reconstruction, or rehabilitation projects must be evaluated in terms of their effects on both the individual sites and on Forest-wide development levels.

S-2 The Forest Service must determine the appropriate development levels for campgrounds, day use areas, and trailheads. To determine development levels, the Forest recreation management approaches, current and future public needs and use levels, and the role of the public sector in providing these opportunities must be considered.

S-3 The Forest Service capital investment process must be guided by desired development levels.

S-4 Capital investment construction or expansion to increase capacity must not be authorized unless it clearly provides for public need, addresses resource impacts and health and safety standards, and meets developed recreation goals.

S-5 New campgrounds will not be constructed.

G-1 The Forest Service should create architectural design standards for facilities and signs, consistent with the Built Environment Image Guide (USDA Forest Service, FS-710, September 2001), to maintain a consistent architectural character.

G-2 Existing campgrounds and day use areas may be improved or expanded.

Driving for Pleasure

G-1 Forest System roads are open to street-licensed registered motor vehicles except where closed. Open/closed roads may vary from year to year and season to season.

Roadside Camping

G-1 Roadside camping is allowed along open Forest System roads unless closed to that use by Forest Supervisor's Order.

G-2 The development level of roadside camping opportunities may vary, but Forest-wide the emphasis will be on lower levels of development.

G-3 Roadside camping should include a range of opportunities from random roadside openings to specifically designated sites.

Trailheads

G-1 Trailheads and trailhead parking lots serve as primary access to the trail system and backcountry sites. The Forest Service should determine the appropriate levels of development (e.g., paved or gravel, size, toilets provided/not provided) based on the objectives of the backcountry areas and the facilities served by the trails.

G-2 Trailhead parking lots should not be constructed, improved, or expanded solely to accommodate increased recreation use.

Motorized Dispersed Recreation (Motorized Trails)

Winter Motorized Trails

S-1 Motorized trail use and maintenance must be coordinated with the states of New Hampshire and Maine and must be consistent with state laws. All motor vehicles using Forest trails must be state registered.

S-2 The White Mountain National Forest will remain closed unless designated open to snowmobile and all terrain vehicle (ATV) use.

S-3 Motorized use is permitted on designated motorized trails only. Off-trail cross-country use is prohibited.

G-1 Trails may be closed if conditions warrant.

G-2 Special use permits for new competitive events should be prohibited.

G-3 New Hampshire corridor trails and Maine ITS (Interconnected Trail System) trails should provide uninterrupted use. Corridor/ITS routes should be relocated, alternate locations determined, or dual use considered before management actions such as timber harvesting require temporary trail closure.

G-4 New Hampshire non-corridor (primary and local trails) and Maine non-ITS trails may be closed or interrupted due to Forest operations.

G-5 Snowmobile trails should be managed and maintained consistent with the respective state and White Mountain National Forest agreements for snowmobile trail operation and maintenance.

G-6 New or relocated snowmobile trails should not be located on frozen waterbodies.

Summer Motorized Trails

S-1 Summer motorized trail use is prohibited.

Non-Motorized Dispersed Recreation

General

S-1 Concentrating use will be emphasized over dispersing use.

G-1 To protect low- and moderate-use locations, management actions (e.g., authorization of special use permits, information and education efforts) should not disperse recreation use from high- to low-use areas.

G-2 Use should be managed to prevent negative impacts to natural and cultural resources, and to the recreation experience.

Education

G-1 Consistent with ROS objectives, education and information delivery:

1. Should be concentrated primarily at visitor centers, classrooms, and other off-Forest locations, or at trailhead and developed facilities when delivery can be effectively accomplished at those locations.
2. To a lesser degree, may be conducted at backcountry locations when effective delivery cannot be accomplished at developed or frontcountry locations.

G-2 Posted public safety messages and signs (other than directional trail signs) should be located primarily at trailheads and visitor centers. They may be used at backcountry locations in unusual or unique circumstances.

G-3 Education messages should emphasize programs such as "hikeSafe" and "Leave No Trace" to foster personal responsibility for safety and to promote low impact in backcountry locations.

G-4 Education messages should emphasize the objectives of the Forest recreation management approaches to ensure Forest visitors understand the impacts of specific use related issues and to ensure that recreationists are going to the appropriate area for the opportunities they seek.

Trails

S-1 The Forest Trail System consists of the trails identified in the White Mountain National Forest trails database.

S-2 Trailhead and interior identification and directional signs must conform to standards identified in FSH 2309.18 and EM 7100-15.

G-1 Existing trails should be removed from the Forest Trail System and closed if continued use causes unacceptable impacts that cannot be mitigated, or if the trail does not meet overall objectives for the trail system.

G-2 Trails should be maintained to standards described in FSH 2309.18, consistent with the ROS objectives of each management area.

G-3 Incidental trails should be evaluated for potential removal or inclusion in the Forest trail system.

G-4 No additional trails should be constructed or authorized unless clearly needed to provide public access to the existing system, address resource impacts, meet health and safety standards, conform to management area direction, or meet the Forest recreation management approaches.

Overnight Facilities

S-1 Overnight facilities (huts, shelters, tent platforms, and their related support structures such as toilets) and dispersed campsites must be managed as components of an overall system of backcountry opportunities.

S-2 Existing overnight facilities must be managed to minimize inconsistencies with desired ROS class objectives.

G-1 Forest Protection Areas (areas where restrictions such as limits on camping, use of wood or charcoal fires, and limits on party size are applied) should be established around all overnight facilities to prevent uncontrolled increases in use and size.

G-2 Forest users should bear a share of management costs for overnight facilities and dispersed sites through continued use of volunteer programs, payment for services, recreation passes, and cooperative agreements.

G-3 Overnight facilities may be provided to concentrate use. They should be designed and managed to absorb recreation impacts and prevent site deterioration, and to be consistent with ROS objectives.

Appalachian Mountain Club Huts

S-1 Huts must be managed consistent with the Appalachian Mountain Club Special Use Permit mitigation requirements.

S-2 The construction of additional huts is prohibited.

S-3 Expanding hut capacity is prohibited.

S-4 Except for health, safety, and resource impact concerns, expanding existing huts in physical structure is prohibited.

G-1 Potable public water systems may be provided.

Shelters/Cabins/Tent Platforms

S-1 If not clearly needed to protect natural resources, maintain a desired recreation use opportunity or pattern, or conform to the Forest recreation management approaches, shelters, cabins, and tent platforms must be removed.

S-2 Shelters, cabins, and tent platforms that are retained must be maintained. Native materials should be emphasized for maintenance and repair activities. Non-native material may be used if native material

is unavailable or impractical. Materials should be replaced in-kind. Any material used should be durable and blend closely with the natural surroundings.

S-3 Reconstruction of shelters, cabins, and tent platforms determined eligible for the National Register of Historic Places must conform to required standards in *Standards for Upkeep and Rehabilitation of Historic Buildings.*

G-1 Shelters, cabins, and tent platforms that currently control and mitigate recreation impacts that are unlikely to be successfully mitigated through other appropriate strategies should be retained.

G-2 Human waste disposal facilities should be provided consistent with appropriate backcountry waste management technology.

G-3 Where fires are allowed, they should be confined to designated fire rings.

G-4 Additional shelters, cabins, and tent platforms should not be constructed unless unacceptable resource or social conditions exist that cannot be otherwise mitigated. New shelters, cabins, or tent platforms must be consistent with the Forest recreation management approaches.

G-5 New shelter and tent platform sites should be located 100 feet or more from any main trail, water body, or riparian area, and should not be located within two miles of an existing road open to motor vehicles.

G-6 Reconstruction and relocation of cabins, shelters, and tent platforms may include expansion of facilities, but should allow only the minimum expansion needed to better manage existing recreation use of the site and the surrounding area.

Dispersed Campsites

S-1 Dispersed campsites causing unacceptable impacts that cannot be reasonably mitigated must be removed.

G-1 Dispersed campsites may be designated with limited signing, as needed, to better manage recreation use.

G-2 Human waste disposal facilities and water systems should not be provided at dispersed campsites.

G-3 Consistent with management area direction, dispersed campsites may be allowed or relocated to manage existing recreation use.

Cross-Country Skiing

G-1 Forest Service-maintained cross-country ski trails should provide a lower level of development and services than cross-country areas under special use permit.

Mountain Biking

S-1 Except for designated Wilderness and the Appalachian Trail corridor, which are closed, Forest development trails will be open unless closed to mountain bike use.

S-2 Mountain biking is allowed on travel corridors unless closed to that use.

S-3 Cross-country mountain bike travel outside the open system of Forest trails and open travel corridors is prohibited.

G-1 Existing travel corridors should be reviewed systematically, with public involvement, with the goal of establishing a designated Forest trail system.

Rock and Ice Climbing

S-1 The White Mountain National Forest is open unless designated closed to rock, ice, and mixed climbing.

S-2 Except in Wilderness (see MA 5.1) where it is prohibited, storing (caching) equipment, including fixed ropes is permitted for no more than 14 days.

S-3 Chipping to create foot and hand holds, gluing to stabilize features, and attaching permanent artificial handholds is prohibited.

S-4 Route cleaning is prohibited where federally-listed threatened, endangered, and sensitive species occur.

S-5 To protect natural features, the use of mechanical or motorized devices, explosives, or chemicals for cleaning or developing climbing routes is prohibited. Hand drills and power drills are permitted for the installation of bolt protection, except in Wilderness where power drills are prohibited.

G-1 Specific areas should be closed or limitations placed on use, including group size, if recreational climbing creates unacceptable social or natural resource impacts. This may result in temporary or permanent closures or limits on number of outfitter/guide permits authorized.

G-2 To minimize social and environmental impacts, climbing party size should be limited to 12 persons, except in Wilderness, where group size is limited to 10.

G-3 Removing, altering, or manipulating vegetation, soils, or other natural features at the cliff edge, talus slope, or cliff base should be avoided.

G-4 Climbing or new route development may be restricted to protect federally listed threatened, endangered, and sensitive species.

G-5 Climbing should be restricted where there is potential to impact heritage resources.

G-6 When issues are no longer effectively addressed by application of standards and guidelines, climbing plans for specific areas should be developed to minimize environmental and social impacts.

G-7 Removable traditional protection should be used. Fixed protection may be considered when the use of removable protection is impossible, impractical, or causes increased or ongoing unacceptable resource impact. If installation of fixed protection for a new route, or the replacement of fixed protection on an existing route, is required, the following guidelines should be used:

a. 3/8" expansion bolts with hangers (or other acceptable industry standard that has the same or less impact) should be used. Ring hangers should be used for rappel stations. Webbing should not be used on new bolt anchors.

b. Replacement bolts should use the existing holes when possible.

c. Natural-colored webbing should be used on tree anchors.

d. All bolt hangers should be painted to blend with the color of the cliff face.

e. Hand drills, battery powered rock drills (except in Wilderness), hammers, crowbars, and wrenches are recognized as standard tools for fixed anchor installation and maintenance.

G-8 Reasonable cleaning of a route is allowed (except per S-4). Hand tools such as wire brushes, hand brooms, and toothbrushes are recognized as standard tools.

Rock and Ice Climbing Special Use Permits

S-1 To minimize social and environmental impacts from commercial group use, rock and ice climbing outfitter/guide group size must be limited to 12 persons. In Wilderness, the group size limit is 10 persons.

G-1 Rock and ice climbing recreation events permits should limit group size to 12 persons.

G-2 Numbers of permits per cliff for outfitter/guide and recreation events may be limited to protect natural resources or the recreation experience.

Special Uses — Recreation Specific

S-1 Special uses apply to all kinds of commercial use on the Forest and must be managed to best serve the public interest, in accordance with FSM 2700. Standards and guidelines pertaining to any type of special use are stated in "Land Use Authorizations (Special Uses)" in the Lands section of this chapter. These must be followed, in addition to the recreation-specific requirements, below.

S-2 Outfitters/guides must submit operating plans and itineraries as part of their annual permit process.

S-3 Permits for recreation events and services with off-trail use are prohibited with the following exceptions: 1) water-based activities, 2) activities in the alpine zone on two or more feet of snow, 3) established climbing routes (as restricted by Rock and Ice Climbing standards and guidelines), 4) existing sporting dog field trial permits in the Kilkenny area, and 5) hunting.

S-4 Recreation special uses must not be dispersed from high-use to low-use areas, as identified in the current *Trail Use Inventory*.

S-5 Recreation Special Uses must be managed to protect the characteristics of low-use areas as identified by current trail use levels.

G-1 Recreation Special Use proposals should be denied if not consistent with the Forest recreation management approaches.

G-2 Recreation Special Use proposals may be denied when applications are not received in a timely manner.

G-3 If monitoring and analysis determines that recreation Special Use capacity (either social or resource) is being reached, an allocation study should be considered to determine need for user day limits. If applicable, results of the allocation study will be used to set and implement user day limits.

G-4 Group size may be limited when necessary to provide for safety and resource protection, or to minimize the impact large groups have on others.

G-5 In general, Special Use Permits for cross-country ski areas should provide more developed opportunities, including highly groomed trails and patrols, than Forest trails.

Wildlife Related Recreation

S-1 The White Mountain National Forest is open unless designated closed to hunting, fishing, and trapping.

Riparian and Aquatic Habitats

Also see Chapter 3 for required management area-specific direction.

S-1 All appropriate state and federal permits must be acquired prior to implementing management activities within wetlands, floodplains, streams, or ponds.

S-2 Projects requiring the use of heavy machinery within the wetted area of a stream or pond must have hazardous material spill kits on site.

S-3 Crossing of perennial streams with motorized vehicles for recreational and commercial purposes must be done at designated locations.

S-4 Acceptable stream flow must be maintained during construction on all fish bearing streams.

G-1 Tree cutting and harvest should not occur within 25 feet of the bank of mapped perennial streams, the high water mark of a pond, or a identified natural vernal pool, unless prescribed to benefit hydrological or ecological function of the associated stream, pond, or riparian area. Exceptions to this include tree removals needed to clear a designated stream crossing, maintaining an existing road or previously cleared skid road that cannot be relocated, or protecting human safety or infrastructure. Trees (greater than 4 inch DBH) cut or moved in this zone should be placed in a fashion that benefits riparian functions or aquatic habitats when possible.

G-2 Uneven-aged silvicultural practices should be used within the Riparian Management Zone (RMZ) along all perennial streams, lakes, ponds, and vernal pools. Cuts should be should be designed to maintain a relatively continuous forest canopy for the protection and maintenance of water quality, dead wood recruitment, hydrologic function, wildlife habitat, and scenic values. Regeneration group cuts should be limited to less than one acre in size. Exceptions may apply in areas deemed

important for maintaining beaver colonies. In the absence of on-the-ground riparian mapping, width of RMZs should be defined as in Table 2-01.

Table 2-01. Width of RMZ for Specific Aquatic Features

Aquatic Feature	Width of RMZ* (feet)
1st and 2nd order streams	75’
3rd order streams	275’
4th and larger order streams	575’
Lakes, ponds, and vernal pools	75’

* These widths may vary on the ground and may be modified at the project level if a hydrologist or biologist maps the actual riparian zone.

G-3 Treatments of riparian vegetation to enhance beaver forage should occur only in riparian types 30 or 35. If areas are not typed, treatments should occur on streams with less than 2 percent gradient, bankfull channel widths less than 25 feet, and valley widths greater than 150 feet.

G-4 Treetops and slash from commercial timber harvesting operations should not remain in any perennial stream, pond, lake, wetland, or vernal pool.

G-5 New skid roads, classified roads, trails, and walk-in campsites should not be located within the stream or pond management zone, which is a minimum of 50 feet in width. The width of the zone increases 20 feet in width with each increase of 10 percent in side slope. If any of the above need to be located within the zone, additional measures to minimize sedimentation should be taken.

G-6 New timber log landings, developed campsites, and permanent facilities should not be located within 100 feet of a perennial stream or the high water mark of a pond. If they need to be located within 100 feet, additional measures to prevent direct runoff into surface waters and to minimize sedimentation should be taken.

G-7 Existing roads, facilities, campsites, or trails within 100 feet of perennial streams or ponds should be considered for relocation as part of normal project planning, except when doing so would result in greater overall impact to the land or water resource.

G-8 Known springs should be protected from human impact.

G-9 Specific protection measures will be prescribed on a site-by-site basis for intermittent and ephemeral streams. These streams should not be permanently filled or relocated because of skidding operations. Sites where temporary water diversions or channel fill is necessary will be functionally restored after project completion.

G-10 Naturally occurring downed wood should not be removed from streams, floodplains, wetlands, ponds, or vernal pools unless needed

to protect culverts, bridge crossings, existing infrastructure, or human safety.

G-11 Naturally occurring vernal pools identified during project planning should not be altered as a result of skidding or construction activities.

G-12 Management activities should avoid soil rutting that could lead to amphibian migration barriers between uplands and vernal pools.

G-13 Restoration or enhancement of streams should occur where aquatic habitats are considered to be below their ecological potential.

G-14 Stream restoration efforts or habitat enhancement projects prescribed to increase habitat diversity (pool habitat, fish cover, nutrient and sediment storage, etc.) should harmonize with the surrounding visual setting and be consistent with ecological conditions and floodplain characteristics. The use of native materials (boulders, trees) should be emphasized.

G-15 Trees that directly provide structure to the streambanks and channels of intermittent streams should be retained.

G-16 Permitted construction activities in streams identified as having a fisheries value should not occur during the egg incubation period of October through April in areas where potential sedimentation would be detrimental to egg survival.

Scenery Management

Also see Chapter 3 for required management area-specific direction.

S-1 Scenic Integrity Objectives provide an indication of the alteration or disturbance allowed in the viewed landscape. They are defined in terms of Very High, High, Moderate, and Low. Scenic Integrity Objectives are assigned based on Scenic Classes and Management Areas. Scenic Integrity Objective assignments for the Forest are shown in Table 2-02a and Table 2-02b.

S-2 Scenic Integrity Objectives will be met by

a. Applying the technical principles and guidelines outlined in the *National Forest Landscape Management Handbook* series, specifically for timber, roads, utilities, recreation and ski areas (See FSM 2380.61 – Current Publications).

b. Following examples of Scenic Integrity Objectives found in Appendix H of *Landscape Aesthetics – A Handbook for Scenery Management.*

c. Following current and/or future guidelines developed specifically for the White Mountain National Forest to achieve Scenic Integrity Objectives within individual management areas.

G-1 All management activities should meet or exceed Scenic Integrity Objectives established for the Forest through the Scenery Management System (SMS) outlined in *Agriculture Handbook 701, Landscape Aesthetics – A Handbook for Scenery Management.*

Table 2-02a. Management Areas with Multiple Scenic Integrity Objectives.

Scenic Class	Management Area		
	2.1	8.2	6.1, 6.2, 6.3
1	High	High	High
2	Moderate	Moderate	High
3	Moderate	Low	Moderate
4	Moderate	Low	Moderate
5	Low	Low	Moderate
6	Low	Low	Moderate
7	Low	Low	Moderate

Table 2-02b. Management Areas with a Single Scenic Integrity Objective.

Management Area	Scenic Integrity Objective
5.1	Very High
7.1	Low
8.1	High
8.3	High – Very High
8.4	High
8.5	See specific Scenic Area
8.6	High
9.1	Very High
9.2	Low
9.3	High
9.5	High

Transportation System

Also see Chapter 3 for required management area-specific direction.

Road Location, Design, and Construction

S-1 Roads and related facilities (e.g. parking lots, trailheads) must be located, designed, and constructed to the appropriate standard necessary to meet management objectives for the area served.

S-2 Road and related facility standards shall be determined by the needs of all resources, including consideration of safety, costs of transportation, and effects upon lands and resources.

S-3 Road location must consider soil erosion and slope stability risks.

S-4 Temporary erosion control devices must be installed and maintained until disturbed ground has been stabilized.

S-5 Roads subject to the Highway Safety Act, that do not meet two-lane standards, must 1) be increased to a full two lanes or 2) reduced to a single lane with intervisible turnouts when they are reconstructed.

G-1 New through roads should not be constructed.

G-2 Roads and related facilities should be located outside of riparian areas, wetlands, deer wintering areas and vernal pools.

G-3 Road construction on the small breakland Ecological Land Types (ELTs) should be avoided.

G-4 Where abutments are required for resource protection, permanent abutments should be considered on temporary bridges that will be utilized on classified roads scheduled for future recurrent use.

G-5 Excess materials generated during construction activities should be removed from construction sites and properly disposed of.

G-6 Appropriate control and management of storm water runoff should be considered in parking lot design.

G-7 When roads subject to the Highway Safety Act, along with their related facilities, are reconstructed, they should be brought into compliance with the Highway Safety Act standards.

Road Management

S-1 Roads are open to non-motorized uses unless specifically closed.

S-2 Temporary roads must be decommissioned upon completion of the activity for which they were authorized.

S-3 Private landowners and other government agencies shall be required to obtain an access permit from the Forest Service to construct a new road which connects onto an existing National Forest System road to ensure public safety and resource protection.

G-1 New roads constructed for resource management purposes should be open to public highway vehicle traffic when the following guidelines are met, otherwise they should be closed to public highway vehicle use:

a. The road provides access to ongoing multi-resource activities;

b. Specific public benefit(s) and time are identified in the road management objectives (RMO);

c. The road adequately supports the expected use, and no significant public safety or resource hazards exist; or

d. The road meets recreation management goals and objectives.

G-2 Seasonal road restrictions should be considered when:

a. Use would cause unacceptable damage to roadbed or soil and water resources;

b. Use causes unacceptable wildlife conflict or habitat degradation;

c. Use results in unsafe conditions;

d. A seasonal public or administration need is served;

e. The area accessed has seasonal need for protection or non-use; or

f. It is necessary to resolve conflicts between users.

G-3 Administrative use of closed or restricted roads should not occur when such use would cause damage to roads or resources.

G-4 Roads may be open to winter motorized, non-highway vehicle use (e.g., snowmobiles) when they are part of an official trail system designed, maintained, and signed for that use.

G-5 Objective maintenance Level I (intermittent stored service) roads should have temporary drainage structures removed, be stabilized, and have entrances blocked during the period they are closed to vehicles.

G-6 Existing roads should be considered for decommissioning

a. When there is no longer any need for the road.

b. When alternative routes may be available.

c. To protect natural and cultural resources or to meet other resource needs.

Road Maintenance

S-1 Commercial users must be responsible for all winter and summer maintenance associated with their activities.

S-2 Roads and related facilities maintained for winter use must be designed and maintained to protect investment, resources, and to ensure public safety.

G-1 National Forest System roads and related facilities will not normally be maintained (i.e. plowed) for winter highway vehicle use by the public unless specifically designated to support winter use.

Vegetation Management

Also see Chapter 3 for required management area-specific direction.

S-1 The maximum size of temporary openings created by even-aged management is limited to 30 acres.

S-2 Whole tree removal is limited to soils with sufficient nutrient concentration and nutrient replenishment capacity to support the new or residual stand of vegetation, maintain soil productivity, and meet other resource objectives.

S-3 All tops and limbs from harvested trees must be scattered and left on-site when harvesting on outwash sands or soils shallow to ledge.

S-4 State of Maine and State of New Hampshire *Best Management Practices* must be met or exceeded.

G-1 No more than 15 percent of the area of watersheds of first and second order perennial streams should be treated with even-age regeneration methods in a five year period.

G-2 Timber management prescriptions adjacent to trail corridors should be modified to protect trail- and recreation-related values (e.g., uncut

zones, slash disposal, trail relocation, and/or use of uneven-aged management).

G-3 Timber stand improvement prescriptions may be implemented to influence stand composition and development in order to attain desired vegetative conditions. Practices should be consistent with currently approved silvicultural guides.

G-4 New even-aged regeneration harvest should not be made adjacent to previous regeneration areas until the average height of the first stand is at least 15 feet.

G-5 Where exposure of mineral soil is expected, skid roads should generally be located on grades of less than 20 percent, with only short steeper pitches.

G-6 Final harvest cuts should be separated by a manageable stand at least 10 acres in size.

G-7 Harvesting in hardwood stands adjoining deer wintering areas should occur during the winter when needed to provide browse.

G-8 Logging slash within 50 feet of a maintenance level 3 road, a trail, or private property should be treated or removed. Slash may be treated or removed at a greater distances when necessary to protect resource values.

G-9 Wood residues from harvest activities should be made available for firewood permittees when consistent with management area objectives.

Water Resources

Also see Chapter 3 for required management area-specific direction.

Soil and Water Conservation Practices

S-1 Soil and Water Conservation Practices (FSH 2509.22) must be developed and documented for activities that could affect water and soil resources.

S-2 Water quality must be maintained and protected, except that some discharges may be allowed if they are of limited extent and duration and result in no more than temporary and short term changes in water quality. Such activities shall not permanently degrade water quality or result at any time in water quality lower than that necessary to protect the existing and designated uses. Such temporary and short term degradation is only allowed when all practical and appropriate Soil and Water Conservation Practices are used to reduce impacts to water quality.

S-3 Effective, proven methods (e.g., silt fencing) to reduce concentrated runoff and erosion from construction activities must be used.

S-4 Where used, sediment traps must be maintained until disturbed sites and/or cut and fill slopes are stabilized.

S-5 Permanent stream crossings must be designed to pass the bankfull discharge unimpeded.

S-6 Fords must not be used on perennial streams, except on a temporary basis during construction, unless approved for administrative use at designated locations with appropriate mitigations.

G-1 New or reconstructed features (e.g., ditches and water bars) intended to capture runoff water should be designed to drain into areas suitable for trapping sediment and not directly into streams, wetlands, and vernal pools.

G-2 To minimize turbidity where construction activity occurs in intermittent or perennial watercourses, such activity should be isolated from the streamflow or carried out during low flow periods.

G-3 Cross drainage on roads and skid trails should use the spacing in the appropriate state Best Management Practices.

Stream Crossings

G-1 Stream crossings of watercourses and riparian strips should be located as close to perpendicular, and as straight, as is compatible with the topography on either side.

G-2 Permanent stream crossings should cross at stream segments with Riparian Types 12, 15, and 17.

G-3 All permanent new, redesigned, or reconstructed stream crossings and other instream structures must be designed and constructed to pass bank full flows, withstand expected flood flows, provide for the passage of sediment, bedload, and woody material, and allow free movement of resident aquatic life.

G-4 Culverts and bridges should be designed to pass bedload and woody material.

G-5 Temporary stream crossings on perennial streams should be designed to withstand at least a 25-year flood and pass bankfull flows.

G-6 During culvert and abutment installations, the disturbed site should be isolated from the stream flow.

G-7 Where construction activity occurs in intermittent or perennial watercourses, activities should be isolated from the streamflow or done during low flow periods to minimize turbidity and other effects.

G-8 Stream crossings should be installed using techniques to keep streambeds and banks intact.

Floodplains and Wetlands

S-1 New facilities or structures within the 100-year floodplain must be designed to protect public safety and preserve the beneficial values of floodplains.

G-1 New campgrounds and facilities should be located outside the 100-year floodplain and wetlands.

G-2 Ensure, as much as possible, that natural drainage patterns are not altered by management activities that negatively impact wetlands.

G-3 When implementing ground disturbing activities adjacent to or in wetlands and floodplains, all practical mitigations should be used.

G-4 Fragmentation of floodplains and wetlands should be avoided when planning corridors (e.g., for power lines, roads, or trails).

G-5 Wetlands should be managed across the Forest Service for "no net loss."

Water Uses

S-1 Projects that withdraw water from surface water features or groundwater must ensure that water is maintained at levels that will protect management uses and Forest resources, including aquatic species, their habitats, and water quality.

S-2 A site-specific assessment and/or consultation with appropriate agencies must be done to determine instream flow requirements and/or water withdrawal limits.

S-3 Existing and designated instream water uses, and the level of water quality necessary to protect those uses, must be maintained or improved and protected.

S-4 State Best Management Practices (BMPs) for well drilling and groundwater protection must be met or exceeded.

S-5 All well drilling operations must have the site contained during and after well installation until the site stabilizes. This could include such measures as a containment pit, adding a temporary well cap, installing hay bales and silt fencing, and pumping overflow off-site or to a poly-lined dumpster when necessary.

S-6 All wells must be constructed outside of wetlands and surface waters.

S-7 Well drilling materials and by-products must be contained and prevented from moving into wetlands and surface waters.

Wild and Scenic Rivers

Also see Chapter 3 for required management area-specific direction.

S-1 Manage eligible rivers to maintain their classification and eligibility until Congress designates the segments or decides not to designate them (see Appendix C).

Wildland Fire

Also see Chapter 3 for required management area-specific direction.

S-1 Wildland fire use (WFU) implementation criteria must be described in the *Fire Management Plan* before fire is managed under WFU. Wildland fires that do not meet the established criteria will be managed using the full range of suppression options available to confine, contain, and control the fire.

S-2 All ignitions must receive an appropriate management response (suppression or wildland fire use) according to the *Fire Management Plan*.

G-1 Fire planning should be integrated into all resource management plans to ensure treatment objectives utilize fire in an appropriate manner from both ecological and resource protection standpoints.

G-2 Fire suppression and prescribed fire impacts should be minimized by implementing Minimum Impact Suppression Tactics as described in the *Interagency Standards for Fire and fire Aviation Operations*.

G-3 Existing standing dead, and dead-and-down, woody material should be retained and not damaged during fuel reduction activities unless they are considered a safety hazard. This applies especially to large (greater than or equal to eighteen inches DBH) hollow or rotten logs and rotten stumps.

G-4 Best available smoke management practices should be used to assure that prescribed fire will not result in adverse effects on public health and safety, or visibility in Class I airsheds.

Wildlife

Also see Chapter 3 for required management area-specific direction.

Wildlife Habitat Management

S-1 Habitat management objectives must be developed for an individual Habitat Management Unit (HMU) prior to implementation of vegetative management in that HMU. These objectives must be based on land capability, current condition in the HMU, and landscape needs to meet management area objectives.

S-2 The Forest Service shall not introduce non-indigenous species except as biological controls for invasive species.

S-3 Known active raptor nest areas must be protected. Extent of the protection should be based on proposed management activities, human activities existing before nest establishment, species, topography, vegetative cover, and other factors. A no-disturbance buffer of at least 66 feet is required around nest sites from nest-site selection to fledging (generally March through July); exceptions may occur for some management activities when animals are adapted to human activity. At many sites, conditions will result in the need for a larger buffer to provide adequate protection.

G-1 Habitat should be managed according to guidance provided in the Forest's *Terrestrial Habitat Management* reference document.

G-2 Oak-pine and hemlock habitats should be retained on the landscape, but not all existing stands need to be maintained.

G-3 Maintain or enhance tree species diversity within stands, except when a stand is converted to aspen-birch, which reduces tree species diversity in the stand but provides a key habitat on the landscape. This includes retaining components of yellow birch and other minor species, and

retaining at least a few softwoods in hardwood stands and a few hardwoods in softwood stands where possible.

G-4 Even-aged regeneration harvest in spruce-fir and mixedwood habitats should occur only where softwood regeneration would be expected based on ecological land type or other conditions. Exceptions include when trying to create or maintain aspen-birch habitat, or when salvage harvesting after a large-scale disturbance.

G-5 Patches of regeneration forest habitat less than five acres in size should be created only in close proximity to other patches of regeneration habitat; grouping makes small habitat patches suitable for a number of species associated with regeneration forest habitat. Larger patches may be grouped or spread out within an HMU, depending on project objectives, forest type distribution, accessibility, and other resource concerns.

G-6 Group selection harvest should be emphasized in deer wintering areas (deeryards). Other management methods that would retain dense cover while providing pockets of browse can also be used if group selection is not appropriate.

G-7 Roads, trails, and new facilities should be located outside of deer wintering areas.

G-8 Gated roads may be opened seasonally to allow access to hunting or fishing areas, if resource concerns permit and if consistent with Forest Plan direction.

G-9 Multi-year surveys of air space used by birds and bats should be conducted prior to permitting wind tower applications.

G-10 When structures that exceed the height of the adjacent canopy (e.g., cell towers) are proposed, mitigation measures to deter collisions by birds, bats, and other wildlife species should be implemented.

G-11 Protection of sensitive habitats, such as wetlands, and den and nest sites for key species, should be considered for protection at the project-level.

Nuisance Wildlife

S-1 All dumpsters, garbage cans, and recycling bins at developed recreation sites must be wildlife-resistant.

S-2 At developed and backcountry sites with known problems, actions must be taken to alleviate the wildlife-human conflict. If these measures do not work, trapping or other measures may be used to remove the problem animal in coordination with state agencies. A process for addressing conflicts and recommended preventative measures are documented in the *White Mountain National Forest Protocol to Avoid Wildlife-Human Conflicts*.

G-1 Preventative measures and education should be used to minimize wildlife-human conflicts.

G-2 To the degree feasible, campers, hikers, and day-use visitors should be advised when there is a known nuisance wildlife problem in developed or backcountry areas near where they are recreating.

G-3 Information about proper food storage should be available to campers and recreationists at recreation sites.

G-4 When education and deterrents do not eliminate wildlife-human conflicts, or when necessary to maintain public safety, dispersed or developed recreation sites may be closed by Forest Supervisor's Order.

Wildlife Openings

S-1 The value of wildlife trees, snags, and down logs must be considered during development of burn plans for wildlife openings.

G-1 Alternate uses of wildlife openings should be limited, and should be designed and timed to reduce impacts to the habitat value of the opening.

a. When a wildlife opening is used for other purposes, such as a helicopter site, it must be restored to the condition it was in prior to that use.

b. Special uses and events are not allowed in a wildlife opening if they alter the habitat value of the opening.

c. Camping in wildlife openings should be discouraged.

Wildlife Reserve Trees

S-1 When harvest reduces the basal area of a stand below thirty square feet per acre, uncut patches totaling five percent of the harvested area must be retained, with each at least one quarter acre in size.

S-2 When timber harvest will leave basal area above thirty square feet per acre, at least six cavity and/or snag trees per acre must be retained. These leave trees should include at least one wildlife tree and three trees exceeding twelve inches DBH per acre when feasible. In areas lacking such cavity trees and snags, trees of the largest available diameters with defects likely to lead to cavity formation should be retained.

G-1 Uncut patches retained under S-1 should be located to encompass as many wildlife trees, snags greater than or equal to nine inches DBH, other trees with cavities or broken tops, and bear-clawed beech as possible. A wildlife tree or snag greater than eighteen inch DBH may be used as a nucleus. In areas lacking suitable cavity trees and snags, trees of the largest available diameters with defects likely to lead to cavity formation should be retained.

G-2 When possible, uncut patches retained under S-1 and leave trees retained under S-2 should be placed within three hundred feet of open wetlands, ponds, riparian areas, or wildlife openings greater than five acres in size.

G-3 Existing standing dead, and dead-and-down woody material, should be retained and not damaged during Forest management activities unless they are considered a safety hazard or the area is being permanently removed from a forest condition (for example, parking lot construction). This applies especially to large (greater than or equal to eighteen inches DBH) hollow or rotten logs and rotten stumps,

G-4 Cull material from harvested trees, especially hollow logs, should be left in the woods.

Forestry pioneers studying five-year-old slash on the northwest slope of Mt. Carrigain, 1919, in what is now the Pemigewasset Wilderness. From left: Henry S. Graves, then Chief of the U.S. Forest Service; J.J. Fritz, WMNF Forest Supervisor, 1918-1923; Franklin Reed, District Forester; Philip W. Ayres, SPNHF Forester; Allen Chamberlain of the Boston Transcript, SPNHF officer; and District Ranger C.B. Shiffer. (WMNF photo)

White Mountain National Forest

Chapter 3
Management Area Direction

Chapter Contents

Cover

Titus Brook Wildlife Opening (WMNF Photo by John Williams)

MA 2.1 — General Forest Management

Purpose

1. Provide high quality sawtimber and other timber products on a sustained yield basis.
2. Provide a balanced mix of habitats for wildlife species.
3. Provide opportunities for a full mix of recreation opportunities, from low-use hiking trails to highly developed campgrounds, and ROS objectives, varying from urban to semi-primitive motorized in different locations and sometimes varying by season or presence of management activities.
4. Manage high-use or highly developed recreation areas to acceptable social and ecological standards; manage to retain some low-use and less developed areas.

Desired Condition of the Land

The Forest will be a mix of deciduous and coniferous forest stands of various types. The stands will vary in size, shape, height, and tree species. Both even-aged and uneven-aged harvest techniques will be used. As a result, two different conditions will occur among the stands: some stands will consist of trees of about the same age and size; the remaining stands will consist of a mix of tree sizes and ages ranging from seedlings to very large, mature trees.

Silvicultural practices will be used to meet timber, ecological, visual, and recreation objectives. Most stands will provide high quality sawtimber. Suitable habitat will be provided for a variety of wildlife and plant species. TES species and Outstanding Natural Communities will be conserved. Habitat at the landscape level will include a sustainable mix of young and mature forest. Permanent and temporary openings will occur across the landscape in shapes and sizes that are consistent with scenic objectives in an area. All communities that would naturally be present will be managed so that they are maintained or enhanced.

Along major road corridors, large diameter trees of different species with a variety of bark and foliage characteristics will predominate. Numerous views of broad, changing landscapes will be provided along roads and trails. Views, ecological processes, and management practices will be interpreted at stationary vista sites.

Recreation opportunities will be diverse, including activities such as hiking, mountain biking, driving for pleasure, snowmobiling, hunting and fishing, roadside camping, and developed camping. Some roads and trails will receive limited use, while others will be heavily used at certain times. Campground development levels will vary among sites, with some offering limited facilities and others providing more amenities. The location of various types and levels of recreation development will be determined by the Recreation Opportunity Spectrum (ROS) objective assigned to specific areas as well as by public demand and feasibility. ROS objectives will include

rural, roaded natural, semi-primitive motorized. Within these ROS objectives, there will be substantial non-motorized recreation opportunities.

Noticeable human activity in these areas will differ from very evident to absent.

Permanent and temporary roads will provide access to meet land management objectives. Major road corridors will be open for public use. Other roads will be open occasionally to provide for activities such as firewood gathering or hunting access. Most roads will be closed to public vehicular traffic. Selected areas may have snowmobile trails.

Log skidding then and now: horses drag logs at Waterville Valley ca. 1938; at right, a modern skidder at the Clear Brook timber sale. (WMNF photos by Bluford W. Muir, Forrest Seavey)

Standards and Guidelines

See Chapter 2, Forest-wide standards and guidelines, for additional required direction in each program area.

General

G-1 Emergency and project-related motorized administrative use may be allowed. Project-related motorized administrative use should consider potential impacts to social conditions and ecological resources in the area.

Accessibility

Forest-wide standards and guidelines apply.

Air Quality

Forest-wide standards and guidelines apply.

Geologic and Mineral

Forest-wide standards and guidelines apply.

Heritage

Forest-wide standards and guidelines apply.

Lands

Special Uses

S-1 Designated communication sites are prohibited.

G-1 New communication use permits may be authorized on a case-by-case basis if they are attached to existing facilities and consistent with visual quality standards, Recreation Opportunity Spectrum requirements, and management area objectives.

G-2 Wind towers may be considered.

Native American Relations

Forest-wide standards and guidelines apply.

Non-Native Invasive Species

Forest-wide standards and guidelines apply.

Rare and Unique Features

G-1 Vegetative manipulation may be implemented to protect or improve habitat for threatened, endangered, or sensitive species.

Recreation

G-1 Recreation management activities will match the ROS Class objectives

provided in this management area. Recreation management activities themselves should not drive the ROS Class from a less developed to a more developed Class. For example, a paved trail should not be constructed in an area with a semi-primitive motorized objective. ROS objectives in this management area include:

a. Areas adjacent to, and within one half mile of, Interstate, state, town, and National Forest System roads open to public vehicular use should have recreation management activities consistent with urban, rural, or roaded natural ROS objectives. The specific ROS objective depends on the individual road classification and related development on National Forest or adjacent private lands.

b. Areas adjacent and within one half-mile of National Forest System roads closed to public vehicular use should have recreation management activities consistent with the roaded natural ROS objective. During the winter months, some of these roads become part of the snowmobile trail system.

c. Areas generally beyond one half-mile of roads open to public vehicular use should have recreation management activities consistent with the semi-primitive motorized ROS objective. During timber harvesting, some areas may temporarily appear roaded natural due to the presence of people, equipment, and reconstructed roads. But when timber activities are not present and during summer months when there is no motorized recreation, much of this management area will appear as SPNM.

Riparian/Aquatic

Forest-wide standards and guidelines apply.

Scenery Management

G-1 In evaluating cumulative effects for viewed landscapes from established concern level 1, open, higher elevation viewpoints affording expansive or large scale views, no more than 9 percent of the acreage within the view should be treated with regeneration vegetation management activities within a 30 year period. Total area affected during any one entry period with new regeneration treatment should not exceed 4 percent of the acreage. Assessment may need to be made from multiple viewpoints (that view a common land base). The assessment will apply to each view separately.

G-2 VisualFX or similar computer graphics/simulation software should be used to design and evaluate visibility of proposed regeneration cuts, especially when viewed from higher elevation or superior viewpoints.

G-3 For areas with a "High" Scenic Integrity Objective, created openings should be minimally evident from trail, road, or use area vantage points. Maximum observed size should not exceed 4-5 acres. If openings occur, they should appear as natural occurrences and be well-distributed in the viewed landscape.

The General Forest Management area (MA 2.1) offers a broad range of recreational activities. Dogsledding (WMNF photo by Terry Miller); Bowhunting (WMNF photo by Forrest Seavey); Canoeing on Long Pond (WMNF photo by Kathie Fife); Backpacking on the Zealand Trail (WMNF photo by Forrest Seavey); RV and tent camping at Hancock Campground (WMNF photos by Forrest Seavey)

G-4 For areas with a "Moderate" Scenic Integrity Objective, and viewed from superior viewpoints, clearcuts and other noticeable openings should be informal in distribution and designed to be in scale with the observed landscape.

G-5 Observed opening acreages will vary under different situations and in relationship to the viewing position. As a starting point, observed acreages of approximately 10 acres normally achieve a Moderate Scenic Integrity Objective.

G-6 In general, larger-sized openings relate better to existing landscape character when placed at lower elevations (Valley Bottom Land Type Association).

G-7 For projects where group cutting is the preferred prescription, and views from a superior viewpoint are a concern, groups should be laid out in an informal distribution pattern and varied in size.

Transportation System

Forest-wide standards and guidelines apply.

Vegetation Management

G-1 Harvest restrictions, such as time of day, day of the week, or season, should be considered in high-use recreation areas or other sensitive areas, such as private residences, on a case-by-case basis.

G-2 The use of chemicals for Timber Stand Improvement (TSI) or site preparation may be allowed as per label specifications and in accordance with appropriate Forest Service handbook and manual direction. Proper mitigation procedures for resource protection will be utilized.

G-3 When artificial regeneration is prescribed it should be initiated within two years of the harvest cut. Site preparation for planting may include manual, prescribed fire, chemical, or mechanical methods.

G-4 Selection cuts should be made on a 15- to 20-year entry interval, depending on individual site conditions.

Water Resources

Forest-wide standards and guidelines apply.

Wild and Scenic Rivers

Forest-wide standards and guidelines apply.

Wildland Fire

S-1 Wildland fire use (WFU) is prohibited.

G-1 Prescribed fire may be used.

Wildlife

Forest-wide standards and guidelines apply.

MA 5.1 — Wilderness

Purpose

1. Manage as part of the National Wilderness Preservation system in accordance with the Wilderness Act of 1964, the Eastern Wilderness Act and individual Wilderness enabling legislations.
2. Provide a range of Wilderness values including social, scientific, ecological, and recreational.
3. Recognize the particular importance of maintaining Wilderness character within the northeast, including the character of an untrammeled landscape, where population pressures are intense and the overall landscape has been heavily modified.
4. Allow natural ecological events to progress without modification or manipulation where feasible.

Desired Condition of the Land

Management Area 5.1 will be composed of Congressionally-designated Wilderness. While Eastern Wilderness includes lands that have been modified through logging and other human actions over hundreds of years, the current natural ecological processes will be allowed to take place. The forest will be a product of natural succession. Large- and small-scale change will occur through natural events, such as wind disturbance or ice storms. In addition to natural processes within terrestrial and aquatic ecosystems, those Wildernesses that contain Class I airsheds (Great Gulf and Presidential Range/Dry River) will be managed to recognize air quality as integral to ecosystem health.

The Forest objective for Wilderness is to manage the areas to standard in accordance with the Wilderness Management Plan and national direction. In order to provide a range of Wilderness recreation opportunities and to protect low-use areas, Wildernesses will be divided into four zones labeled A (generally the lowest-use zone), B, C, and D (generally the highest-use zone). Each zone will be managed for its unique attributes, with goals and thresholds in place to prevent degradation of Wilderness character. Wilderness zones with high recreation use will be managed to maintain their values as sources of inspiration for the large surrounding populations, while having standards preventing unacceptable social or ecological impacts. Low-use Wilderness zones will be managed to maintain their low use; use will not be dispersed from high- to low-use areas by management actions. Interaction between users will vary by Wilderness, by specific places within each Wilderness, and by season of use. In general, use will be concentrated around trail corridors. Away from trails and in low use Wilderness zones, evidence of, and interaction with, other users will be low. Facilities and designated campsites may be present, when necessary, to protect Wilderness character, but natural processes will take precedence over recreation objectives.

Managerial controls will be kept to a minimum, and used only as necessary to protect ecological and social values. Wilderness will be accessible by foot or other non-motorized, non-mechanized means.

Entering the Presidential Range/Dry River Wilderness (WMNF photo by Terry Miller)

Standards and Guidelines

See Chapter 2, Forest-wide standards and guidelines, for additional required direction in each program area.

General

S-1 Management direction for both the Appalachian Trail (MA 8.3) and Wilderness (MA 5.1) must apply where the AT crosses through Wilderness. Where direction differs, the more restrictive standards and guidelines must apply.

S-2 Management direction for both the Alpine Zone (MA 8.1) and Wilderness (MA 5.1) must apply where Wilderness contains portions of the Alpine Zone. Where direction differs, the more restrictive standards and guidelines must apply.

S-3 Group size is limited to 10 people.

S-4 Consistent with Wilderness designation, only non-motorized activities are allowed.

S-5 Line officers may authorize motorized administrative use for emergencies as indicated in Table 3-01.

Table 3-01. Motorized Administrative Use Approvals by Activity

Motorized Use Request	Approval Authority
Chainsaws and portable pumps	Forest Supervisor
Helicopter use and landing sites	Forest Supervisor
Fire retardant drops from aircraft	Forest Supervisor
All Terrain vehicles	Forest Supervisor
Bulldozers, excavators, and similar heavy equipment	Regional Forester

S-6 The minimum tool concept must be used to guide management actions, including motorized administrative use in non-emergency situations.

G-1 Nonconforming structures should be evaluated for their historical and cultural values. They may be retained if 1) they do not threaten public safety or resource protection, 2) their cultural value is integral to that of Wilderness, or 3) they reflect Wilderness character.

G-2 Permission should not be given for helicopter flights over Wilderness, except for emergency use or when demonstrated to be the minimum tool necessary to meet Wilderness goals and objectives.

G-3 Wilderness management and recreation management should follow the White Mountain National Forest *Wilderness Management Plan*, including implementation of a zoned management strategy using Zones A-D (see Appendix E).

Education and Interpretation

S-1 Management must emphasize the education messages outlined in the *Wilderness Management Plan*, including targeting the appropriate Leave No Trace and hikeSafe messages.

G-1 Posted public safety messages and signs (other than directional trail signs) or focused interpretive programs should be provided outside of Wilderness. Posted public safety messages may be used in Wilderness to mitigate an unusual or extraordinary public safety hazard.

G-2 Public education about Class I Airsheds should be encouraged.

Public Health and Pollution Control

G-1 Public potable water systems should not be provided.

G-2 Human waste disposal facilities should be provided only at existing overnight facilities. If concentrations of dispersed campsites threaten water quality, they should be removed.

G-3 When provided, human waste disposal facilities should be consistent with current backcountry waste management technology and Wilderness values.

Wilderness Restoration

G-1 Restoration efforts should be site-specific and small scale, such as rehabilitating campsites or other sites impacted by recreation.

G-2 Ecosystem restoration should be considered only if the need is causally linked to human-induced changes, and if those changes pose a significant threat to resources outside of Wilderness.

Accessibility

Forest-wide standards and guidelines apply.

Air Quality

G-1 The Great Gulf and Presidential Range/Dry River Wilderness Class I Airsheds should be managed to protect air quality related values (AQRVs) such as visibility, vegetation, and water quality.

G-2 The IMPROVE (Interagency Monitoring of Protected Visual Environments) site at Camp Dodge, or similar substitute technology, should be maintained to monitor air quality in Class I Wilderness in the White Mountain National Forest.

Geologic and Mineral

Leasable (Commercial) Minerals

S-1 These lands are withdrawn from mineral extraction activities.

Mineral Materials (Common Variety)

S-1 Development of common variety mineral sites is prohibited.

Recreational Rock and Mineral Collecting

S-1 Surface-disturbing recreational rock and mineral collecting is prohibited.

Heritage

G-1 Historic sites and artifacts, even if considered nonconforming structures, should be undisturbed except where they threaten public safety or resource protection.

Lands

Special Uses

S-1 New Special Use facilities are prohibited except as allowed for by any provisions in Congressional designation of any specific Wilderness.

S-2 On-the-ground military exercises are prohibited in Wilderness.

S-3 The Forest will work cooperatively with the military and the public in reducing the impacts of low-level military training flights.

G-1 Research permits may be allowed if 1) research can be done without compromising Wilderness character, or 2) research is Wilderness-dependent.

Native American Relations

Forest-wide standards and guidelines apply.

Non-Native Invasive Species

S-1 Manual control must be considered as the first choice of eradication.

G-1 Chemical control methods, if deemed necessary, should be used through direct application. Broadcast application of herbicides or pesticides should be used only if direct application is not working.

G-2 Biological controls should be used only when the effectiveness of other control methods will not achieve site-specific eradication objectives.

Rare and Unique Features

S-1 Vegetation manipulation to protect or improve habitat for threatened, endangered, or sensitive species is prohibited.

Recreation

S-1 Management actions, such as dispersing use or increasing developments, must not result in a change along the Recreation Opportunity Spectrum or Wilderness Management zone scale from less- to more-developed. For example, management actions must not change a zone from A to B, B to C, or C to D.

S-2 Geocaching is prohibited.

Use Administration

S-1 Signs are permitted only for resource protection and public safety according to zone direction.

G-1 Numbers of users may be limited to provide opportunities for solitude and low to moderate contact with other groups or individuals.

G-2 Visitor use may be managed by informing visitors of alternative opportunities outside of Wilderness, restricting access to the Wilderness, limiting length of stay, limiting group size, and/or instituting a permit system.

G-3 Camping is permitted in all areas consistent with zone designations, unless restricted by a Forest Supervisor's Order.

G-4 The use of wood or charcoal fires may be limited as necessary to protect Wilderness character.

G-5 Only those improvements needed to protect and manage the Wilderness resource, or that address an unusual and extraordinary public safety hazard, should be constructed. The improvements must be consistent with zone designations.

G-6 The number and type of improvements, such as trails, footbridges, and signs, should be kept to a minimum and be consistent with zone designations.

Overnight Facilities

S-1 Construction of new overnight facilities is prohibited.

S-2 Existing facilities must be assessed to determine whether recreation impacts, or historical or cultural significance, warrants retention or removal.

S-3 Existing overnight facilities that are not identified in area-enabling legislation must be removed if they can no longer meet health and safety standards without full replacement, and if they are not needed for resource protection.

S-4 An existing facility determined eligible for the National Register of Historic Places must be retained if this is the only way to adequately preserve and protect its historical or cultural significance.

S-5 Shelters identified for retention must be maintained. Native materials are to be used, if possible, for maintenance and repair. Non-native materials may be used only if native material is unavailable or impractical. Materials are to be replaced in-kind. Any materials used should be durable, and should blend closely with the natural surroundings.

S-6 Facilities must not exist outside Zone D.

G-1 Overnight facilities identified in the area-enabling legislation should be retained.

G-2 Overnight facilities not identified in area-enabling legislation should be retained if removal would increase recreation impacts on an area

where those impacts are currently well mitigated by the shelter, and those impacts are unlikely to be successfully mitigated through other appropriate strategies.

G-3 Shelters not meeting historic or resource protection needs should be removed.

G-4 For shelters that will be retained, every practical effort should be made to minimize the presence of the shelter and its impact on the surrounding area.

Rock and Ice Climbing

S-1 Wilderness is open unless closed to rock, ice, and mixed climbing.

S-2 The use of power drills is prohibited.

S-3 Storing equipment, including fixed ropes, is prohibited.

S-4 Installation of fixed protection, including webbing, bolts, or pitons, is prohibited on new climbing routes.

G-1 Existing fixed protection on established climbing routes may be replaced consistent with Forest-wide standards and guidelines, as necessary to preserve known routes and to protect visitor safety.

Special Uses—Recreation Specific

S-1 Outfitter/guide permits will be issued only where they are consistent with Wilderness zone descriptions, as described below.

a. Because Zone A should have the lowest levels of recreation use and the fewest recreation-related impacts, outfitter/guide use is prohibited in Zone A.

b. Because Zone B requires the highest level of primitive camping skills, permits will be issued only to those applicants whose trip leaders have documented certification as Leave No Trace masters or trainers. Since the density of use is low in this zone, the fewest number of permits will be issued.

c. To prevent proliferation of campsites beyond established standards, outfitter/guide permits for overnight use in Zone C will be limited to designated or established campsites. Permits for day use will be issued only if that use is consistent with zone standards. To keep use within expected levels, this zone should have the next fewest permits issued.

d. To protect adjacent areas and to minimize proliferation of campsites beyond established standards, permits for overnight use in Zone D will be limited to designated or established campsites. Permits for day use will be issued only if that use is consistent with zone standards. Because this zone has the greatest concentration of campsites and can accommodate the highest number of users, this zone should have the highest number of outfitter/guide permits.

S-2 Use in any zone must not be allowed to increase beyond a level that can be accommodated within established standards.

S-3 Outfitter/guide permits must not disperse use from high- to low-use areas.

S-4 Permits for competitive or recreation events are prohibited.

S-5 Permits for new recreation facilities are prohibited.

Trail Construction, Reconstruction, and Maintenance

S-1 Zone A has no trails. Trails are prohibited.

S-2 Zone B must be managed according to FSH Level I standards and according to primitive ROS standards.

S-3 Zones C and D must be managed according to FSH Level II standards and according to semi-primitive ROS standards.

S-4 Consistent with zone descriptions, fords must be used for drainage crossing, except where public health and safety or resource protection requires a bridge.

G-1 Trail construction, reconstruction, and maintenance should be consistent with the appropriate Wilderness zone management direction.

G-2 Bridge materials should be native or natural in appearance to minimize contrast with the natural setting. Non-native materials such as dimensional lumber, bolts, cables, or steel stringers may be allowed when necessary.

Trail Management and Operation

S-1 Signs must be used consistent with zone descriptions. Trail signs must indicate only the trail name, direction of travel, destination, maintaining organization (if applicable), and USFS.

S-2 Cairns, limited scree walls, blazing, and directional arrow signs must be used only when the summer trail tread is not easily discernible, for resource protection, or to mitigate an unusual or extraordinary public safety hazard. Cairns and limited scree walls should be used in preference to blazing.

G-1 Trails may be added or eliminated to protect Wilderness character.

Appalachian Trail

S-1 Management direction contained in Management Area 8.3, Appalachian Trail, and MA 5.1, Wilderness, applies. Where there is a conflict, the stricter standards must be followed.

Riparian/Aquatic

S-1 Fish stocking is prohibited, unless prescribed in an interagency plan to reintroduce indigenous strains of fish.

Scenery Management

Forest-wide standards and guidelines apply.

Transportation System

S-1 Roads are prohibited.

G-1 Parking lots for trails that access Wilderness should not be expanded or constructed solely to accommodate increased recreation use.

Vegetation Management

S-1 Timber management is prohibited.

Insects and Disease

G-1 The natural process of native insect and disease outbreaks in Wilderness should be controlled only when justified by predicted loss of resource values on bordering private or public lands.

G-2 Pesticide use may be allowed after a "minimum tool" analysis has been conducted and when deemed necessary to prevent significant losses to resource values on bordering private or public lands, or to control non-native invasive species.

Water Resources

Forest-wide standards and guidelines apply.

Wild and Scenic Rivers

Forest-wide standards and guidelines apply.

Wildland Fire

S-1 The Wilderness Fire Management Plan must recognize natural fire as a natural ecological process. Lightning-ignited fires will be managed as wildland fire use, as described in the Fire Management Plan, under conditions and criteria that constitute low risk to firefighter and public safety.

S-2 An appropriate management response to human-caused fires must follow the Wilderness Fire Management Plan, which includes careful consideration of suppression strategies to minimize impacts to Wilderness.

S-3 Prescribed fire is prohibited.

G-1 A resource advisor should be used for all fires in Wilderness.

Wildlife

S-1 Since habitat must be a result of natural process only, wildlife habitat improvement projects are prohibited.

Above. Former Mt Osceola fire lookout tower, ca. 1954. Right. Fire lookout on Mt Hale in 1939 uses an alidade to help triangulate a fire location. The use of fire lookout towers ended on the White Mountain National Forest about 1969. (WMNF photos, above unknown, at right by B.W. Muir)

MA 6.1 — Semi-Primitive Recreation

Purpose

1. Emphasize hiking, backpacking, and related foot trail use.
2. Provide for motorized trail use in winter.

Desired Condition of the Land

Lands will be accessible by foot and other non-motorized means, such as skis, snowshoes, or mountain bikes. In the winter, access by snowmobile and ATV may be allowed on designated trails. Recreation facilities such as cabins and tent platforms may be present, but will complement the desired recreation experience. Facilities such as utility corridors and other special uses will be permitted, provided they are compatible with the semi-primitive character of the area.

Recreation impacts will be managed with the minimum managerial controls necessary to protect natural resources such as water quality and threatened, endangered, and sensitive plants or wildlife, and to maintain the desired recreation experiences.

Motorized trail use is limited to the winter months, and will be confined to trail corridors and at occasional recreation facilities. The number of people present will vary by location. Portions of this management area may show evidence of high use while other locations will exhibit low use. Use is concentrated on trail corridors. In winter, there will be obvious evidence of trail signs, grooming, and snowmobiles on motorized trails. Some evidence of motorized use, such as sound, may go beyond trail corridors. Away from trails, the presence of other people will generally be low.

The landscape will be natural appearing. Extensive stands of northern hardwoods and conifers will dominate. These stands will contain a mix of tree sizes and ages, visually dominated by mature trees. There will also be signs of naturally appearing disturbances and openings. Signs of human use will be confined largely to trail corridors and areas around recreation facilities.

Although permanent roads are generally prohibited, there are several places where roads are present and accepted as a non-conforming use.

Standards and Guidelines

See Chapter 2, Forest-wide standards and guidelines, for additional required direction in each program area.

General

G-1 Project-related and emergency motorized administrative use may be allowed. This use should consider potential impacts to social conditions and ecological resources in the area. Where applicable, project-related motorized administrative use will be timed to minimize social and ecological impacts.

Accessibility

Forest-wide standards and guidelines apply.

Air Quality

Forest-wide standards and guidelines apply.

Geologic and Mineral

Leasable (Commercial) Minerals

S–1. Surface disturbing activities are prohibited.

Mineral Materials (Common Variety)

S–1. New development of common variety minerals is prohibited.

Recreational Rock and Mineral Collecting

Forest-wide standards and guidelines apply.

Heritage

Forest-wide standards and guidelines apply.

Lands

Special Uses

S–1. Designated communication sites are prohibited.

S–2. All communication use permits not attached to existing facilities are prohibited.

S–3. Wind towers are prohibited.

G–1. New communication use permits may be authorized on a case-by-case basis if they are attached to existing facilities and consistent with visual quality standards, Recreation Opportunity Spectrum requirements, and management area objectives.

Native American Relations

Forest-wide standards and guidelines apply.

Non-Native Invasive Species

Forest-wide standards and guidelines apply.

Rare and Unique Features

G-1 Vegetation manipulation may be implemented to protect or improve habitat for threatened, endangered, or sensitive species, but is limited to small-scale activities. Vegetation manipulation to promote Bicknell's thrush habitat may be allowed to compensate for loss of habitat caused by other resource activities or as part of a limited research project designed to evaluate the effectiveness of artificially improving habitat.

Recreation

G–1 Snowmobile trail use should be managed for the SPM ROS objective. This is an accepted inconsistency to the SPNM ROS objective of this management area.

G-2 Route 112, Jefferson Notch Road, Route 16, and the East Side road, where they pass through this management area, are recognized as inconsistencies to the ROS Class objective. They are acceptable, but where feasible will be managed to minimize impacts on the SPNM experience.

Riparian/Aquatic

S–1 Non-motorized transportation must be used for stocking, except for stocking from the air.

S–2 Atlantic salmon restoration will be accomplished within cooperative agreement standards.

S–3 Fish habitat structures, if used, must be created from materials that blend with the surrounding area and do not detract from the natural landscape.

G–1 Stocking of indigenous species may be allowed consistent with Forest-wide standards and guidelines.

Scenery Management

Forest-wide standards and guidelines apply.

Transportation System

S–1 No new roads, other than temporary roads, will be constructed .

Vegetation Management

S–1. Scheduled commercial timber harvest is prohibited. Forestlands in this management area are classified as "not suited for timber production."

S–2. Timber harvesting activities for salvage operations and other management actions for insect and disease control is allowed.

S–3. Where salvage operations do occur, timber management practices must be in accordance with Forest-wide standards and guidelines for Vegetation Management and Management Area 2.1

Water Resources

Forest-wide standards and guidelines apply.

Wild and Scenic Rivers

Forest-wide standards and guidelines apply.

Wildland Fire

S–1. Wildland fire use (WFU) is allowed.

G–1. Prescribed fire may be used to maintain viability of fire-adapted communities such as pine, oak, and oak-pine.

Wildlife

G–1. Habitat structures should not be constructed, but if used, must be created from materials that blend with the surrounding area and do not detract from the natural landscape.

Mountain bikers at Snows Mtn, Waterville Valley (WMNF photo by Forrest Seavey)

MA 6.2 — Semi-Primitive Non-Motorized Recreation

Purpose

1. Emphasize hiking, backpacking, and related foot trail recreational opportunities, providing a relative sense of isolation and remoteness in a predominantly natural or natural-appearing environment.
2. Manage for large expanses of relatively undisturbed landscapes.

Desired Condition of the Land

Lands assigned to this management area will be accessible by foot and other non-motorized means, such as skis, snowshoes, or mountain bikes. Motorized trails will not be present. Recreation facilities, such as cabins, shelters, and tent platforms may be present, but must complement the desired recreation opportunities.

Recreation impacts will be managed to protect such natural resources as water quality and threatened, endangered, or sensitive plants or wildlife in order to minimize visual disturbance and to preserve a sense of isolation and remoteness. The minimum managerial controls necessary will be used to maintain these areas to acceptable social and ecological standards.

Non-motorized dispersed use is the focus of this management area. The number of people present will vary by location. Portions of this management area may show evidence of high use while other locations will exhibit low use. Use is concentrated in trail corridors, with low use found away from trails.

The landscape will be natural appearing. Natural process will predominate. Extensive stands of northern hardwoods and conifers will dominate. These stands will contain a mix of tree sizes and ages, visually dominated by mature trees. There will also be signs of naturally appearing disturbances and openings. Signs of human use will be confined largely to trail corridors and areas around recreation facilities.

This MA prohibits permanent roads, but there are several places where roads are present and accepted as inconsistencies.

Hikers take a break in the Mahoosuc Range (WMNF photo by Ken Allen)

Standards and Guidelines

See Chapter 2, Forest-wide standards and guidelines, for additional required direction in each program area.

General

G-1 Project-related and emergency motorized administrative use may be allowed. This use should consider potential impacts to social conditions and ecological resources in the area. Where applicable, project-related motorized administrative use will be timed to minimize social and ecological impacts.

Accessibility

Forest-wide standards and guidelines apply.

Air Quality

Forest-wide standards and guidelines apply.

Geologic and Mineral

Leasable (Commercial) Minerals

S-1 These lands are administratively unavailable for mineral extraction activities.

Mineral Materials (Common Variety)

S-1 New development of common variety minerals is prohibited.

Recreational Rock and Mineral Collecting

Forest-wide standards and guidelines apply.

Heritage

Forest-wide standards and guidelines apply.

Lands

Special Uses

S-1 Designated communication sites are prohibited.

S-2 Wind towers are prohibited.

S-3 All communication use permits not attached to existing facilities are prohibited.

G-1 New communication use permits may be authorized on a case-by-case basis if they are attached to existing facilities and consistent with visual quality standards, ROS requirements, and management area objectives.

Native American Relations

Forest-wide standards and guidelines apply.

Non-Native Invasive Species

Forest-wide standards and guidelines apply.

Rare and Unique Features

G-1 Vegetation manipulation may be implemented to protect or improve habitat for threatened, endangered, or sensitive species, but is limited to small-scale activities.

Recreation

S-1 Motorized trails are prohibited.

G-1 A semi-primitive non-motorized recreation opportunity is the dominant objective. Some areas may be managed for primitive recreation experience opportunities. Appalachian Mountain Club Huts are recognized as acceptable inconsistencies in the semi-primitive Recreation Opportunity Spectrum (ROS) class. They will be managed to minimize the inconsistency.

G-2 Route 118, Route 113, and Route 16, where they pass through this management area, are recognized as inconsistencies to the ROS Class objective. They are acceptable, but where feasible will be managed to minimize impacts on the SPNM experience. Route 302, where it passes through this management area, is recognized as an acceptable RN inconsistency that will be managed as RN.

Riparian/Aquatic

S-1 Non-motorized transportation must be used for stocking, except for stocking from the air.

S-2 Atlantic salmon restoration will be accomplished within cooperative agreement standards.

S-3 Habitat structures, if used, must be created from materials that blend with the surrounding area and do not detract from the natural landscape.

G-1 Stocking of indigenous species may be allowed consistent with Forest-wide standards and guidelines.

Scenery Management

Forest-wide standards and guidelines apply.

Transportation System

S-1 Roads are prohibited. Existing roads under Forest Service jurisdiction must be closed and revegetated.

Vegetation Management

S-1 Scheduled commercial timber harvest is prohibited. Forestlands in this management area are classified as "not suited for timber production."

S-2 Timber harvesting activities for salvage operations, unless for non-native invasive species (NNIS) treatment, are prohibited. Alternate control of non-native insect and disease should be considered first if consistent with management area goals and objectives.

G-1 The natural process of native insect and disease outbreaks should be controlled only when justified by predicted loss of resource values on bordering private or public lands. See additional direction under NNIS for those species.

Water Resources

Forest-wide standards and guidelines apply.

Wild and Scenic Rivers

Forest-wide standards and guidelines apply.

Wildland Fire

S-1 Wildland fire use (WFU) is allowed.

G-1 Prescribed fire may be used to maintain viability of fire-adapted communities such as pine, oak, oak-pine.

Wildlife

S-1 Creating or maintaining wildlife openings is prohibited.

G-1 Habitat structures should not be constructed, but if used, must be created from materials that blend with the surrounding area and do not detract from the natural landscape.

MA 6.3 — Semi-Primitive Winter Motorized Recreation

Purpose

1. Emphasize motorized trail recreation opportunities in the winter.
2. Recognize the Forest's role in the statewide snowmobile systems.

Desired Condition of the Land

There will be motorized trail use in the winter, confined to designated trail corridors and at occasional recreation facilities. There will be obvious evidence of trail signs, grooming, and snowmobiles on motorized trails in the winter. Some evidence of motorized use, such as sound, may go beyond trail corridors.

Use will be managed to prevent unacceptable impacts to other resources, such as threatened, endangered, or sensitive plants and wildlife.

The landscape will be natural appearing. Natural processes will predominate. Extensive stands of northern hardwoods and conifers will dominate. These stands will contain a mix of tree sizes and ages, visually dominated by mature trees. There will also be signs of naturally appearing disturbances and openings.

Snowmobiling in Canaan; Mt. Cube in the distance (WMNF photo by Kathie Fife)

Standards and Guidelines

See Chapter 2, Forest-wide standards and guidelines, for additional required direction in each program area.

General

G-1 Project-related and emergency motorized administrative use may be allowed. This use should consider potential impacts to social conditions and ecological resources in the area. Where applicable, project-related motorized administrative use will be timed to minimize social and ecological impacts.

Accessibility

Forest-wide standards and guidelines apply.

Air Quality

Forest-wide standards and guidelines apply.

Geologic and Mineral

Leasable (Commercial) Minerals

S-1 Surface disturbing activities are prohibited.

Mineral Materials (Common Variety)

S-1 New development of common variety minerals is prohibited.

Recreational Rock and Mineral Collecting

Forest-wide standards and guidelines apply.

Heritage

Forest-wide standards and guidelines apply.

Lands

Special Uses

S-1 Designated communication sites are prohibited.

S-2 All communication use permits not attached to existing facilities are prohibited.

S-3 Wind towers are prohibited.

G-1 New communication use permits may be authorized on a case-by-case basis if they are attached to existing facilities and consistent with visual quality standards, Recreation Opportunity Spectrum (ROS) requirements, and management area objectives.

Native American Relations

Forest-wide standards and guidelines apply.

Non-native Invasive Species

Forest-wide standards and guidelines apply.

Rare and Unique Features

G-1 Vegetation manipulation may be implemented to protect or improve habitat for threatened, endangered, or sensitive species, but is limited to small-scale activities.

Recreation

S-1 Semi-primitive non-motorized opportunities will be available year-round as the predominant ROS objective. Primitive recreation experience opportunities may be available in specific locations and at particular times of the year.

G-1 Use on snowmobile trails should be managed for the SPM ROS objective as an accepted inconsistency to the SPNM ROS objective of this management area.

Riparian/Aquatic

S-1 Non-motorized transportation must be used for stocking, except for stocking from the air.

S-2 Atlantic salmon restoration will be accomplished within cooperative agreement standards.

S-3 Habitat structures, if used, must be created from materials that blend with the surrounding area and do not detract from the natural landscape.

G-1 Stocking of indigenous species should be allowed, consistent with Forest-wide standards and guidelines.

Scenery Management

Forest-wide standards and guidelines apply.

Transportation System

S-1 Roads are prohibited. Existing roads under Forest Service jurisdiction must be closed and revegetated.

Vegetation Management

S-1 Scheduled commercial timber harvest is prohibited. Forestlands in this management area are classified as "not suited for timber production."

S-2 Timber harvesting activities for salvage operations and for native insect and disease control are prohibited.

G-1 Where fires are allowed, use of firewood is limited to on-site use of dead and down wood.

Water Resources

Forest-wide standards and guidelines apply.

Wild and Scenic Rivers

Forest-wide standards and guidelines apply.

Wildland Fire

S-1 Wildland fire use (WFU) is allowed.

G-1 Prescribed fire may be used to maintain the viability of fire-adapted communities such as oak, pine, and oak-pine.

Wildlife

S-1 Creating or maintaining wildlife openings is prohibited.

G-1 Habitat structures should not be constructed, but if used, must be created from materials that blend with the surrounding area and do not detract from the natural landscape.

Alpine skiers at Wildcat Ski Area on the White Mountain National Forest enjoy a spectacular view of Tuckerman Ravine and the Presidential Range across Pinkham Notch. (WMNF photo by Joe Gill)

MA 7.1 — Alpine Ski Areas

Purpose

Maintain the range of recreation opportunities by recognizing the potential for alpine skiing, snowboarding, and year-round recreation activities at the four alpine ski areas managed by the private sector under Special Use Permit authority. Recognize the importance of current facilities in concentrating use within small areas (less than 0.05 percent of total acreage) of the National Forest.

Desired Condition of the Land

These areas will be highly developed. Loon Mountain, Attitash/Bear Peak, and Waterville Valley Ski Areas are in close proximity to substantially developed environments on adjacent private lands. Wildcat Ski Area, surrounded by National Forest land, will not have this high level of neighboring development. Large numbers of users may be present, sights and sounds of human activity will be readily evident, and the interaction between users will be moderate to high. Facilities are designed for use by a large number of people. Facilities including parking lots, structures, and utilities will be evident, and are designed to be compatible with the values that make the area attractive to the users.

Management and operating practices are aimed at enhancing permitted recreation activities at the area while protecting the natural resources and visual characteristics.

Vegetation will be managed to meet the objectives of the alpine ski areas.

Each of these alpine ski areas is authorized by Special Use permit. The permit is a legal document that defines the area, describes management of the full range of recreation activities provided by the area, and incorporates resource protection requirements. Special use permits must be consistent with Forest Plan standards and guidelines, goals and objectives, and management area direction.

The Appalachian National Scenic Trail Management Area (MA 8.3) and the Alpine Ski Areas Management Area (MA 7.1) will not overlap.

Standards and Guidelines

See Chapter 2, Forest-wide standards and guidelines, for additional required direction in each program area.

General

Soil

S-1 All alpine ski area permit holders must have an approved erosion control, drainage, and revegetation plan.

S-2 The Forest Engineer will approve dams for impoundments and snowmaking ponds, which will be inspected and monitored consistent with Federal and State regulations.

S-3 Design and engineering of facilities such as dams or impoundments in geologic hazard zones (such as liquefaction subsoils) shall be subject to the review and approval of a Forest Service engineer.

G-1 No more than approximately 600 total slope feet of contiguous exposed mineral soil (equal to an area no greater than two acres, taking into account slope and terrain) should occur on any ski trail, pipeline corridor, or other utility.

G-2 Emergency and project-related motorized administrative use may be allowed.

Accessibility

Forest-wide standards and guidelines apply.

Air Quality

Forest-wide standards and guidelines apply.

Geologic and Mineral

Leasable (Commercial) Minerals

S-1 Subject to valid existing rights, all lands within the boundaries of ski area permits are withdrawn from disposition under all mineral laws. (Omnibus Parks and Public Lands Management Act of 1996 Title VII Sect. 107(j)).

Mineral Materials (Common Variety)

S-1 Common variety minerals obtained from the permit area may be used only within the permit area.

Recreational Rock and Mineral Collecting

S-1 Surface-disturbing recreational rock and mineral collecting is prohibited.

Heritage

Forest-wide standards and guidelines apply.

Lands

Special Uses

G-1 Designated communication sites may be allowed.

G-2 Wind towers may be considered when their installation and operation is compatible with existing and reasonably foreseeable ski area operations.

G-3 New communication use permits may be authorized on a case-by-case basis.

Native American Relations

Forest-wide standards and guidelines apply.

Non-Native Invasive Species

G-1 Mowing or clearing of trails and trail edges should not occur between May 1st and July 15th, except where the mowing is used as part of a program to control invasive species.

Rare and Unique Features

G-1 Vegetation manipulation may be implemented to protect or improve habitat for threatened, endangered, or sensitive species.

Canada Lynx

G-2 To maintain snowshoe hare habitat when designing ski area expansions, adequately sized coniferous intertrail islands with coarse woody material retained should be included.

G-3 Ski operations in expanded or newly developed areas should be evaluated and adjusted, in a manner consistent with operation needs, to provide nocturnal foraging opportunities for lynx.

Recreation

G-1 A rural ROS experience opportunity is the dominant objective. In some cases, adjacent private land development can be significantly urbanized. Facilities should be designed, constructed, operated, and maintained consistent with the ROS Class objective. Year-round recreation use that is appropriate on National Forest lands is desirable and encouraged at winter sports sites.

Trail Management and Administration

Appalachian Trail

S-1 The recreation values of the Appalachian National Scenic Trail that runs along the upper boundary of the Wildcat Ski Area must be considered in management actions in the Wildcat Ski Area management area.

Riparian/Aquatic

Forest-wide standards and guidelines apply.

Scenery Management

G-1 *Agriculture Handbook 617, National Forest Landscape Management*, Volume 2, (Chapter 7, Ski Areas) should be used 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.

Transportation System

S-1 Permittees must develop an on-mountain transportation plan for roads and parking to be approved by the Forest Engineer and line officer.

Vegetation Management

S-1 Vegetation may be intensively managed for purposes including ski area development and management, visual enhancement, and safety.

S-2 There will be no scheduled commercial timber harvest, but commercial sales may be used to implement vegetation management activities used to meet ski area objectives.

S-3 Vegetation management will be implemented within the requirements of the Special Use permit and in accordance with operation, safety, and development plans.

Water Resources

Forest-wide standards and guidelines apply.

Wild and Scenic Rivers

Forest-wide standards and guidelines apply.

Wildland Fire

S-1 Wildland fire use (WFU) is prohibited.

G-1 Prescribed fire may be used.

Wildlife

S-1 To promote forest regeneration in areas designated for tree skiing (glade skiing), the use-cycle approach must be used, and protective measures implemented, as described in a vegetation management plan. Regeneration areas must be protected with strong and visible barriers.

MA 8.1 — Alpine Zone

Purpose

Recognize, conserve, and interpret the alpine and subalpine zone in the Presidential Range and on Franconia Ridge for biological, aesthetic, recreational, cultural, research, and monitoring values.

Desired Condition of the Land

The White Mountains have long been recognized as home to the largest and most diverse alpine area east of the Rocky Mountains. The high elevations and open conditions support a variety of alpine and subalpine communities and attract countless visitors to enjoy the views or unique recreation opportunities. While many species found in this alpine zone also occur in the Canadian arctic, the White Mountains contain several plant and animal species that are found in few, if any, other places. The Presidential Range and Franconia Ridge are the largest blocks of alpine and subalpine habitat on the Forest, and so are afforded special recognition and protection as the Alpine Zone MA. Smaller alpine and subalpine areas also should be protected, but they are not part of this management area because of their small size and scattered distribution across the Forest.

These areas will continue to be dominated by low-growing alpine and subalpine plants mixed with bedrock, talus, or gravel. Broad vegetative groupings include heath barrens, snowbank communities, bogs, dwarf shrub/sedge-rush tundra, heath-krummholz, and kampfzone communities. Most of this area occurs above 4,000 foot elevation. Changes to vegetation will be primarily the result of natural processes.

Evidence of recent human activity will be limited primarily to hiking trails and occasional recreational facilities, such as huts. Private inholdings, such as the Mt. Washington Auto Road and Cog Railway, will remain visible. There will be no roads on the Forest in this area. Natural processes will predominate.

Emphasis will be placed on increasing awareness and stewardship of the alpine resource (including those areas outside the mapped Alpine Zone Management Area) through increased education and interpretation of this special environment. The focus should be on alpine wildlife, plants, and communities in the White Mountain National Forest, and human behaviors that will minimize impacts to the alpine zone. An alpine ethic should be emphasized that minimizes human impacts, including protecting plants, proper disposal of trash and human waste, and staying on established trails.

The alpine zone will be managed for its unique recreation attributes with goals and thresholds in place to prevent degradation of its unique biological, cultural and aesthetic values. Areas of the alpine zone with high recreation use will be managed to recognize their value as sources of inspiration for the large surrounding populations, while also having standards to mitigate social, biological, cultural, and aesthetic impacts. Low-use areas of the alpine zone and low-use seasons will be managed to maintain their low use. Use

will not be dispersed from high- to low-use areas. In general, use will be concentrated around trail corridors and facilities. Away from trails and facilities and in the winter season, evidence of and interaction with other users will be low.

The primary recreational uses will be hiking and winter mountaineering, and efforts will be made to confine use to designated trails or use areas. A semi-primitive non-motorized experience is the dominant ROS Class objective. Some areas will be managed for primitive recreation opportunities.

Hikers in the Alpine Zone (WMNF photo by Ken Allen)

Standards and Guidelines

See Chapter 2, Forest-wide standards and guidelines, for additional required direction in each program area.

General

S-1 If monitoring indicates declines in alpine communities because of human use, mitigation actions must be taken.

S-2 Management direction for both the Appalachian Trail (MA 8.3) and Alpine Zone (MA 8.1) must apply where the AT crosses through the Alpine Zone. Where direction differs, the more restrictive standards and guidelines must apply.

S-3 Management direction for both the Wilderness (MA 5.1) and Alpine Zone (MA 8.1) must apply where Wilderness contains portions of the Alpine Zone. Where direction differs, the more restrictive standards and guidelines must apply.

G-1 Signing for resource protection or public safety may occur within the alpine zone but should be minimized.

G-2 The emphasis for interpretive and educational signing should be at trailhead kiosks and inside existing facilities.

G-3 The Forest should coordinate with volunteer, government, and non-government groups on alpine education.

G-4 The Forest should emphasize the use of volunteer and Forest Service alpine stewards to provide education and interpretation.

G-5 Consistent with ROS objectives, education and information delivery:

1. Should be concentrated primarily at visitor centers, classrooms, and other off-Forest locations, or at trailhead and developed facilities when delivery can be effectively accomplished at those locations.
2. To a lesser degree, may be conducted at backcountry locations when effective delivery cannot be accomplished at developed or frontcountry locations.

G-6 Project-related motorized administrative use should not be allowed except for management of existing Special Use permits. The Forest Supervisor may authorize motorized administrative use for emergencies.

Accessibility

Forest-wide standards and guidelines apply.

Air Quality

Forest-wide standards and guidelines apply.

Geologic and Mineral

Leasable (Commercial) Minerals

S-1 These lands are administratively unavailable for mineral extraction activities.

Mineral Materials (Common Variety)

S-1 Common variety mineral extraction is prohibited.

Recreational Rock and Mineral Collecting

S-1 All recreational rock and mineral collecting activities are prohibited.

Heritage

Forest-wide standards and guidelines apply.

Lands

Special Uses

S-1 Designated communication sites are prohibited.

S-2 Wind towers are prohibited.

S-3 All communication use permits not attached to existing facilities are prohibited.

G-1 New communication use permits may be authorized on a case-by-case basis if they are attached to existing facilities and consistent with visual quality standards, ROS requirements, and alpine zone objectives.

G-2 Permits for research activities should have restrictions necessary to protect the unique resources in the Alpine Zone.

Native American Relations

Forest-wide standards and guidelines apply.

Non-Native Invasive Species

G-1 High priority should be given to invasive species prevention and eradication to maintain the unique intrinsic values of the native alpine communities.

Rare and Unique Features

G-1 Vegetation manipulation may be implemented to protect or improve habitat for threatened, endangered, or sensitive species, but is limited to small-scale activities.

Recreation

General

S-1 A semi-primitive non-motorized recreation experience opportunity is

the dominant ROS class objective. Some areas will be managed for primitive recreation experience opportunities.

Use Administration

S-1 Geocaching is prohibited.

S-2 Wood or charcoal fires are prohibited year-round.

S-3 Helicopter landing zones and drop zones must be approved in advance except in emergencies, and should be placed to minimize ecological impacts.

S-4 Camping is prohibited unless on two feet or more of snow cover.

S-5 Camping on frozen lakes is prohibited.

G-1 Hikers and their pets should be encouraged to stay on trails.

G-2 The Forest may close areas or limit use, including camping, skiing, and hiking, as necessary to protect species and communities of concern.

Facilities

S-1 Additional backcountry facilities (huts, cabins, shelters, tent platforms, and associated structures) on National Forest lands in the alpine zone are prohibited.

S-2 Existing facilities and trails will be designed, constructed, operated, and maintained consistent with the ROS class.

S-3 Appalachian Mountain Club huts in the alpine zone must be managed consistent with the Special Use permit to minimize impacts of their inconsistency with the designated ROS class. Also see Appalachian Mountain Club Huts under Forest-wide direction (Chapter 2).

S-4 Expanding the capacity of existing backcountry facilities is prohibited.

S-5 Except for health, safety, and resource impact concerns, expanding the physical structure of existing backcountry facilities is prohibited.

Trail Construction

S-1 Trail construction is prohibited.

S-2 Trail reconstruction in the alpine zone must follow White Mountain National Forest Supplement 2309.18-2000-1, Chapter 2 Section 2.31, addressing construction standards for trails in the alpine zone.

G-1 Reconstruction and relocation of existing trails are allowed only when unacceptable resource impact exists that cannot be mitigated in any other way.

Trail Maintenance and Operation

S-1 Trail maintenance and operation in the alpine zone must follow White Mountain National Forest Supplement 2309.18-2001-3, Chapter 4 Section 4.29a, and addressing operation and maintenance standards for trails in the alpine zone.

G-1 Maintenance Level 2 should be the general objective in the management area (FSH 2309.18).

Special Uses — Recreation Specific

G-1 Recreation permits, including alpine flower walks, may be limited in number or contain restrictions (such as group size limitations) as necessary to protect species and communities of concern.

G-2 Recreation permits should not be authorized for off-trail use except on two or more feet of snow.

Riparian/Aquatic

Forest-wide standards and guidelines apply.

Scenery Management

S-1 Impacts caused by Huts to the Scenic Integrity Objective of "Very High" must be minimized.

Transportation System

S-1 Roads are prohibited.

Vegetation Management

S-1 Timber management is prohibited.

Water Resources

Forest-wide standards and guidelines apply.

Wild and Scenic Rivers

Forest-wide standards and guidelines apply.

Wildland Fire

S-1 Wildland fires must be managed in accordance with Alpine Zone fire management requirements included in the *Fire Management Plan*.

S-2 Wildland fire use (WFU) is allowed to recognize natural fire as a part of natural ecological process.

S-3 An appropriate management response to human-caused fires must follow the Alpine Zone fire management requirements, which includes careful consideration of suppression strategies to minimize impacts to the alpine zone.

S-4 Prescribed fire is prohibited.

G-1 A resource advisor should be used on all fire suppression activities in the Alpine Zone.

Wildlife

G-1 Changes in habitat should result primarily from natural processes.

G-2 Habitat structures should not be constructed, but if used, must be created from materials that blend with the surrounding area and do not detract from the natural landscape.

MA 8.2 — Experimental Forests

Purpose

1. Provide areas of National Forest System lands that are dedicated to continuous, long-term research in cooperation with the Northeast Research Experiment Station.
2. Improve understanding of fundamental ecological processes and the effects of land management practices on these processes, and provide new information for science-based land management.

Desired Condition of the Land

Research will be a mix of long- and short-term activities. Long-term monitoring will be a significant research activity. There will be forest openings of various sizes interspersed with stands of trees. Evidence of human activity will include roads, trails, weirs, cultural sites and experimental apparatus. Evidence of human activity will work toward harmony with a natural-appearing environment. Research will be guided by periodically updated project plans. Non-research activities will be limited. Research activities will be coordinated with White Mountain National Forest, as necessary.

Bartlett Experimental Forest will generally focus on silviculture, wildlife, and forest productivity measurements. Hubbard Brook will generally focus on water quality, quantity, and nutrient cycling.

Standards and Guidelines

See Chapter 2, Forest-wide standards and guidelines, for additional required direction in each program area.

General

S-1 Firewood collection permits shall not be issued.

G-1 Buildings and structures should be provided only to meet research objectives.

G-2 Emergency and project-related motorized administrative use may be allowed. Project-related administrative use should consider potential impacts to social conditions and ecological resources in the area.

Accessibility

Forest-wide standards and guidelines apply.

Air Quality

Forest-wide standards and guidelines apply.

Geologic and Mineral

Leasable (Commercial) Minerals

S-1 These lands are administratively unavailable for mineral extraction activities.

Mineral Materials (Common Variety)

S-1 Common variety mineral activity is prohibited in Hubbard Brook Experimental Forest.

G-1 Common variety mineral activity is permitted at Bartlett Experimental Forest to meet research objectives for the area.

Recreational Rock and Mineral Collecting

S-1 Recreational mineral activity is prohibited.

Heritage

G-1 National Register determination of eligibility should be undertaken for standing structures within Experimental Forests.

Lands

Special Uses

S-1 Only special uses not affecting the purpose of the management area will be authorized.

S-2 Designated communication sites are prohibited.

S-3 All communication use permits not attached to facilities are prohibited.

S-4 Wind towers are prohibited.

Native American Relations

Forest-wide standards and guidelines apply.

Non-native Invasive Species

Forest-wide standards and guidelines apply.

Rare and Unique Features

G-1 Vegetation manipulation may be implemented to protect or improve habitat for threatened, endangered, or sensitive species.

Recreation

S-1 Recreation activities must be compatible with research activities. There may be temporary or permanent closures to recreation activities when there is actual or potential impact to research activities.

Riparian/Aquatic

S-1 Habitat management is prohibited unless approved by managers to meet the research objectives of the management area.

Scenery Management

Forest-wide standards and guidelines apply.

Transportation System

S-1 Roads are allowed when necessary to achieve the purposes of Experimental Forests.

Vegetation Management

G-1 Forest vegetation may be manipulated only to meet research objectives.

Water Resources

Forest-wide standards and guidelines apply.

Wild and Scenic Rivers

Forest-wide standards and guidelines apply.

Wildland Fire

S-1 Wildland fire use (WFU) is prohibited.

S-2 Prescribed fire is permitted to meet research objectives.

Wildlife

S-1 Habitat management may occur only to meet research objectives.

Hiker on the AT in the Mahoosucs (WMNF photo by Ken Allen)

MA 8.3 — Appalachian National Scenic Trail

Introduction

The Appalachian National Scenic Trail (AT) includes all trails designated by the National Trails System Act, as amended (P.L. 90-543), that occur on federal lands managed by the White Mountain National Forest. The AT includes spur trails to shelters, overnight-use sites, viewpoints, and water sources. Within the Proclamation Boundary, the Appalachian National Scenic Trail management area is the land designated as 0.5 miles either side of the trail. Outside the Proclamation Boundary, the Appalachian National Scenic Trail management area includes all the lands acquired by the National Park Service for the AT in the state of New Hampshire and administratively transferred to the USDA Forest Service under a Memorandum of Agreement. They are managed as part of the White Mountain National Forest "... for the protection and enhancement of the Appalachian Trail and also in accordance with this agreement." They are "... subject to the National Trails System Act and laws, rules and regulations pertaining to the National Forest System." These NPS-acquired lands are commonly referred to as either "corridor lands" or "transfer lands."

The Appalachian National Scenic Trail is administered by the Secretary of Interior in consultation with the Secretary of Agriculture, and managed as a partnership between the National Park Service AT Park Office, USDA Forest Service, local Appalachian Trail Clubs, and the Appalachian Trail Conservancy (ATC, formerly named the Appalachian Trail Conference).

Purpose

1. Manage the segment of the Appalachian National Scenic Trail on Federal lands that traverses the state of New Hampshire and the White Mountain National Forest.
2. Provide for the conservation and enjoyment of the nationally significant scenic, historic, natural, and cultural qualities of the land through which the trail passes.
3. Provide opportunities for high quality outdoor recreation experiences, including a sense of remoteness and solitude.
4. Recognize and strengthen the level of partnership, cooperation and volunteer efforts integral to AT management.

Desired Condition of the Land

The AT will be accessible only by foot and other non-motorized, pedestrian means, such as skis or snowshoes. Roads and motorized trails are not present except at designated crossings. Limited recreation facilities such as huts, cabins, shelters, and tent platforms may be present but will complement the desired recreation opportunities. Development levels and levels of use will vary by location, but the management area will emphasize a remote backcountry recreation experience in a predominantly natural or natural-appearing landscape.

Although new roads are prohibited, there are locations where roads currently exist in this management area.

Recreation impacts will be managed to protect cultural and natural resources and to minimize visual disturbance. The minimum managerial controls necessary will be used to maintain acceptable social and ecological standards.

There are extensive stands of northern hardwoods and conifers in the AT management area. These stands will contain a mix of tree sizes and ages, visually dominated by mature trees. This management area also includes part of the alpine/subalpine area, offering a rare landscape with high open areas for outstanding views.

Lakes of the Clouds Hut, with Mt. Washington in the background, is a popular stop for AT hikers and other alpine visitors (WMNF photo by Forrest Seavey)

Standards and Guidelines

See Chapter 2, Forest-wide standards and guidelines, for additional required direction in each program area.

General

S-1 Management of the AT must follow the National Trails System Act, as amended (P.L. 90-543). This Act is implemented according to:

a) The Comprehensive Plan for the Protection, Management, Development, and Use of the Appalachian National Scenic Trail.

b) Various Memoranda of Agreement, Memoranda of Understanding, and policy statements between the USDA Forest Service, the National Park Service, and the Appalachian Trail Conference (now Appalachian Trail Conservancy).

c) Forest Service Direction (FSM, FSH, and supplements).

S-2 Consistent with existing agreements, the White Mountain National Forest will consult with the Appalachian Trail Conservancy, the Appalachian Mountain Club, and Dartmouth Outing Club (local Appalachian Trail clubs) on management actions that affect AT values.

S-3 Management direction for both the Appalachian Trail (MA 8.3) and Wilderness (MA 5.1) must apply where the AT crosses through Wilderness. Where direction differs, the more restrictive standards and guidelines must apply.

S-4 Management direction for both the Appalachian Trail (MA 8.3) and Alpine Zone (MA 8.1) must apply where the AT crosses through the Alpine Zone. Where direction differs, the more restrictive standards and guidelines must apply.

S-5 Corridor lands with easements or outstanding rights will be managed consistent with deed transfer language.

S-6 Motorized use is allowed only for administrative purposes.

G-1 The Forest should consult with the State of New Hampshire on actions in the AT management area adjacent to the AT on New Hampshire state lands.

G-2 Management is guided by the following documents. When these documents are amended, they will provide updated guidance and as such will not require Forest Plan amendments.

- Appalachian Trail Conference. *Appalachian Trail Design, Construction, and Maintenance* (ATC Stewardship Manual, second edition, 2000).
- Appalachian Trail Conference. *Overnight-Use Management Principles.*
- Appalachian Trail Conference. *Local Management Planning Guide.*
- Appalachian Trail Conference. *Checklist for the Location, Construction and Maintenance of Campsites and Shelters on the Appalachian Trail*.
- Local Management Plans for the Appalachian Trail.

G-3 The Forest Service should report law enforcement incidents on the AT to the National Park Service AT Park Office, the ATC, and local AT clubs.

G-4 The Forest should develop and distribute information about the Appalachian Trail and appropriate use of the trail in cooperation with the ATC and local AT clubs.

G-5 Consistent with ROS objectives, education and information delivery:

1 Should be concentrated primarily at visitor centers, classrooms, and other off-Forest locations, or at trailheads and developed facilities when delivery can be effectively accomplished at those locations.

2. To a lesser degree, may be conducted at backcountry locations when effective delivery cannot be accomplished at developed or frontcountry locations.

G-6 Printed public safety messages and signs (other than directional trail signs, or signs at overnight facilities) should be located primarily at trailheads or visitor centers. They may be used at backcountry locations in unusual or unique circumstances.

Accessibility

Forest-wide standards and guidelines apply.

Air Quality

Forest-wide standards and guidelines apply.

Geologic and Mineral

Leasable (Commercial) Minerals

S-1 These lands are administratively unavailable for mineral extraction activities.

Mineral Materials (Common Variety)

S-1 Common variety mineral extraction is prohibited.

Recreational Rock and Mineral Collecting

S-1 Recreational rock and mineral collecting is prohibited.

Heritage

Forest-wide standards and guidelines apply.

Lands

Special Uses

S-1 Designated communication sites are prohibited.

S-2 Wind towers are prohibited.

S-3 New utility lines or rights-of-way are prohibited unless they represent the only feasible and prudent alternative to meet an overriding public need.

S-4 Impacts to the AT from new utility corridors must be sufficiently mitigated to protect trail values.

G-1 Agricultural special use permits are permitted only when used to maintain existing fields and vistas, and only if consistent with wildlife habitat requirements, cultural needs, and scenery management objectives.

G-2 New communication use permits may be authorized on a case-by-case basis if they are attached to existing facilities and are consistent with visual quality standards, Recreation Opportunity Spectrum objectives, and other management area requirements.

G-3 Authorizations for research activities may be allowed if operated consistent with AT objectives.

G-4 New approved utility lines or rights-of-way should be co-located within existing rights-of-way (roads, utility lines, etc.) where practical, and should be limited to a single crossing of the AT.

Native American Relations

Forest-wide standards and guidelines apply.

Non-native Invasive Species

Forest-wide standards and guidelines apply.

Rare and Unique Features

G-1 Vegetation manipulation may be implemented to protect or improve habitat for threatened, endangered, or sensitive species.

Recreation

General

S-1 Dispersed camping is allowed unless restricted to address social or resource concerns. Implementation of closures will be through Forest Supervisors Orders. Closures will be coordinated with the ATC and local AT clubs.

S-2 Management of the AT experience must be compatible with the prescribed recreation experience opportunity class. Lands within this management area should be managed under the semi-primitive non-motorized (SPNM) Recreation Opportunity Spectrum (ROS) class. There are situations where the AT crosses or follows public roads and snowmobile trails, and where developed facilities are present. Current inconsistencies in this ROS Class, such as Appalachian Mountain Club huts, are acceptable but are managed to minimize impacts on the SPNM experience.

S-3 There are cases where sections of the AT retain a greater sense of the wild (primitive ROS class). These areas will be managed with special concern for these values.

G-1 Route 16, where it passes through this MA in the Pinkham Notch area, is recognized as an acceptable inconsistency to the ROS Class objective.

G-2 Length of stay limits may be implemented as needed.

G-3 On sections of the AT where use is high, follow the strategy of concentrating use at specific sites rather than dispersing use along the trail. Management activities should not disperse recreation use from high- to low-use sections.

G-4 Overnight camping and recreation use should be managed to recognize different levels of use and desired recreation opportunities consistent with overall AT goals.

G-5 Areas may be closed, new campsites may be designated or built, or the use regulated to address social or resource issues.

G-6 Open surface water sources may be identified in Forest, ATC, and AT trail club information, including guidebooks, trailhead signs, or on blue blazed side trails.

G-7 Open surface water sources may be improved only to the minimum necessary to allow for collection of water.

G-8 AT hikers should be responsible for the potability of their own drinking water.

Facilities

G-1 Backcountry facilities include huts, shelters, tent platforms, and associated amenities such as toilets, spring boxes, registers, and other facilities agreed to by the Forest, ATC, and local AT clubs. Dispersed campsites without overnight amenities are allowed and should be managed to maintain appropriate recreation opportunities or to minimize impacts on natural resources.

G-2 Design and management of the backcountry facility system should consider the needs of both long distance hikers (places to eat and sleep after a day of walking) and for hikers of all distances.

G-3 New shelters, tent platforms, and dispersed campsites may be considered where there is a demonstrated need. If constructed, they should be located 100 feet or more from the main trail and should not be located within two miles of an existing road open to motor vehicles.

Horse, Pack Stock, and Mountain Bike Use

S-1 On all National Park Service (NPS) acquired corridor lands, horse, pack stock, and mountain bike use are prohibited except at designated crossings.

S-2 Horse, pack stock, and mountain bike use is prohibited on the AT footpath and within 500 feet of the trail except where it crosses or is located on Forest system, state or county (town) roads, or designated snowmobile trails.

G-1 New mountain bike crossings should be discouraged, except as mutually agreed on by the Forest, ATC, and local AT clubs.

G-2 Trail users should be informed and educated about closures and guidelines for using the trail, especially regarding horses, pack stock, and bicycles.

Motorized Use

S-1 Motorized use is limited to portions where the AT crosses or is located on Forest System, state, county, or town roads, or during the snow season on designated snowmobile trails.

S-2 Motorized use on other segments of the AT footpath is prohibited.

S-3 New motorized trails are prohibited except at crossings.

G-1 New snowmobile or motorized crossings should be discouraged, except as mutually agreed on by the Forest, ATC, and local AT clubs.

G-2 Trail users should be informed and educated about closures and guidelines for using the trail, especially regarding motorized use.

Operation and Maintenance

S-1 Management actions such as trail locations, improvements, or increasing developments must not result in a change along the ROS scale from less to more developed. For example, management actions must not change an ROS class from primitive to semi-primitive. Changes from more developed to less developed are allowed.

S-2 The Optimal Location Review process must be used to initiate the decision-making process for trail relocations.

G-1 Consistent with Recreation Opportunity Spectrum (ROS) standards, sufficient signing should be provided to inform hikers of significant features and distances to major road crossings.

G-2 Where the trail is located on decommissioned roads, the tread should be allowed to revegetate to normal Appalachian Trail tread widths.

G-3 Use of trail structures such as steps, cribbing, and bridges should be minimized. Where necessary, the simplest rustic design, with the least disturbance, should be used. Trail structures should be consistent with ROS class.

Special Uses — Recreation Specific

S-1 The Forest Service must manage recreation special use permits on the AT in coooperation with the ATC and the AT clubs.

S-2 Recreation special uses must not be dispersed from high use to low use areas of the AT, as identified in the current *Trail Use Inventory*.

S-3 Competitive events permits are prohibited.

S-4 The recreation special use permit program along the AT must be managed to protect the characteristics of low use areas.

G-1 Outfitter/guide permits are allowed but may be restricted to address social and environmental concerns.

G-2 Recreation Special Use permits on the AT should be denied when social or resource conditions warrant (for example, if crowding or overuse negatively affects natural resources or a specific experience objective).

G-3 If monitoring and analysis of social and resource conditions determines that recreation special use capacity along the AT has been reached, a process should be developed to assign user days.

G-4 Group size may be limited when necessary to provide for safety and resource protection or to minimize the impact large groups have on others.

Riparian/Aquatic

G-1 Artificial habitat structures should not be used. If used, they must be created from materials that blend with the site and do not detract from the natural landscape.

Scenery Management

S-1 The AT is a Concern Level 1 Travelway, and middleground and background areas on National Forest lands seen from the AT must be managed for scenery in accordance with Scenic Integrity Objectives identified through the Scenery Management System.

S-2 All management activities will meet a Scenic Integrity Objective of High or Very High.

Transportation System

G-1 To maintain a discrete trail experience, trailhead parking facilities should be located where the Appalachian Trail can be accessed by a short spur trail rather than locations where the trail footpath crosses a road.

G-2 New roads should not be allowed within this management area. New roads may be allowed if they are the only feasible and prudent alternative, and after impacts have been mitigated to the extent practical.

G-3 Where the AT follows Forest Service system roads, road maintenance may be done as needed on drainage structures, closure devices, and the roadbed. Grass may be allowed to grow in local roads (maintenance levels I or II).

G-4 Roads crossings should be at right angles wherever possible.

Vegetation Management

S-1 On all National Park Service (NPS) acquired corridor lands, commercial timber management and salvage operations are prohibited.

S-2 Commercial timber management is prohibited where the AT management area is adjacent to any MA other than MA 2.1.

S-3 Salvage operations are prohibited where the AT management area is adjacent to any MA other than MAs 2.1 and 6.1.

G-1 Where the AT management area adjoins MA 2.1, commercial timber management and salvage operations are allowed in that portion of the Appalachian Trail MA between the trail footpath and the 2.1 Management Area, but only outside the foreground area as defined in the Scenery Management System (SMS). The foreground zone is determined by site-specific analysis of the area as seen from the AT. Everywhere else in the AT management area, commercial timber management and salvage sales are prohibited.

G-2 Maintaining existing fields and vistas should be allowed.

Water Resources

Forest-wide Standards and Guidelines apply.

Wildland Fire

S-1 Wildland fire use (WFU) is allowed only where permitted in the adjacent management area.

S-2 Prescribed fire is prohibited.

Wildlife

S-1 Creation of regeneration forest habitat must occur only through natural disturbance events, except for areas adjacent to Management Area 2.1, in that portion of the Appalachian Trail MA between the trail footpath and the 2.1 Management Area outside the foreground zone.

Scott Bailey, geologist at Hubbard Brook Experimental Forest (left), and Professor Charlie Cogbill, Sterling College, at the trailhead for Dicey Mill Trail, accessing The Bowl Research Natural Area (WMNF photo by Kathie Fife)

MA 8.4 — Research Natural Areas

Alpine Garden

Purpose

1. Preserve a wide spectrum of pristine representative forest, alpine, and geologic areas having scientific interest.
2. Preserve and maintain genetic diversity.
3. Provide reference areas for the study of ecological processes.
4. Provide areas to serve as a baseline for measuring long-term ecological changes.

Desired Condition of the Land

Natural processes will predominate. Recreation use within the RNA generally will be incidental and will not be encouraged. However, there is considerable recreation use adjacent to the Alpine Garden RNA, especially on the Alpine Garden Trail (which splits the RNA into two pieces) and the nearby Huntington Ravine and Lions Head trails. There are no trails within the RNA itself. Camping is prohibited. Research is designed to be non-manipulative. Roads are absent. This area provides excellent opportunities for long-term monitoring of many kinds.

Standards and Guidelines

See Chapter 2, Forest-wide and Alpine Zone (MA 8.1) standards and guidelines, for additional required direction in each program area.

General

S-1 Management direction for both the Alpine Garden RNA and the Alpine Zone (MA 8.1) applies. Where direction differs, the more restrictive standards and guidelines apply.

S-2 All research activities shall be coordinated between the White Mountain National Forest and the USFS Northeast Research Station, Durham, New Hampshire.

S-3 Structures are prohibited, except that permanent structures or markers for research purposes may be allowed when they serve to achieve the approved research objectives.

G-1 Motorized administrative use is prohibited.

Accessibility

Forest-wide and Alpine Zone standards and guidelines apply.

Air Quality

Forest-wide and Alpine Zone standards and guidelines apply.

Geologic and Mineral

Leasable (Commercial) Minerals

S-1 These lands are administratively unavailable for mineral extraction activities.

Mineral Materials (Common Variety)

S-1 Common variety mineral extraction is prohibited.

Recreational Rock and Mineral Collecting

S-1 Recreational rock and mineral collecting is prohibited.

Heritage

S-1 Archaeological excavations may be permitted under condition that they will not have long-term impacts or diminish the purpose of Research Natural Areas.

Lands

Special Uses

S-1 Only special uses not affecting the purpose of the RNA will be authorized.

Native American Relations

Forest-wide and Alpine Zone standards and guidelines apply.

Non-Native Invasive Species

S-1 Manual control must be the first choice of eradication.

G-1 Chemical control methods, if deemed necessary, should be used through direct application. Broadcast application of herbicides or pesticides should be used only if direct application is not working.

G-2 Biological controls should be used only when the effectiveness of other control methods will not achieve site-specific eradication objectives.

Rare and Unique Features

S-1 Vegetation manipulation implemented to protect or improve habitat for threatened, endangered, or sensitive species is prohibited.

Recreation

S-1 Wood or charcoal fires are prohibited year-round.

S-2 Management action likely to introduce new or additional recreation use is prohibited.

Riparian/Aquatic

S-1 Habitat management is prohibited unless approved by managers to meet the purpose of the management area.

Scenery Management

Forest-wide and Alpine Zone standards and guidelines apply.

Transportation System

Forest-wide and Alpine Zone standards and guidelines apply.

Vegetation Management

Insects and Disease

G-1 The natural process of insect and disease outbreaks should be controlled only when justified by predicted loss of resource values outside the Research Natural Area.

G-2 Pesticide use may be allowed after a minimum tool analysis has been conducted and when deemed necessary to prevent significant losses to resource values on bordering public or private lands.

Water Resources

Forest-wide and Alpine Zone standards and guidelines apply.

Wild and Scenic Rivers

Forest-wide and Alpine Zone standards and guidelines apply.

Wildland Fire

S-1 Wildland fire use (WFU) is allowed.

S-2 Prescribed fire is prohibited.

Wildlife

S-1 Habitat management is prohibited unless approved by managers to meet purpose of the management area.

The Bowl, Nancy Brook

Purpose

1. Preserve a wide spectrum of pristine representative forest and geologic areas having scientific interest.
2. Preserve and maintain genetic diversity.
3. Provide reference areas for the study of ecological processes.
4. Provide areas to serve as a baseline for measuring long-term ecological changes.

Desired Condition of the Land

Natural processes will predominate. Recreation use generally will be incidental and will not be encouraged. Hiking trails will not be added. Camping will be by individual site designation. Campfires will not be permitted. Research is designed to be non-manipulative. Roads are absent. These areas provide excellent opportunities for long-term monitoring of many kinds.

Standards and Guidelines

Also see Chapter 2 for Forest-wide standards and guidelines that must be considered along with this Management Area-specific direction.

General

S-1 All research activities shall be coordinated between the White Mountain National Forest and the USFS Northeast Research Station, Durham, New Hampshire.

S-2 Structures are prohibited, except that permanent structures or markers for research purposes may be allowed when they serve to achieve the approved research objectives.

G-1 Project-related motorized administrative use may be allowed, but only on existing trails. The Forest Supervisor may authorize motorized use for emergencies.

Accessibility

Forest-wide standards and guidelines apply.

Air Quality

Forest-wide standards and guidelines apply.

Geologic and Mineral

Leasable (Commercial) Minerals

S-1 These lands are administratively unavailable for mineral extraction activities.

Mineral Materials (Common Variety)

S-1 Common variety mineral extraction is prohibited.

Recreational Rock and Mineral Collecting

S-1 Recreational rock and mineral collecting is prohibited.

Heritage

S-1 Archaeological excavations may be permitted under condition that they will not have long-term impacts or diminish the purposes of Research Natural Areas.

Lands

Special Uses

S-1 Only special uses not affecting the purpose of the RNA will be authorized.

S-2 Designated communication sites are prohibited.

S-3 Wind towers are prohibited.

Native American Relations

Forest-wide standards and guidelines apply.

Non-Native Invasive Species

S-1 Manual control must be the first choice of eradication.

G-1 Chemical control methods, if deemed necessary, should be used through direct application. Broadcast application of herbicides or pesticides should be used only if direct application is not working.

G-2 Biological controls should be used only when the effectiveness of other control methods will not achieve site-specific eradication objectives.

Rare and Unique Features

S-1 Vegetation manipulation implemented to protect or improve habitat for threatened, endangered, or sensitive species is prohibited.

Recreation

S-1 Wood or charcoal fires are prohibited year-round.

S-2 Management action likely to introduce new or additional recreation use is prohibited.

S-3 Motorized trail use is prohibited.

S-4 New trails are prohibited.

G-1 Existing trails should be maintained at Level I and II.

G-2 Where allowed, camping will be only at designated sites.

Riparian/Aquatic

S-1 Habitat management is prohibited unless approved by managers to meet the purpose of the management area.

Scenery Management

Forest-wide standards and guidelines apply.

Transportation System

S-1 New road construction is prohibited.

Vegetation Management

S-1 Timber management is prohibited.

Insects and Disease

G-1 The natural process of insect and disease outbreaks should be controlled only when justified by predicted loss of resource values outside the Research Natural Area.

G-2 Pesticide use may be allowed after a minimum tool analysis has been conducted and when deemed necessary to prevent significant losses to resource values on bordering public or private lands.

Water Resources

Forest-wide standards and guidelines apply.

Wild and Scenic Rivers

Forest-wide standards and guidelines apply.

Wildland Fire

S-1 Wildland fire use (WFU) is allowed.

S-2 Prescribed fire is prohibited.

Wildlife

S-1 Habitat management is prohibited unless approved by managers to meet the purpose of the management area.

MA 8.5 — Scenic Areas

Gibbs Brook, Greeley Ponds, Lafayette Brook, Lincoln Woods, Mount Chocorua, Pinkham Notch, Rocky Gorge, Sawyer Pond, Snyder Brook

Purpose

1. Manage these areas for their outstanding natural beauty.
2. Manage each Scenic Area consistent with the specific objectives and guidelines identified in the order designating each area.
3. Manage the Pinkham Notch Scenic Area to recognize its unique recreation opportunities while preserving its scenic integrity.
4. Recognize the particular importance the current facilities at Pinkham Notch serve in concentrating use within a heavily used area.
5. Manage Pinkham Notch Scenic Area to serve as a base for the Mount Washington Avalanche Center operations.

Desired Condition of the Land

The Scenic Areas will meet the objectives for which each has been designated. Most have been recognized as having "outstanding natural beauty." They will exhibit late successional vegetation with related wildlife species. Others have been identified for their recreation potential. As a result, evidence of human activity will range from substantially unnoticeable to very evident, and road networks vary from none to high density.

The Pinkham Notch Scenic Area will appear much as it does now. Unique recreation activities with high use will remain available, and management actions that disperse this use to other locations, and in other seasons, will be minimized. The Harvard Mountain Club cabin permit will continue to provide overnight shelter in winter.

AMC base station at Pinkham Notch ca. 1938; currently the location of the Pinkham Notch Visitor Center (WMNF photo)

Standards and Guidelines

Also see Chapter 2 for Forest-wide standards and guidelines that must be considered along with this Management Area-specific direction.

General

S-1 Management direction for both the Scenic Areas and the Alpine Zone apply where they overlap. Where direction differs, the more restrictive standards and guidelines must apply.

S-2 The recreation values of the Appalachian National Scenic Trail that runs within the Pinkham Notch Scenic Area must be considered in management actions within that management area.

S-3 Administrative motorized use on trails in the Pinkham Notch Scenic Area is limited to the Sherburne Trail, Tuckerman Ravine Trail, and Huntington Ravine Winter Access Trail and their associated cutoffs and spurs.

S-4 Motorized trail standards specifically for snow tractor access apply to administrative use in the Pinkham Notch Scenic Area.

S-5 Administrative facilities are prohibited in all areas except Pinkham Notch and Rocky Gorge Scenic Areas.

G-1 Project-related and emergency motorized administrative use may be allowed. Project-related motorized administrative use should consider potential impacts to social conditions and ecological resources in the area. Where applicable, project-related administrative use will be timed to minimize social and ecological impacts.

G-2 Buildings and structures may be provided to support developed recreation management objectives in the Rocky Gorge Scenic Area.

G-3 Facilities, where allowed, should be provided for public health and safety and maintained to prevent site deterioration.

Accessibility

Forest-wide standards and guidelines apply.

Air Quality

Forest-wide standards and guidelines apply.

Geologic and Mineral

Leasable (Commercial) Minerals

S-1 Surface-disturbing activities are prohibited.

Mineral Materials (Common Variety)

S-1 New development of common variety minerals is prohibited.

Recreational Rock and Mineral Collecting

S-1 Surface-disturbing recreational collection activities are prohibited.

Heritage

Forest-wide standards and guidelines apply.

Lands

Special Uses

S-1 New facility permits are prohibited in the Pinkham Notch Scenic Area.

S-2 The overall area impacted by facilities for existing permits must not increase, though the size or number of buildings may change.

S-3 Designated communication sites are prohibited.

S-4 Wind towers are prohibited.

Native American Relations

Forest-wide standards and guidelines apply.

Non-Native Invasive Species

Forest-wide standards and guidelines apply.

Rare and Unique Features

G-1 Vegetation manipulation may be implemented to protect or improve habitat for threatened, endangered, or sensitive species, but is limited to small-scale activities.

Recreation

Alpine Skiing

S-1 Access to Tuckerman Ravine for spring skiing must be by foot. Access from private or state lands on Mt. Washington by any motorized means, such as helicopter, the Auto Road, or the Cog Railway, is prohibited.

S-2 The Forest Service will operate the Mount Washington Avalanche Center in accordance with yearly operating plans to enhance public, volunteer, and employee safety by increasing backcountry avalanche awareness.

S-3 The Mount Washington Avalanche Center will issue seasonal avalanche and safety advisories.

S-4 Consistent with an agreement with the State of New Hampshire, the Forest Service has the lead search and rescue responsibility in the Cutler River drainage from December 1 through May 31.

S-5 Ski lifts and tows are prohibited.

Developed Recreation

S-1 Glen Ellis Falls day use area must be managed to protect its social and resource characteristics. Trail improvements made by the Civilian Conservation Corps are a significant heritage resource to be protected and interpreted. Sanitation facilities may be provided for visitor safety.

S-2 Rocky Gorge day use area must be managed for the unique characteristics of the Gorge and the adjacent Falls Pond that is hidden from the gorge area.

Recreation Opportunity Spectrum

Pinkham Notch

S-1 The Recreation Opportunity Spectrum (ROS) class will be predominantly semi-primitive non-motorized. There are some primitive opportunities at some times of the year, particularly in winter. These primitive recreation opportunities will be protected. Route 16 in the Pinkham Notch area, where it passes through this management area, is recognized as a Roaded Natural inconsistency to the ROS Class objective of the Appalachian Trail management area. It is acceptable, but where feasible will be managed to minimize impacts on the SPNM experience.

Rocky Gorge

S-2 The Recreation Opportunity Spectrum class will be roaded natural.

Gibbs Brook, Greeley Ponds, Lafayette Brook, Lincoln Woods, Mount Chocorua, Sawyer Pond

S-3 The ROS class will be semi-primitive non-motorized.

Snyder Brook

S-4 The ROS class will be roaded natural.

Overnight Facilities

S-1 Increasing the capacity or development level of current facilities at Pinkham Notch is prohibited.

S-2 Pinkham Notch Visitor Center facilities will be managed consistent with the requirements in the Appalachian Mountain Club Special Use Permit.

S-3. Construction of new facilities is prohibited in all scenic areas except Pinkham Notch and Rocky Gorge.

G-1 Current facilities at Pinkham Notch should be managed to concentrate use while minimizing their impact on the unique attraction and scenic integrity of the area.

G-2 For the Pinkham Notch Scenic Area, additional facilities and trails should not be allowed in order to limit development of the area.

G-3 All existing backcountry camping facilities (shelters, tent platforms, cabins, and toilets) should be maintained to provide for public health and safety and to prevent site deterioration.

G-4 Reconstruction and relocation of cabins, shelters, and tent platforms is allowed to better manage existing recreation use of the site and surrounding area.

Trail Maintenance and Operation

G-1 New trails should not be constructed.

G-2 Trail reconstruction should be consistent with the desired recreation experience opportunity.

G-3 Trail maintenance generally should be Levels I and II (White Mountain National Forest supplement to FSH 2309.18). The Tuckerman Ravine, Sherburne, and Huntington Ravine Winter Access trails should have a Maintenance Level IV or V.

Use Administration

S-1 Swimming and diving in the Rocky Gorge Scenic Area are prohibited.

S-2 Dispersed camping is prohibited in the Rocky Gorge Scenic Area.

S-3 In Sawyer Pond, camping within 1/4 mile of the trails and pond is prohibited except at designated sites such as tent platforms and the shelter.

G-1 Camping is permitted at backcountry facilities and dispersed campsites if not prohibited by a Forest Supervisor's Order.

G-2 Access and use may be regulated to address social or environmental concerns in the Pinkham Notch Scenic Area.

G-3 Non-motorized boating is permitted on Sawyer Pond. It is also permitted on Falls Pond, but access and launch facilities should not be provided.

Motorized Trails

S-1 For all areas except the Pinkham Notch Scenic Area, motorized trails and use are prohibited except for administrative purposes and except for use on the Bolles and Liberty designated snowmobile trails.

Mount Chocorua (WMNF photo by Richard Alan Dow)

Special Uses — Recreation Specific

S-1 Permits for new facilities will not be authorized at the Pinkham Notch Scenic Area.

G-1 Recreation Special Use permits should not be authorized in the Rock Gorge or the Falls Pond areas.

Riparian/Aquatic

G-1 Artificial habitat structures should be minimized, but if used must be created from materials that blend with the surrounding area and do not detract from the natural environment.

G-2 Stocking of indigenous species may be allowed consistent with Forest-wide standards and guidelines.

Scenery Management

G-1 The Scenic Integrity Objective at Pinkham Notch for land along Route 16 is "Moderate." Land beyond one half-mile of Route 16 is "High."

G-2 Rocky Gorge, Gibbs Brook, Greeley Ponds, Mount Chocorua, Sawyer Pond, Snyder Brook, Lafayette Brook have a Scenic Integrity Objective of "High."

G-3 *Lincoln Woods* has a Scenic Integrity Objective of "Very High."

Transportation System

S-1 Roads are prohibited in all but Pinkham Notch and Rocky Gorge Scenic Areas.

G-1 Reconstruction of the parking lot at the Pinkham Notch Visitor Center Special Use Permit area is allowed consistent with permit requirements.

G-2 Construction of overflow parking in the vicinity of Pinkham Notch

G-3 For the Rocky Gorge Scenic Area, Forest System roads should be limited to roads and parking areas maintained as part of the Rocky Gorge development.

G-4 Temporary roads may be allowed in the Rocky Gorge Scenic Area. Visitor Center is allowed. Overflow parking must be strictly designed and managed to address specific overflow-parking needs during certain times of the year. It must not be solely to accommodate increased use.

Vegetation Management

S-1 Timber management is prohibited.

G-2 Vegetation management for salvage operations and for insect and disease control is allowed only within one-half mile of roadside areas.

Water Resources

Forest-wide standards and guidelines apply.

Wild and Scenic Rivers

Forest-wide standards and guidelines apply.

Wildland Fire

S-1 Wildland fire use is prohibited.

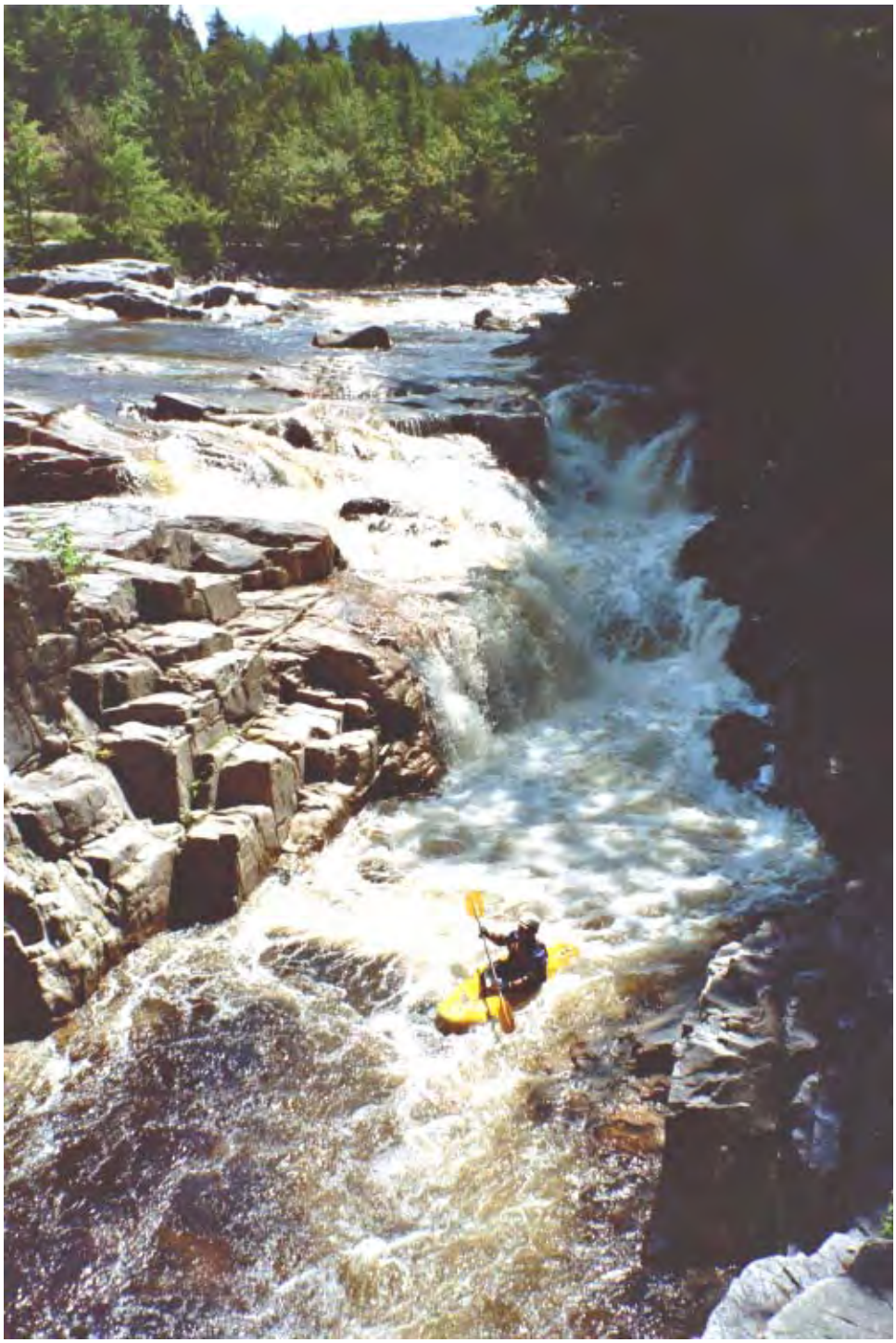
S-2 Prescribed fire is prohibited.

Wildlife

S-1 Wildlife openings must not be maintained or created.

S-2 Existing openings shall remain open only through natural processes.

Kayaker on the Swift River at Rocky Gorge Scenic Area (WMNF photo by Ken Allen)



MA 8.6 — Wildcat Wild and Scenic River

Purpose

1. Maintain, enhance, and protect the free-flowing character and outstandingly remarkable values of the designated rivers included in the National Wild and Scenic River System.
2. Manage the designated river segments of the Wildcat River and tributaries according to the Wild and Scenic River Act (Public Law 90-542) and legislation designating the Wildcat River a Wild and Scenic River (Public Law 100-554).
3. Manage those segments of the designated Wildcat Wild and Scenic River off National Forest System land in accordance with requirements in the National Wild and Scenic Rivers Act and Public Law 100-554, which designated the Wildcat Wild and Scenic River.
4. As directed by Public Law 100-554, the White Mountain National Forest will be the river-administering agency for the Wildcat River system and will jointly manage the segments located off National Forest System land through a cooperative agreement with the Selectmen of the Town of Jackson and the State of New Hampshire, consistent with the Wildcat Comprehensive River Management Plan (CRMP).
5. The designated river segments of the Wildcat River and tributaries according to the Wild and Scenic rivers Act are:

River Segment	River Name	Classification	Length (miles)
Headwater	Wildcat River	Scenic	4.45
	Wildcat Brook	Scenic	2.83
	Bog Brook	Scenic	1.58
Intervale	Wildcat River	Scenic	3.79
	Great Brook	Scenic	1.05
Jackson Falls	Wildcat River	Recreational	0.81

Desired Condition of the Land

The river area on National Forest System land is heavily forested and predominantly in a natural or natural appearing condition. Vegetation within the riparian zone appears unaltered and near pristine. Vegetation outside the riparian area, although altered by vegetation management, is natural appearing and provides a variety of plant species and age groups. High altitude areas of the river remain in natural condition.

Existing roads and hiking trails are low density, provide access to the river area, and allow occasional views of the river and drainages.

Traditional non-motorized recreation uses are predominant. Use is light to moderate and evidence of human activity is substantially unnoticeable and subordinate to the characteristic landscape.

Privately owned land surrounding this management area is predominantly forested and reminiscent of a 19th century pastoral landscape. There is noticeable human activity resulting from occasional homes and seasonally used cabins. Evidence of use is usually in harmony with the natural-appearing environment and consistent with good resource management.

Standards and Guidelines

See Chapter 2, Forest-wide standards and guidelines, for additional required direction in each program area.

Headwaters Segment

The following management direction was brought forward from the CRMP for the Wildcat Scenic River.

Visual Quality

S-1 The scenery and the natural appearing character of the river area will be protected and enhanced.

S-2 On WMNF lands, the visual quality standards and guidelines, described in the Wildcat Comprehensive River Management Plan will be used as guidance for enhancing the views and landscape character seen from the trails. Management activities needed to preserve or create vistas will be considered.

S-3 Following the scenery management system, the Scenic Integrity Objective (SIO), within the foreground area of the river and trails, will be "High." In the middle and background areas, the SIO will be "Moderate."

Water Quality

S-1 Water quality will be monitored and protected in accordance with Forest-wide standards and Guidelines as well as federal and state water quality guidelines.

S-2 All shelters, toilets, and primitive camps will be located in such a way that they cannot pollute drinking water sources.

S-3 Users will be educated on low-impact camping methods that protect drinking waters. On the Forest, backcountry rangers, signs, and handouts will be used to inform visitors about low-impact use.

Fish and Wildlife

S-1 Artificial habitat structures, if used, must be created from materials that blend with the site, do not detract from the natural landscape, and do not adversely affect the river's free-flowing condition and the values for which it was designated.

Vegetation Management

S-1 Vegetation within the river corridor will be allowed to evolve through natural processes, except when it is manipulated for the following reasons:

- Maintenance of critical habitat for threatened or endangered wildlife species;
- Correction of severe damage caused by fire, wind, ice, insect/disease, or other natural catastrophes;
- To screen developments to meet visual integrity objectives;
- Management of vegetation for critical wildlife situations outside the seen area;
- Performance of minor work to enhance wildlife habitat, create vistas and meet trail construction and maintenance needs.

S-2 Silvicultural prescriptions will be used that contribute to restoration of ecological function and natural appearance of riparian influence zones.

G-1 Unique and visually attractive stands (e.g. white birch) may be managed to enhance their health and allow viewing within hiking trail corridors.

Areas of Cultural Significance

S-1 On National Forest land, surveys will be conducted prior to all earth-disturbing activities. All activities will be designed to avoid, minimize, or mitigate adverse effects upon any known cultural or historic resources.

S-2 National Register sites and non-eligible sites chosen for enhancement and interpretation will be afforded protection as necessary by Town of Jackson Zoning Ordinances.*

G-1 Where appropriate, cultural and historical sites may be interpreted through maps, guidebooks, and signs.

Recreation Improvements to Infrastructure

Recreation

S-1 Existing trail shelters and hut at Carter Notch will be managed in accordance with the Appalachian Club Special Use Permit.

G-1 Improvements for recreational development may occur as appropriate and/or necessary including, but not limited to privies, spring boxes, trails, river crossings, trailheads and informational signs.

G-2 To protect low and moderate use locations, recreation use should not be dispersed from high to low use areas.

G-3 Existing dispersed camping is allowed, where suitable, but recreational facilities will not be constructed within 100 feet of the river or trail, except when the only feasible location is within the 100 foot buffer.

* See CRMP, Appendix L, Existing Regulations Affecting Riparian Lands in the Town of Jackson, NH.

G-4 Overnight facilities (huts and shelters) should be managed in order to concentrate use, absorb recreation impacts, and prevent site deterioration.

G-5 Rehabilitation measures may be considered at damaged existing sites.

Fishing Access

S-1 Access will be provided at public landings and through hiking trail corridors.

Hiking and Cross-Country Ski Trails

S-1 Hiking trails will be constructed and maintained to standards described in FSH 2309.18.*

Visitor and Use Management

S-1 Management of the river area on the National Forest will strive to provide a recreation experience consistent with the semi-primitive non-motorized ROS Objective.**

S-2 Existing traditional recreational uses consistent with protecting river values and the semi-primitive non-motorized ROS Objective will be maintained. Current levels and types of recreation use are generally considered appropriate.

Early postcard view of two girls on the Wildcat Wild and Scenic River; date and photographer unknown (WMNF photo)

* See Forest Service Handbook 2309.18 (Trails Management), WMNF Supplement.

** See Appendix H of the Final Environmental Impact Statement for a description of Recreation Opportunity Spectrum (ROS) objectives.

Management Area Direction

The following management direction was developed during Forest Plan revision for MA 8.6.

General

S-1 Those segments of the designated Wildcat Wild and Scenic River on National Forest System lands must be managed consistent with direction in the Wildcat Comprehensive River Management Plan.

S-2 Management direction for both the Wild and Scenic River (MA 8.6) and Appalachian Trail (MA 8.3) must apply where MA 8.3 contains portions of the Wild and Scenic River MA. Where direction differs, the more restrictive standards and guidelines must apply.

G-1 Project-related and emergency motorized administrative use may be allowed. Project-related motorized administrative use should consider potential impacts to social conditions and ecological resources in the area. Where applicable, project-related administrative use will be timed to minimize social and ecological impacts.

Accessibility

Forest-wide standards and guidelines apply.

Air Quality

Forest-wide standards and guidelines apply.

Geologic and Mineral

Leasable (Commercial) Minerals

S-1 These lands are withdrawn from mineral extraction activities within one-quarter mile of the river bank.

Mineral Materials (Common Variety)

S-1 New development of common variety minerals is prohibited.

Recreational Rock and Mineral Collecting

S-1 Surface disturbing rock and mineral collecting is prohibited.

Heritage

See Headwaters Segment standards and guidelines for "Areas of Special Significance."

Lands

S-1 Designated communication sites are prohibited.

S-2 Wind towers are prohibited.

Native American Relations

Forest-wide standards and guidelines apply.

Non-native Invasive Species

Forest-wide standards and guidelines apply.

Rare and Unique Features

G-1 Vegetation manipulation may be implemented to protect or improve habitat for threatened, endangered, or sensitive species, but is limited to small-scale activities.

Recreation

Forest-wide standards and guidelines apply.

See also Headwaters Segment standards and guidelines for "Recreation Improvements to Infrastructure" and "Visitor and Use Management."

Riparian/Aquatic

See Headwaters Segment standards and guidelines for "Fish and Wildlife."

Scenery Management

See Headwaters Segment standards and guidelines for "Visual Quality."

Transportation System

Forest-wide standards and guidelines apply.

Vegetation Management

See Headwaters Segment standards and guidelines for "Vegetation Management."

Water Resources

See Headwaters Segment standards and guidelines for "Water Quality."

Wildland Fire

S-1 Wildland fire use is prohibited.

S-2 Prescribed fire is prohibited.

Wildlife

Forest-wide standards and guidelines apply.

MA 9.1 — Recommended Wilderness

Purpose

1. Recognize the areas currently recommended for Wilderness.
2. Manage the land to protect Wilderness values to protect eligibility for the Wilderness Preservation System.

Desired Condition of the Land

In Recommended Wilderness, natural ecological processes will be allowed to take place. These areas will be generally 5,000 acres or larger. The Forest will be a product of natural succession; large and small-scale change will occur through natural events such as wind disturbance or ice storms.

Each Recommended Wilderness will be managed for its unique attributes, with goals and thresholds in place to prevent degradation of its Wilderness values. Areas with high recreation use will be managed to recognize their value as sources of inspiration for the large surrounding populations, while also having standards to prevent unacceptable social or ecological impacts. Low use areas will be managed to maintain their low use; use will not be dispersed from high to low use areas. Interaction between users will vary by location and by season of use. In general, use will be concentrated around trail corridors.

Managerial controls will be kept to a minimum, and used only as necessary to protect ecological and social values. Recommended Wilderness will be accessible by foot or other non-motorized means.

Facilities may be present.

Marsh in Wild River drainage; angled lines are moose tracks (WMNF photo by Ken Allen)

Standards and Guidelines

See Chapter 2, Forest-wide standards and guidelines, for additional required direction in each program area.

General

S-1 Management direction for both the Appalachian Trail (MA 8.3) and Recommended Wilderness (MA 9.1) must apply. Where there is a conflict, the more restrictive standards must apply.

G-1 Restoration efforts should be site-specific and small scale, such as rehabilitating campsites or other sites impacted by recreation.

G-2 Ecosystem restoration should be considered only if the need is causally linked to human-induced changes and if those changes pose a significant threat to resources outside this management area.

G-3 Project-related and emergency motorized administrative use may be allowed. Project-related motorized administrative use should consider potential impacts to social conditions and ecological resources in the area. Where applicable, project-related administrative use will be timed to minimize social and ecological impacts.

Accessibility

Forest-wide standards and guidelines apply.

Air Quality

Forest-wide standards and guidelines apply.

Geologic and Mineral

Leasable (Commercial) Minerals

S-1 Surface-disturbing activities are prohibited.

Mineral Materials (Common Variety)

S-1 Development of common variety mineral sites is prohibited.

Recreational Rock and Mineral Collecting

S-1 Surface disturbing rock and mineral collecting is prohibited.

Heritage

G-1 Historic sites and artifacts, even if considered nonconforming structures, should be undisturbed except where they threaten public safety or resource protection.

Lands

S-1 Designated communication sites are prohibited.

S-2 Wind towers are prohibited.

S-3 All communication use permits not attached to existing facilities are prohibited.

Native American Relations

Forest-wide standards and guidelines apply.

Non-native Invasive Species

S-1 Manual control must be considered as the first choice of eradication.

G-1 Chemical control methods, if deemed necessary, should be used through direct application. Broadcast application of herbicides or pesticides should be used only if direct application is not working.

G-2 Biological controls should be used only when the effectiveness of other control methods will not achieve site-specific eradication objectives.

Rare and Unique Features

G-1 Vegetation manipulation may be implemented to protect or improve habitat for threatened, endangered, or sensitive species, but is limited to small-scale activities.

Recreation

S-1 Management actions, such as dispersing use or increasing developments, must not result in a change along the Recreation Opportunity Spectrum (ROS) scale from less- to more-developed. For example, management actions must not change an ROS class from primitive to semi-primitive.

S-2 Motorized trails are prohibited. The responsible official may authorize motorized use for emergencies such as search and rescue and fire suppression.

S-3 Trails designed specifically for mountain bike use are prohibited.

S-4 Mountain bike use on existing trails is allowed consistent with Forest-wide direction.

G-1 Natural processes should take precedence over recreation objectives.

G-2 The number and type of structures such as trails, footbridges, and signs should be kept to a minimum.

G-3 Public potable water systems should not be provided.

G-4 Where provided, human waste disposal facilities should be consistent with current backcountry waste management technology and Wilderness values.

Rock and Ice Climbing

S-1 The development of new rock, ice, and mixed climbs is allowed as long as they do not require installation of fixed protection, including webbing, bolts and pitons. New climbing routes requiring fixed protection are prohibited

S-2 Replacement of existing fixed protection and anchors is allowed to preserve known climbing routes and promote safe climbing.

Special Uses — Recreation Specific

S-1 Special use facility development is prohibited until a decision is made on Wilderness designation.

Riparian/Aquatic

S-1 Fish stocking is prohibited except for the Atlantic salmon restoration program, which will be accomplished within cooperative agreement standards.

Scenery Management

Forest-wide standards and guidelines apply.

Transportation System

S-1 Roads are prohibited.

G-1 Parking lots for trails that access Recommended Wilderness should not be expanded or constructed solely to accommodate increased recreation use.

Vegetation Management

S-1 Timber management practices are prohibited.

Insects and Disease

G-1 The natural process of insect and disease outbreaks should be controlled only when justified by predicted loss of resource values outside of the management area.

G-2 Pesticide use may be allowed after a minimum tool analysis has been conducted and when deemed necessary to prevent significant losses to resource values on bordering private or public lands or for control of non-native invasive species.

Water Resources

Forest-wide standards and guidelines apply.

Wild and Scenic Rivers

Forest-wide standards and guidelines apply.

Wildland Fire

S-1 Wildland fire use (WFU) is allowed.

S-2 Prescribed fire is prohibited.

G-1 Resource Advisors should be used for all fires in Recommended Wilderness.

Wildlife

S-1 Since habitat must be a result of natural process only, wildlife habitat improvement projects are prohibited.

MA 9.2 — Alpine Ski Area Expansion

Purpose

1. Recognize the potential need for ski area expansion, and manage the lands so as not to preclude future ski area development.

Desired Condition of the Land

Although adjacent to heavily developed alpine ski areas, these lands generally appear natural, with little evidence of management. Existing roads and trails may provide access.

These lands are contiguous to existing ski areas, and range in size from 40 to 1,000 acres.

A variety of land characteristics will occur. In the lower and middle elevations, extensive stands of northern hardwoods dominate the landscape. Conifers, such as red and white spruce and balsam fir, will be mixed with hardwoods at mid- to lower- elevations and will dominate at higher elevations. These stands tend toward a mix of tree sizes and ages, visually dominated by large mature trees.

Snowboarding at the Terraine Park, Loon Mountain Ski Area (WMNF photo by Joe Gill)

Standards and Guidelines

See Chapter 2, Forest-wide standards and guidelines, for additional required direction in each program area.

General

G-1 Project-related and emergency motorized administrative use may be allowed. Project-related motorized administrative use should consider potential impacts to social conditions and ecological resources in the area. Where applicable, project-related administrative use will be timed to minimize social and ecological impacts.

Accessibility

Forest-wide standards and guidelines apply.

Air Quality

Forest-wide standards and guidelines apply.

Geologic and Mineral

Leasable (Commercial) Minerals

S-1 Surface-disturbing activities are prohibited.

Mineral Materials (Common Variety)

S-1 New development of common variety minerals is prohibited.

Recreational Rock and Mineral Collecting

S-1 Surface disturbing rock and mineral collecting is prohibited.

Heritage

Forest-wide standards and guidelines apply.

Lands

Special Uses

S-1 Designated communication sites are prohibited.

G-1 Wind towers may be considered when their installation and operation is compatible with existing and reasonably foreseeable future ski area operations.

G-2 New communication use permits may be authorized on a case-by-case basis.

Native American Relations

Forest-wide standards and guidelines apply.

Non-Native Invasive Species

Forest-wide standards and guidelines apply.

Rare and Unique Features

G-1 Vegetative manipulation may be implemented to protect or improve habitat for threatened, endangered, or sensitive species.

Recreation

S-1 Construction of campgrounds and day use areas is prohibited.

G-1 Dispersed recreation activities may occur within this management area as long as the activity is compatible with the overall purpose of potential alpine ski area expansion.

G-2 Foot trails are generally inconsistent with the objectives of this management area. Existing foot trails may be maintained until actual development of the area.

G-3 Motorized trails are generally inconsistent with the objectives of this management area. Existing winter motorized trails may be maintained until actual development of the area. No new motorized trail construction is allowed.

Special Uses — Recreation Specific

S-1 Any special use facility development is prohibited until a decision is made on ski area expansion.

G-1 Outfitter/guide permits may be allowed.

Riparian/Aquatic

Forest-wide standards and guidelines apply.

Scenery Management

Forest-wide standards and guidelines apply.

Transportation System

S-1 Any roads constructed must be closed and revegetated upon completion of the project.

G-1 Existing roads unnecessary for management area objectives should be closed and revegetated.

Vegetation Management

S-1 Timber harvest activities may occur on suitable ground as long as the harvest activity is compatible with the overall purpose of potential ski area expansion. These may include, but are not limited to, salvage operations and other management actions related to insect and disease control.

S-2 Where harvest operations occur, slash, visual, and other timber management requirements must be in accordance with those standards and guidelines stated under Management Area 2.1.

Water Resources

Forest-wide standards and guidelines apply.

Wild and Scenic Rivers

Forest-wide standards and guidelines apply.

Wildland Fire

S-1 Wildland fire use is prohibited.

G-1 Prescribed fire may be used.

Wildlife

Forest-wide standards and guidelines apply.

Old growth stands at Gibbs Brook CRNA (WMNF photo by Lee Carbonneau)

MA 9.3 — Candidate Research Natural Areas

Purpose

1. Recognize the areas currently recommended for study as Research Natural Areas (RNAs).
2. Manage the land to protect eligibility for Research Natural Area status.
3. Coordinate with Research to review and document each recommended research natural area with an establishment record (see FSM 4063.37).

Desired Condition of the Land

Natural processes will predominate. Recreation use will be incidental and will not be encouraged. Hiking trails will not be added. Camping will be by individual site designation. Campfires will not be permitted. Research is designed to be non-manipulative. Roads are absent. These areas provide excellent opportunities for long-term monitoring of many kinds.

Standards and Guidelines

See Chapter 2, Forest-wide standards and guidelines, for additional required direction in each program area.

General

S-1 All research activities shall be coordinated between the White Mountain National Forest and the USFS Northeast Research Station, Durham, NH.

S-2 Structures are prohibited, except that permanent structures or markers for research purposes may be allowed when they serve to achieve the approved research objectives.

G-1 Project-related motorized administrative use may be allowed, but only on existing trails. The Forest Supervisor may authorize motorized use for emergencies.

Accessibility

Forest-wide standards and guidelines apply.

Air Quality

Forest-wide standards and guidelines apply.

Geologic and Mineral

Leasable (Commercial) Minerals

S-1 Mineral activities that may alter the character, or diminish the potential, of an area for designation as a Research Natural Area are prohibited until study is complete and a decision has been made regarding designation.

S-2 Surface disturbing activities are prohibited.

Mineral Materials (Common Variety)

S-1. New development of common variety minerals is prohibited.

Recreational Rock and Mineral Collecting

S-1 Surface disturbing rock and mineral collecting is prohibited.

Heritage

S-1 Archaeological excavations are permitted under condition that they will not have long-term impacts, or diminish the potential of the area for designation as an RNA.

Lands

Special Uses

S-1 Only special uses not affecting the potential for RNA designation will be authorized.

S-2 Designated communication sites are prohibited.

S-3 Wind towers are prohibited.

Native American Relations

Forest-wide standards and guidelines apply.

Non-Native Invasive Species

S-1 Manual control must be the first choice of eradication.

G-1 Chemical control methods, if deemed necessary, should be used through direct application. Broadcast application of herbicides or pesticides should be used only if direct application is not working.

G-2 Biological controls should be used only when the effectiveness of other control methods will not achieve site-specific eradication objectives.

Rare and Unique Features

S-1 Vegetation manipulation implemented to protect or improve habitat for threatened, endangered, or sensitive species is prohibited.

Recreation

S-1 New trails are prohibited.

S-2 Wood or charcoal fires are prohibited year-round.

S-3 Management action likely to introduce new or additional recreation use is prohibited.

S-4 Motorized trail use is prohibited.

G-1 Existing trails should be maintained at Levels I and II.

Riparian/Aquatic

S-1 Habitat management is prohibited unless approved by managers to meet the objectives of the area.

Scenery Management

Forest-wide standards and guidelines apply.

Transportation System

S-1 New road construction is prohibited.

Vegetation Management

S-1 Timber management is prohibited.

Insects and Disease

G-1 The natural process of insect and disease outbreaks should be controlled only when justified by predicted loss of resource values outside of the Candidate RNA.

G-2 Pesticide use may be allowed after a minimum tools analysis has been conducted and when deemed necessary to prevent significant losses to resource values on bordering private or public lands.

Water Resources

Forest-wide standards and guidelines apply.

Wild and Scenic Rivers

Forest-wide standards and guidelines apply.

Wildland Fire

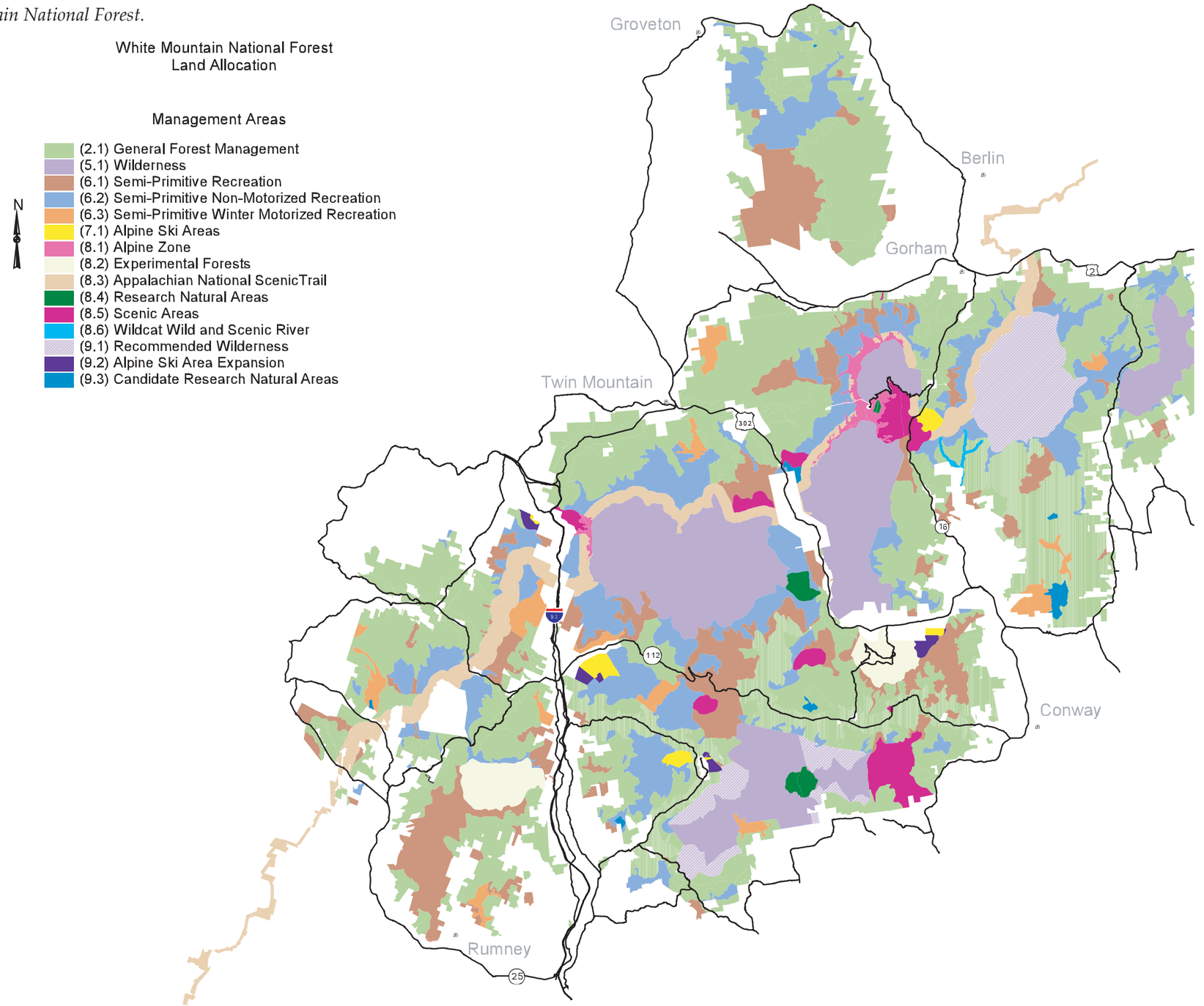
S-1 Wildland fire use (WFU) is allowed.

S-2 Prescribed fire is prohibited.

Wildlife

S-1 Habitat management is prohibited unless approved by managers to meet objectives of the area.

Map 3-01. Management Areas on the White Mountain National Forest.



White Mountain National Forest

Chapter 4
Monitoring and Evaluation

Chapter Contents

Cover

Fisheries monitoring (WMNF Photo by Mark Prout)

Introduction

The White Mountain National Forest's Forest Plan identifies management direction in terms of desired conditions, goals and objectives, standards and guidelines, and management area direction. Monitoring and evaluation are separate, sequential activities required by the National Forest Management Act (NFMA) to determine how well this management direction is being met, and to provide a basis for the periodic evaluation of the Forest Plan. Together, they constitute a quality control process.

Monitoring is the systematic collection of information which reflects changes in actions, conditions, and relationships over time and space, relative to a predetermined standard or expectation.

Evaluation is the interpretation or judging of the information collected during the monitoring phase. Evaluation results are used to answer the monitoring questions, determine the need to revise or amend management plans, or determine how they are implemented. They form a basis for adaptively managing National Forests.

Forest monitoring and evaluation have a number of purposes, including:

- Keeping the Plan current.
- Ensuring compliance with specific standards, laws, and regulatory requirements.
- Examining the implications of administrative decisions.
- Tracking public concerns about the Forest Plan.
- Assessing the state of systems.
- Ultimately, assessing the effectiveness of Forest management in moving toward management goals and desired conditions.

The revised Forest Plan recognizes three basic categories of monitoring and evaluation: *implementation*, *effectiveness*, and *validation* (Table 4-01). Forest

Table 4-01. Monitoring Categories.

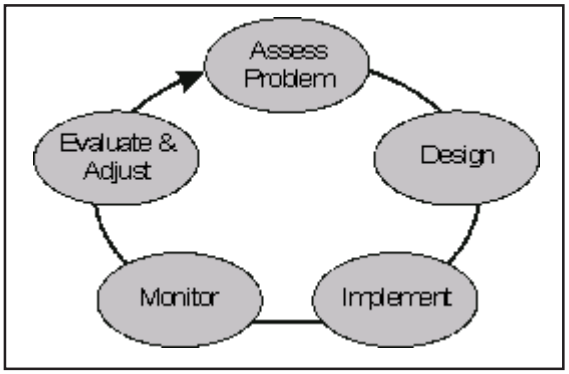
Monitoring Category	Purpose
Implementation	Is the overall direction in the revised Forest Plan being implemented? This includes goals, objectives, desired conditions, standards, guidelines, and management area direction. Or, "Did we do what we said we were going to do?"
Effectiveness	Are the standards and guidelines working? It also includes an evaluation of whether there are significant changes in productivity of the land. Or "Did it work?"
Validation	Are the assumptions and predicted effects used to formulate the revised Forest Plan accurate? Or "Were we right in our initial understanding of the situation, did we look at the right things?"

Plan monitoring focuses on the validation and effectiveness categories. This is Forest-wide monitoring. Implementation monitoring is done at the project level and is completed on a day to day basis. This project monitoring occurs hundreds of times each year and includes activities such as timber sale inspections, interdisciplinary project reviews, backcountry observations by Wilderness rangers, and construction inspections.

Adaptive Management

Knowledge gained through monitoring, evaluation, and associated research provide a basis for adaptive management. Information is collected and compiled that serves as reference points for resource conditions and emerging issues. The scientific validity and appropriateness of assumptions used in the development of the Forest Plan is evaluated. Monitoring and evaluation keep the Plan up-to-date and responsive to changing issues by verifying the effectiveness of management plan standards and guidelines, assessing program and project effects on resources, and providing information for amendments to the management plan. In short, the Forest Plan is made dynamic, relevant, and useful (Figure 4-01).

Figure 4-01. Monitoring and Adaptive Management.



Monitoring and Evaluation Components

Background

The process of monitoring and evaluation is complex; it takes on many forms and applies to many programs. Deciding what resources to monitor — as well as how, why, and when; the frequency; and by whom — requires the consideration of several important guidelines. An integrated and comprehensive monitoring and evaluation program includes three phases.

Monitoring Components

1. **Monitoring Plan**. Establishes the essential required monitoring items and questions, based on specific issues and elements unique to the White Mountain National Forest. The monitoring plan provides an outline that describes what will be accomplished in the Forest Plan monitoring process. Changing the monitoring plan requires a Forest Plan amendment.
2. **Monitoring Guide**. Frames the relationship between the monitoring chapter in the Forest Plan and the specific monitoring tasks. These specific tasks are external to the Forest Plan, and can be revised without amending the Plan. Monitoring tasks are prioritized based on legal requirements as well as resource and social needs. The priorities help establish which items should be accomplished when budgets are restricted. While the guide establishes an optimistic level of monitoring in order to take advantage of additional funding or new partnerships, it is likely that not all of the monitoring components will be funded.
3. **Annual Monitoring Schedule**. Establishes the annual monitoring program and priorities using the Forest's annual work planning process. Monitoring schedules are established for each year based on, among other things, monitoring data from previous years, public issues, tools available, and budgetary considerations.

Monitoring Plan

The *Monitoring Plan*, also known as Forest Plan monitoring and evaluation direction, is contained in this chapter. The Monitoring Plan is considered "strategic" for purposes of the Forest's monitoring and evaluation effort because it provides a conceptual framework within which specific monitoring and evaluation criteria can be built. It defines the overarching questions that must be addressed through monitoring; but, it does not dictate exactly *how* they will be addressed. That detail is contained in the *Monitoring Guide* described in the next section.

The Monitoring Plan sets the direction, purpose, and overall context for monitoring and evaluating the Forest Plan. It establishes questions to be answered, timetables for reporting, and other information. Monitoring Plan direction is broad and ties directly to decisions made in this Forest Plan. Monitoring Plan direction will not change unless the Plan is amended.

Monitoring items included in this chapter are meant to define the broad areas that must be examined. Monitoring items and questions included here are intended to provide the basis for more specific, focused monitoring items to be included in the Monitoring Guide.

Basic monitoring requirements can be grouped into two broad categories: **specific requirements** and **general requirements**.

1) Specific Requirements

- Sustainability Monitoring.
- Outputs, Services, and Costs.
- Management Indicator Species (MIS).

2) General Requirements

- Attainment of Objectives.
- Standards and Guidelines.

The Monitoring Plan for the White Mountain National Forest is comprised of five tables, corresponding to the description above.

1) Sustainability Monitoring — Table 4-02.
2) Outputs, Services, and Costs — Table 4-03.
3) MIS Monitoring — Table 4-04.
4) General Monitoring Requirements (Broad Scale) — Table 4-05.
5) Providing Additional Detail — Monitoring related to Specific Issues, Topics, or Resources — Table 4-06.

Monitoring Guide

The *Monitoring Guide* is a procedural document that is external to the Forest Plan. It describes the Forest's monitoring program in its entirety. It is based on guidance contained in this chapter, and its scope should encompass the scope of the Forest Plan. It is to be developed concurrently with, or immediately following, issuance of the revised Plan to ensure that the two are consistent, complete, and timely.

The Monitoring Guide contains specific monitoring items, along with methods, protocols, and analytical procedures for monitoring them. Monitoring direction and monitoring questions included in this chapter provide the basis for the more specific and detailed monitoring items included in the Monitoring Guide. Sources for the Monitoring Guide could include handbook direction, technical manuals, or other sources. The Guide can be modified in response to policy changes, updated procedures, or other changing conditions. Program managers responsible for Forest Plan development and implementation are involved in developing and updating the Monitoring Guide with the Forest Supervisor making the final decision on content and priorities. The list of items in the guide is beyond that normally funded and as a result includes a prioritization of the items identified. Final selection of the items to be monitored in a given year is outlined in the annual monitoring schedule.

Annual Monitoring Schedule

A monitoring schedule that outlines monitoring items, time frames, roles, and locations for the upcoming year will be prepared annually as part of the annual work planning process. The annual monitoring schedule will be tied to the Forest Plan and Monitoring Guide.

Monitoring program priorities are established or revised annually through the work planning process. Some items in the Monitoring Guide will be accomplished or measured annually, while others will be scheduled for whatever interval is determined necessary to provide for timely evaluation.

Priorities for monitoring will be revisited and revised (if necessary) each year by Forest program managers responsible for their respective resource areas. The annual monitoring program of work will be determined on the basis of many variables, including (but not limited to):

- Itemized frequencies included in this chapter (Tables 4-02 to 4-06) and in the Monitoring Guide.
- Current or emerging issues.
- New technologies.
- Annual funding constraints.
- Public interest or controversy.
- Evaluation of previous years' monitoring results.

Monitoring Plan and Monitoring Guide Relationship

This Monitoring and Evaluation chapter of the Forest Plan is general in nature. It provides a conceptual framework within which specific monitoring and evaluation criteria can be built. Therefore, this chapter does not display specific monitoring and evaluation criteria for any particular resource. These are found in the Monitoring Guide. The Monitoring Guide will not deviate from the Plan in substance or obligations. Forest specialists involved in monitoring and evaluation will use the Monitoring chapter to form their conceptual approach to monitoring resources, but will refer to the Monitoring Guide to find the actual criteria used to measure or otherwise conduct monitoring. The Monitoring Guide is intended to be a flexible component that could change as new methodologies and techniques are developed, or to be more responsive to changing needs and new information. This approach means that monitoring techniques can adapt to the rapid changes that occur under ecosystem management philosophies.

Sustainability Monitoring

Table 4-02 outlines monitoring activities identified.

Table 4-02. Sustainability.

Sustainability	Frequency of Measurement	Time of Evaluation
1) Lands are adequately restocked	Annual	Annual
2) Lands not suited for timber production	10 years	10 years
3) Maximum openings from even-aged management - appropriate	Years 5 & 10	5 years
4) Increase of destructive insects and diseases.	Annual	Annual

Outputs, Services, and Costs

The Forest Plan must monitor its own performance in terms of outputs, services, and costs (see Appendix B). This includes whether the projected outputs and services were actually provided. It also must include how projected costs compare with actual costs of implementing the management prescriptions in the Plan.

Table 4-03 lists the monitoring items to monitor outputs, services, and costs associated with implementing the Forest Plan. Monitoring and evaluating this information will be done on an annual or five-year basis, and results should be made available as a part of the annual monitoring report.

Table 4-03. Outputs, Services, and Costs.

Outputs, Services and Costs	Frequency of Measurement	Time of Evaluation
1) Comparison of projected and actual outputs and services	Annual	Annual
2) Comparison of actual and estimated costs	5 years	5 years

Management Indicator Species (MIS)

The Forest Plan embodies a strategy for conserving Management Indicator Species (MIS). This consists of management direction including specific objectives for maintaining or improving MIS habitat.

The management direction pertaining to MIS populations and their habitat must be monitored to determine whether the actual effects on habitat and populations are consistent with those predicted in the EIS. To the extent practicable, MIS monitoring must be done in cooperation with Fish and Wildlife agencies at the state and federal levels.

The regulations do not require MIS monitoring on every project, but the Forest-wide effects of projects on MIS populations and habitat must be periodically evaluated (Table 4-04). Additional monitoring items and protocols specific to MIS populations on the White Mountain National Forest will be provided in the Monitoring Guide.

Table 4-04. MIS Monitoring — Implementation and Effectiveness.

MIS Conservation Strategy	Monitoring Questions	Spatial Scale Measurement	Frequency of Evaluation	Time of Reliability
Monitor Forest Plan management direction (goals, objectives, standards/guidelines) that affect: 1) amount and quality of habitats, and 2) trends in populations for each MIS.	a) How has the amount and quality of habitat changed relative to the changes projected?	Forest-wide	5 years	5 years
	b) Are population trends of the MIS consistent with those projected under the Plan?	Forest-wide	5 years	5 years
	c) What is the relationship between trends in habitat and populations?	Forest-wide	5 years	5 years

General Monitoring Requirements

The general requirements for Forest Plan monitoring pertain to the implementation and effectiveness of Forest Plan management direction. The following provisions apply. These monitoring and evaluation requirements will provide a basis for a periodic determination of the effects of management practices. Implementation shall be evaluated on a sample basis to determine how well objectives have been met and how closely management standards and guidelines have been applied. Much of this implementation monitoring will be done at the project level, with Forest-wide reporting to track overall Plan implementation. Monitoring requirements identified in the Forest Plan shall provide for documentation of the measured prescriptions and effects, including significant changes in productivity of the land.

Table 4-05 lists implementation and effectiveness monitoring requirements. They are broad in scale. The Monitoring Guide is expected to provide more specific monitoring items and questions that will be used to collectively address these monitoring questions.

Table 4-05. General Monitoring Requirements — Broad Scale Treatment.

General Monitoring Requirements	Monitoring Question	Frequency of Measurement	Time of Evaluation
1) Attainment of Objectives	To what extent have Objectives been attained?	Annual	Annual
2) Application of Standards and Guidelines	To what extent have Standards and Guidelines been applied?	Annual	Annual
3) Effects of Management Practices	What are the effects of management practices prescribed by the Forest Plan?	Annual	Annual

Monitoring for Issues, Topics, and Public Concerns

The preceding sections and tables have provided basic monitoring plan items. In practice, it is appropriate to go beyond basic monitoring requirements to highlight certain high profile issues or concerns specific to the White Mountain National Forest.

Table 4-06 provides a place for these additional monitoring needs to be addressed. The monitoring questions in Column 2 are intended to highlight specific issues or topics of concern in the Forest Plan. The questions provide additional detail for monitoring the management direction in the Forest Plan and for use in adaptive management.

This list of monitoring questions has been designed to help answer the question "Are we accomplishing the goals of our Forest Plan?" The questions provide a foundation for developing the Monitoring Guide, which will ask supplemental questions that collectively respond to the goals and questions included in this table.

Table 4-06. Monitoring Related to Specific Issues, Topics, or Resources.

Monitoring Goal	**Monitoring Questions**
Goal 1: Manage for Ecosystem Health	a) To what extent is terrestrial ecosystem health being maintained or restored by management activities?
	b) To what extent is air quality impacting Forest resources?
	c) To what extent are water resources and aquatic ecosystems being maintained or restored by management activities?
Goal 2: Provide quality recreation opportunities, experiences, and benefits not readily available elsewhere.	To what extent are we maintaining an appropriate range and quality of recreation opportunities?
Goal 3: Manage Wilderness consistent with Wilderness Act.	To what extent is Wilderness managed to preserve its Wilderness character?
Goal 4: Recognize the socioeconomic role of the Forest in the region.	To what extent is the Forest providing a mix of products, services, and amenities?
Goal 5: Provide for a natural appearing landscape.	To what extent are scenic goals and objectives being met?

Evaluation

Data collected in response to Monitoring Plan requirements outlined in the Forest Plan must be evaluated and interpreted to provide useful information (see Figure 4-01). Evaluation is designed to address three basic questions.

- Is the Forest Plan implemented properly? (Implementation)
- Is the Forest Plan achieving the desired outcomes? (Effectiveness)
- Does the Forest Plan need to be changed? (Validation)

Evaluation is performed at intervals established in Tables 4-02 through 4-06. Reporting of the most recent evaluation results will be provided in conjunction with the annual report, when possible. At a minimum, evaluation must:.

1. Be conducted such that every 5 years (at minimum) the Forest Supervisor can determine if there have been any significant changes in the condition of the land or the demands of the public.
2. Provide a basis for determining management effects.
3. Determine how well objectives have been met and how closely standards and guidelines have been applied. An interdisciplinary team performs the evaluation and recommends any needed changes to the Forest Plan.
4. Assess the effects of off-road use on National Forest System lands. Results will be used in the planning process to evaluate current and potential impacts and to classify areas and trails as to whether or not off-road vehicle use may be permitted.
5. Assess forest productivity every 10 years.
6. Determine whether the maximum size limits for harvest areas are appropriate.
7. Help identify research needs.

Evaluation reports will assess how well the outputs, goals and objectives of the Forest Plan have been met, and how closely management standards and guidelines have been applied. Changed conditions and new information will be considered. Results of the evaluation are used to identify changes that may be needed to the Forest Plan.

Annual Monitoring Report

The annual monitoring report provides a basis for evaluating implementation of revised Forest Plan decisions and the effectiveness of specific management practices. It is more internal to the Forest Service than some reports in that it provides immediate guidance to ongoing management. The annual monitoring report is tied directly to the questions identified for each monitoring element and specified in Table 4-02 through Table 4-06. Other components of information management, including collection and storage of data, evaluation and interpretation of data, sharing of information and findings, and coordination with research, will be more fully discussed in the Monitoring Guide.

Researcher studies a little brown bat (WMNF photo)

White Mountain National Forest

Abbreviations, Acronyms, and Glossary

Abbreviations and Acronyms

AA	Analysis Area
ABA	Architectural Barriers Act
ADA	American with Disabilities Act
AMC	Appalachian Mountain Club
AMS	Analysis of the Management Situation
ANC	Acid Neutralizing Capacity
AQRV	Air Quality Related Value
ASNH	Audubon Society of NH
AT	Appalachian National Scenic Trail
ATC	Appalachian Trail Conservancy
ATV	All Terrain Vehicle
BA	Biological Assessment
BE	Biological Evaluation
BMP	Best Management Practice
CDS	Combined Data System
CE	Conservation Education
CE	Cumulative Effects
CEQ	Council of Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CMAI	Culmination of Mean Annual Increment
DBH	Diameter at Breast Height
DEIS	Draft Environmental Impact Statement
DES	Division of Environmental Services (New Hampshire)
DIFW	Dept. of Inland Fisheries and Wildlife (Maine)
DFC	Desired Future Condition
DOE	Determination of Eligibility
DOE	Department of Energy
DOT	Department of Transportation
EIS	Environmental Impact Statement
EJ	Environmental Justice
ELT	Ecological Land Type
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FEIS	Final Environmental Impact Statement
FDR	Forest Development Road
FPA	Forest Protection Area
FR	Forest Road
FS	Forest Service
FSH	Forest Service Handbook
FSM	Forest Service Manual
FY	Fiscal Year
GIS	Geographic Information System
GPS	Geographic Positioning System
GRFS	Graduated Rate Fee System
HMU	Habitat Management Unit
I&E	Information and Education
IDT	Interdisciplinary Team
ITS	Interconnected Trail System
IRS	Internal Revenue Service
LAC	Limits of Acceptable Change
LAU	Lynx Analysis Unit
LCAS	Lynx Conservation and Strategy
LNT	Leave No Trace
LRMP	Land and Resource Management Plan ("Forest Plan")
LTA	Land Type Association
LURC	Land Use Regulatory Commission (Maine)
MA	Management Area
MBF	Thousand Board Feet
MDP	Master Development Plan
ME	Maine
MIS	Management Indicator Species
MMBF	Million Board Feet
MOU	Memorandum of Understanding
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NF	National Forest
NFMA	National Forest Management Act

NFS	National Forest System
NH	New Hampshire
NHFGD	New Hampshire Fish and Game Department
NHNHB	New Hampshire Natural Heritage Bureau
NNIS	Non-Native Invasive Species
NOI	Notice of Intent
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
OA	Opportunity Area
OHRV	Off Highway Recreational Vehicle
OHV	Off Highway Vehicle
PAOT	People At One Time
PILT	Payment in Lieu of Taxes
PLT	Project Learning Tree
PNV	Present Net Value
PNVC	Pinkham Notch Visitor Center
PPD	People Per Day
PPM	Parts Per Million
RARE	Roadless Area Review and Evaluation
RD	Ranger District
RFSS	Regional Forester Sensitive Species
RIM	Recreation Information Management
RMC	Randolph Mountain Club
RMO	Riparian Management Objectives
RN	Roaded Natural
RNA	Research Natural Area
ROD	Record of Decision
ROS	Recreation Opportunity Spectrum
RVD	Recreation Visitor Day
S&G	Standards and Guidelines
SAR	Search and Rescue
SCORP	State Comprehensive Outdoor Recreation Plan
SHPO	State Historic Preservation Office
SI	Suitability Index
SMS	Scenery Management System
SPM	Semi-primitive Motorized
SPNHF	Society for the Protection of New Hampshire Forests
SPNM	Semi-primitive Non-motorized
SVR	Standard Visual Range
SUP	Special Use Permit
TEP&S	Threatened, Endangered, Proposed, and Sensitive
TES	Threatened, Endangered, and Sensitive
TTD	Telecommunication Device for the Deaf
TTY	Teletype
USDA	United States Department of Agriculture
USDI	United States Department of Interior
USFS	United States Forest Service
USFWS	USDI Fish and Wildlife Service
USNPS	USDI National Park Service
VIS	Visitor Information Services
VMS	Visual Management System
VQO	Visual Quality Objective
WFU	Wildland Fire Use
WMNF	White Mountain National Forest
WSR	Wild and Scenic River

Glossary

4x4 Off Highway Vehicle: Street registered motorized 4-wheel drive vehicles that are specifically designed or adapted for off road use. See Off Highway Recreational Vehicle.

Active Raptor Nest Area: If a raptor nest is being used (if it is breeding season at the time of determination) or was used in the previous breeding season (if it is outside the breeding season), the nest is considered active and the area immediately surrounding the nest is considered the active raptor nest area. The size of this area varies by species, topography, etc.

ADAABAAG (Americans with Disabilities Act Architectural Barriers Act Accessibility Guidelines): The combined ruling of the ADA and ABA guidelines require that persons with disabilities, soley because of their disability, not be denied access to the programs provided to all other people by Federal, State and local government, public accommodations, public transportation and commercial establishments. This ruling will apply to all Forest Service administrative facilities, and other offices or places of business that reside on Forest Service land, such as federally assisted areas under special use permit.

Administratively available: National Forest Lands are available for commercial leasing activity during this planning cycle unless they are unavailable due to designation as Wilderness, Wild and Scenic River, in developed recreation areas, or because the disturbance associated with mineral developmental activities would be in conflict with the purpose(s) for which the lands were acquired.

Age Class: A distinct aggregation of trees originating from a single natural disturbance or regeneration cutting

All Terrain Vehicle (ATV): Any motor-driven vehicle which is designed for travel over surfaces (such as bare ground, ice, or snow) other than maintained roads with tires designed to hold not more than 10 psi of air pressure, having a capacity for passengers and other payloads not exceeding 1,000 pounds, and not to exceed 50 inches in width. See also Off Highway Recreational Vehicle.

Allowable Sale Quantity (ASQ): The quantity of timber that may be sold from the area of suitable land covered by the Forest Plan for a time period specified by the Plan. This quantity is usually expressed on an annual basis as the "average annual allowable sale quantity."

Alpine Zone: High elevation areas in which trees are naturally absent or stunted at less than eight feet tall. Alpine areas usually contain mosaics of low shrubs, grasses, sedges, and other vegetation growing over and among bedrock, talus and gravel (Sperduto and Cogbill 1999).

Americans with Disabilities Act (ADA): Law requiring that persons with disabilities not be denied access to the programs provided to all other people by State and local government, public accommodations, public transportation, and commercial establishments, solely because of their disability. The ADA does not apply to the programs and facilities of Federal agencies (see ABA) with the exception of designated Wilderness (ADA Title V Section 507(c)).

Aquatic Ecosystem: The stream channel, lake, or estuary bed, water biotic communities, and the habitat features that occur therein.

Architectural Barriers Act (ABA): The 1968 legislation that requires all facilities constructed, rented, leased or purchased by a Federal agency to be accessible. The UFAS (Uniform Federal Accessibility Standards) covers construction standards for Federal and Federally-assisted facilities. The Forest Service has directed that the agency and its federally-assisted programs, in all new construction or retrofit, to adhere to either UFAS or the Americans with Disabilities Act Accessibility Guidelines (ADAAG), whichever is the higher standard. Reform of both the facility accessibility standards under the ABA and the ADA is underway and will ultimately combine both guidelines under one rule.

Aspen-birch habitat: Forest habitat in which the canopy is comprised almost entirely of aspen species or paper birch. For implementation purposes, this habitat includes forest types 91-95 in our database, but stand conditions, not typing in CDS should be relied on to define habitat.

ATV Racers: ATV riders participating in competitive events, long distances, challenge courses, and sprints. In general they do not use trails and the riding challenge is more important than the natural setting.

Backcountry: The natural and near-primitive forest setting of areas, accessible by trail or off-trail travel.

Backcountry Facility: A relatively small, distinctly defined location in the backcountry where concentrated public use occurs and facilities are provided. These include huts, cabins, shelters, or tent platform sites. Backcountry facilities generally have no motorized access, except if located along a snowmobile trail, or where motorized administrative use is allowed. Backcountry facilities are not considered developed recreation areas. See also huts, cabins, shelters, and tent platform sites.

Basal Area: The area of the cross section of a tree at 4-1/2 feet above the ground. Generally expressed as total basal area per acre.

Base Cation: A positively charged ion, such as Ca++, that occurs soil exchange sites or in soil solution.

Base Sale Schedule: A timber sale schedule formulated on the basis that the quantity of timber planned for sale and harvest for any future decade is equal to or greater than the planned sale and harvest for the preceding decade; and this planned sale and harvest for any decade is not greater than the Long Term Sustained Yield Capacity.

Batholith: A large mass of coarse grained igneous rock that has cooled from magma underground with an exposed surface of at least 40 square miles.

Bed Load: The sediment that generally remains in contact with the stream by sliding, rolling, or saltation (hopping) on the stream bottom.

Benchmark: A set of estimates used to establish standards to compare alternatives considered in detail. Benchmark alternatives include the minimum level, maximum resource levels, and maximum present net value levels.

Biogeochemical: The cycling of nutrients through the biological and chemical processes in forests or other ecosystems.

Biological Diversity: The sum of all natural communities, ecological processes, and species.

Biological Growth Potential: The average net growth attainable in a fully stocked area of forest land.

Biomass: The weight of a forest, usually expressed in kilograms per hectare.

Board Foot: A measure of lumber volume in a tree. The cubic equivalent of a piece of lumber that is 12 inches wide, 12 inches long and 1 inch thick. Often used variations are MBF (thousand board feet) and MMBF (million board feet).

Boltwood: Small hardwood material processed in 4 foot or longer lengths.

Bouldering (Climbing): A climbing discipline usually involving ropeless free ascents or traverses of small formations or boulders.

Buffering: The process whereby the pH of a solution does not change much as moderate quantities of an acid or base are added.

Cabin: A type of backcountry facility (see photo).

Jim Liberty Cabin, Mt. Chocorua, 1950s. (WMNF Photo)

Cached Equipment: Personal equipment, property, or supplies left or stored on National Forest land.

Calcareous Cliff Communities: see "Montane Circumneutral Cliff Community."

Capability: The potential of an area of land to produce resources, supply goods and services, and allow resource uses under an assumed set of management practices and at a given level of management intensity. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology, as well as the application of management practices, such as silviculture or protection from fire, insects, and disease.

Class I (Area, Airshed, Wilderness): Geographic areas designated under the Clean Air Act Amendments of 1977 are afforded the highest level of protection from air pollutants in the nation. These lands consist of national Wildernesses (Forest Service), parks (National Park Service), and wildlife refuges (U.S. Fish & Wildlife Service) in existence at the time the amendment was passed. All other lands in the nation are Class II.

Clearcutting: The removal in a single cut of the entire standing crop of trees. It prepares the area for rapid seed germination and growth of a new even-aged stand. A variation of clearcutting, known as "clearcutting with reserves," may be conducted. This practice involves retaining reserve trees or groups of reserve trees to attain resource goals other than regeneration.

Commercial Forest Land (CFL): Forest land that has not been withdrawn by Congress, the Secretary, or the Chief and is producing or is capable of producing crops of industrial

wood without irreversible damage to soils, productivity, or watershed conditions, and with reasonable assurance that adequate restocking can be attained within 5 years after final harvesting.

Commercial Operations: Using timber sales for cost effective vegetation management on lands that are not part of the timber base.

Commercial Thinning: Thinning operation where the material cut can be sold on the market as opposed to a pre-commercial thinning.

Commercial Use (Special Uses): Any use or activity on National Forest System lands (a) where an entry or participation fee is charged, or (b) where the primary purpose is the sale of a good or service, and in either case, regardless of whether the use or activity is intended to produce a profit (36 CFR 251.51).

Common Variety Minerals: These include sand, stone, gravel, pumicite, cinders, pumice (except that occurring in pieces over 2 inches on a side), clay, and petrified wood. Generally, these materials are sand and gravel and other common variety building materials. Mineral Material Disposal regulations are found in 43 CFR 3600. On acquired lands, the Federal surface management agency has jurisdiction over the disposal of common variety materials.

Communication Site, Designated: See Designated Communication Site.

Communication Use Permits/Authorizations: Authorizations issued for an individual use, resource monitoring, or other minor communication uses. Typically, they are issued for communications that are ancillary to the primary authorized use. For example, the use of equipment that allows ski patrol members to communicate through a radio system on an alpine ski area. Communication use authorizations may not be issued for equipment installed for consumer use. For example, cell towers for companies who are leasing space to cell company providers. This latter type of use must occur through a designated communication site.

Compartment: A small subdivision of forest area for the purpose of orientation, administration, and silvicultural operations. It is defined by permanent boundary features.

Conservation Education: A process designed to inspire citizens to develop the awareness, concern, knowledge, attitude, skills, motivation, and commitment to understand the natural world, resolve environmental concerns, and to practice good stewardship of the land.

Cord: A unit of gross volume measurement for stacked, round wood based on external dimensions, generally implies a stack of wood 4'x4'x8' containing 128 cubic feet.

Corridor: A linear strip of land identified for the present or future location of transportation or utility rights-of-way within its boundaries.

Corridor Snowmobile Trails: Those trails designated and numbered by the New Hampshire BOHRV and the New Hampshire Snowmobile Association Trails committees.

Cost Efficiency: The usefulness of specified inputs (costs) to produce specified outputs (benefits). In measuring cost efficiency, some outputs, including environmental, economic, or social impacts, are not assigned monetary values but are achieved at specified levels in the least cost manner. Cost efficiency is usually

measured using present net value, although use of benefit-cost ratios and rates-of-return may be appropriate.

Cross-country Travel: Any travel between designated trails. It is sometimes referred to as off-trail use or bushwhacking.

Crown: The part of a tree or woody plant bearing live branches and foliage.

Culmination of Mean Annual Increment (CMAI): The point where the total growth increment divided by age is at its maximum.

Day Use Area: Developed recreation sites along roads such as picnic areas, swimming areas, boat ramps, and overlooks.

DBH (Diameter Breast Height): Diameter measurement of a tree at 4-1/2 feet above the ground. Used to determine tree volume.

Debris Flow: A mass movement involving rapid flowage of debris of various kinds under various conditions; specifically, a high density mudflow containing abundant coarse-grained materials and resulting almost invariably from an unusual heavy rain.

Denning Habitat (Lynx): Habitat used during parturition and rearing of young until they are mobile. The common component appears to be large amounts of coarse woody debris, either down logs or root wads. Coarse woody debris provides escape and thermal cover for kittens. Denning habitat may be found either in older mature forest of conifer or mixed conifer/deciduous types, or in regenerating stands (>20 years since disturbance). Denning habitat must be located within daily travel distance of foraging habitat (typical maximum daily distance for females is 3-6 miles).

Designated Communication Site (Special Uses): An area of National Forest System land designated through the forest planning process. It may be limited to a single communications facility but most often includes more than one. A designated communication site provides the leaseholder more flexibility to manage other communication facilities on the site.

Developed Camping: Camping at sites adjacent to or accessible by roads and including some level of amenities, for example, Dolly Copp, Jigger Johnson, Wild River campgrounds or identified roadside sites such as along the Gale River Road.

Dirt/Trail Bike: Any motor-driven wheeled vehicle on which there is a saddle or seat for the operator or passenger or both and which is designed or adapted for travel over surfaces other than maintained roads, including bare ground, ice, or snow. See also Off Highway Recreational Vehicle.

Dispersed Campsite Inventory: A compilation of the several backcountry dispersed site inventories (AMC and WMNF) as well as the several phases of the Forest backcountry dispersed site inventories.

Dispersed Campsites: Backcountry sites, generally without facilities, and often user-developed, used for overnight camping.

Diurnal Security Habitat (Lynx): In lynx habitat, areas that provide secure winter daytime bedding sites for lynx in highly disturbed landscapes, e.g., large developed winter recreational sites or areas of concentrated winter recreational use. Security habitat will provide lynx the ability to retreat from human disturbance during winter daytime hours, emerging at dusk to hunt when most human

activity ceases. Security habitats will generally be sites that naturally discourage winter human activity because of extensive forest floor structure, or stand conditions that otherwise make human access difficult, and should be protected to the degree necessary. Security habitats are likely to be most effective if they are sufficiently large to provide effective visual and acoustic insulation from winter human activity and to easily allow movement away from infrequent human intrusion. These winter habitats must be distributed such that they are in proximity to foraging habitat.

Draft Proposed FSORAG (Forest Service Outdoor Recreation Accessibility Guidelines as revised): Applies to newly constructed and altered camping facilities, picnic areas, and beach access and outdoor recreation access routes and other constructed features including benches, trash/recycling containers, viewing areas at overlooks, telescopes and periscopes, mobility device storage, pit toilets, warming huts, and outdoor rinsing showers.

Draft Proposed FSTAG (Forest Service Trail Accessibility Guidelines as revised): Applies to all levels of difficulty and settings, recognizes and preserves the uniqueness of each recreation area, through the use of exceptions and deviations, when application of the accessibility standards will cause a change in the area's setting. Compliance with the FSTAG and FSORAG will not always result in facilities that will be accessible to all persons with disabilities because they recognize that at some locations the natural environment or historic features will prevent full compliance with certain technical provisions.

Early-successional Forest Habitat: Forest habitat that is comprised primarily of tree species that require an open canopy and high levels of light and that typically colonize an area after stand-replacing disturbance (e.g. aspen-birch forest).

Early Successional Species: Those plant or animal species characteristic of early forest successional stages.

Ecological Land Type (ELT): An area of land 100s to low 1,000s of acres in size with a well-known succession of forest species on unique soil materials. Ecological Land Type classification is based on geomorphic history, nature of soil substrata, and potential natural vegetation.

Ecological Potential: The highest ecological status an area can attain, given no political, social, or economic constraints.

Ephemeral stream: A watercourse or portion of stream which flows briefly in direct response to precipitation or snowmelt in the immediate area.

Equal Access: Defined by the Forest Service (FSH 1709.11, R9 Supplement 1709.11-2000-1) as providing Forest Service opportunities in which all people can participate in the most independent and integrated way possible, which does not fundamentally alter the program, and is in accordance with the Forest Land and Resource Management Plans and Wilderness Management Plans.

Even-Aged Harvest: See Even-Aged Management.

Even-Aged Management: A timber management system that results in the creation of stands in which trees of essentially the same age grow together. Cutting methods producing even-aged stands are clear cut, shelterwood, or seed tree.

Even-Aged Regeneration Harvest: Cutting method that produces even-aged stands; clearcut, shelterwood, or seed tree.

Existing and Designated Uses: Existing uses refers to uses, other than assimilation or waste disposal, which occur in a surface water. Designated uses are those uses specified in water quality standards for each surface water or segment, whether or not such uses are presently occurring. Examples include fisheries, drinking water, and recreational uses such as swimming.

Exploration (Minerals): Establishing the location, size, grade, or reserves of a mineral or energy resource by gathering direct evidence of the resource. Direct data gathering techniques may include drilling holes, digging pits, and driving adits and drifts to sample, or test, a known suspected zone of interest.

Fixed Protection (Climbing): In climbing, permanent or semi-permanent installations placed to protect a leader or provide an anchor. Common examples of fixed protection include 3/8" stainless steel masonry bolts with hangers, pitons (which are metal pins with eye holes that are hammered into cracks in the cliff face), and nylon webbing tied around trees or looped around blocks. The first ascent party usually places fixed protection. It is considered unethical for subsequent parties to add or remove fixed protection placed on the first ascent.

Foot Travel: Non-motorized travel, which includes the use of devices meeting the definition of a wheelchair. There are numerous gates that close Forest roads to unauthorized motor vehicles that currently bear signs stating "foot travel is welcome" on that road. This does not preclude use by those with a device which meets the wheelchair definition, including a motorized wheelchair.

Foraging Habitat (Lynx): Habitat that supports primary prey (snowshoe hare) and/or important alternate prey (especially red squirrels) which are available to lynx. The highest quality snowshoe hare habitats are those that support a high density of young trees or shrubs, tall enough to protrude above the snow. These conditions may occur in early successional stands following some type of disturbance, or in older forests with a substantial understory of shrubs and young conifer trees. Coarse woody debris, especially in early successional stages provides important cover for snowshoe hares and other prey. Red squirrel densities tend to be highest in mature cone-bearing forests with substantial quantities of coarse woody debris.

Forest Land: Land that is at least 10 percent occupied by forest trees of any size or formerly having had such tree cover and not currently developed for non-forest use.

Forest Productivity: The amount of living biomass (weight of above ground wood) present on an acre of forest land when measured at different time intervals, e.g., every five years. This is also known as net productivity.

Forest Protection Area (FPA): Potentially overused or fragile areas of the Forest where use restrictions are applied. The specific areas classified as FPAs are established by Forest Supervisor's Orders and will vary from year-to-year as new areas of concern are identified or problems are corrected. Restrictions may include

limits on camping, use of wood or charcoal fires, and limits on party size. FPAs were called Restricted Use Areas (RUAs) in the 1986 Forest Plan.

Forest Supervisor's Orders: Forest Supervisors may issue orders that will close or restrict activities or the use of certain areas if the need arises. Such orders may be posted so that visitors to the National Forest can reasonably be expected to be familiar with them. Copies of the orders will be available in the offices of Forest Supervisors and District Rangers.

Forest Trail System: Trails identified in the White Mountain National Forest infrastructure database.

Forest Transportation Facility: A classified road, designated trail, or designated airfield, including bridges, culverts, parking lots, log transfer facilities, safety devices and other transportation network appurtenances under Forest Service jurisdiction that is wholly or partially within or adjacent to National Forest System lands (36 CFR 212.1).

Forest Transportation System Management: The planning, inventory, analysis, classification, record keeping, scheduling, construction, reconstruction, maintenance, decommissioning, and other operations undertaken to achieve environmentally sound, safe, cost-effective, access for use, protection, administration, and management of National Forest System lands.

Frontcountry: Day use areas such as picnic areas, swimming areas, boat ramps, and overlooks. Also trails where shorter day hikes are common.

FSORAG: See Draft Proposed FSORAG.

FSTAG: See Draft Proposed FSTAG.

Geocaching: A sport where individuals and organizations set up caches using Geographic Positioning System (GPS) coordinates and shares the locations of these caches on the Internet. GPS users can then use the location coordinates to find the caches. Geocachers are expected to leave something for the cache.

Geocaching, Multi-Caches: The first cache gives coordinates (or partial coordinates) to the next location, or multiple caches have hints to the final cache.

Geocaching, Offset Cache: The published coordinates are for an existing historical monument, plaque, or benchmark with offset numbers stamped or written in or on some part of the marker site. Geocachers use the offset numbers or other instructions to continue the search.

Geocaching, Virtual Cache: The cache is actually an existing landmark, such as a tombstone or statue. Answering a question about the landmark proves the geocacher was there.

Glade Skiing (Alpine Skiing): An area where up to 1/3 of the trees are removed to enable skiing within a designated area. See also Use Cycle Approach.

Goals: Broad statements that describe conditions the Forest will strive to achieve through implementation of the Forest Plan. They are generally timeless and not measurable, and their achievement is not required. Goals should be considered when planning projects and activities, and management should move the Forest toward these desired goals.

Goods and Services: The various outputs, including on-site uses, produced from forest and rangeland resources.

Group Selection: The uneven-aged-cutting method that describes the silvicultural system in which trees are removed periodically in small groups, resulting in openings that do not exceed an acre or two in size. This leads to the formation of an uneven-aged stand, in the form of a mosaic of age class groups in the same stand. It may be applied in combination with single-tree selection.

Guide/Guiding (Special Uses): Providing services or assistance (such as supervision, protection, education, training, packing, touring, subsistence, interpretation, or other assistance to individuals or groups in their pursuit of a natural resource based outdoor activity) for pecuniary remuneration (monetary reward) or other gain. The term "guide" includes the permit holder's employees, agents, and instructors (WO Amendment 2709.11-95-11, 41.53c).

Guidelines: A required course of action or level of attainment. It is intended to move the Forest toward desired conditions in a way that permits operational flexibility to respond to variations in conditions. Guidelines can be modified or not implemented if site-specific conditions warrant a deviation. The rationale for deviating from a guideline must be documented in a project-level analysis and signed decision.

Habitat Connectivity (Lynx): Vegetative cover in sufficient quantity and arrangement to allow for the movement of lynx. Lynx tend to use ridges, saddles, and riparian corridors to move between larger areas of suitable habitat.

Habitat Management Unit (HMU): A block of Forest land in which habitat composition and age class objectives will be established to help ensure that habitats are well-distributed across the Forest and provide a framework for analyzing project impacts to wildlife habitat at a local scale. Blocks vary in size from about 6,000-49,000 acres, and contain a variety of habitat types and land in a mix of Management Areas.

Heritage Property: Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in the National Register of Historic Places. The term includes artifacts, records, and remains that are related to and located within such properties.

Highway: A road that is at least 2 lanes wide, paved with asphalt or concrete. Average daily traffic may exceed 5,000 vehicles and speeds are 45 MPH or greater.

"hikeSafe": A joint initiative between the White Mountain National Forest and NH Fish and Game Department to promote responsible and safe hiking practices. hikeSafe uses the Hiker Responsibility Code to encourage hikers to take personal responsibility and be prepared for their hike. A long-term goal of hikeSafe is to reduce the need for search and rescue services.

Hut (Appalachian Mountain Club): A type of backcountry facility (see photo)

AMC's Greenleaf Hut near Franconia Ridge. (WMNF Photo)

Hydrologic Modification: For the purposes of watershed analysis reports, hydrologic modification refers to changes to a watersheds hydrologic response that are caused by roads and dams.

Hydrologic Unit: An area of land above or upstream from a specific point on a stream (designated as the watershed mouth or outlet), which is defined by a hydrologic boundary that includes all of the source area that could contribute surface water runoff directly and indirectly to the designated outlet point. A hydrologic unit may also contain associated surface areas such as unconsolidated, noncontributing, and trans-basin diverted areas. (From Interagency Guideline on Delineation of Watershed and Subwatershed Hydrologic Unit Boundaries, USGS.)

Ice Climbing: The activity of climbing up frozen water flows using crampons and one or two ice axes. The rope systems used are the same as for rock climbing, however, the type of protection most commonly used is different. Most ice protection is in the form of an ice screw wound into the ice by the leader and remove by the second, following climber. Rock protection is also used when available and the use of fixed protection, usually in the form of pitons, is common.

Inconsistencies with Recreational Opportunity Spectrum: See Recreational Opportunity Spectrum.

IMPLAN®: An economic impact assessment modeling system. IMPLAN allows the user to easily build economic models to estimate the impacts of economic changes in their states, counties, or communities

Incidental Timber Harvest: Refers to quantities of timber harvested in relatively minor amounts for reasons other than general vegetation management activities.

Incidental Trail: A non-constructed path, created incidentally by the passage of visitors, which is discernible and not likely to recover naturally within one year. Incidental trails are not part of the Forest Trail System and are not maintained by the Forest, nor are they authorized for maintenance by cooperator groups or Forest visitors.

INFRA: Short for Infrastructure, an integrated data management tool where Forests can enter, manage, and report information and associated financial data on the inventory of their constructed features such as buildings, dams, bridges, water systems, roads, trails, developed recreation sites, administrative sites, heritage sites, general forest areas, and Wilderness.

Integrated Pest Management: A process for selecting strategies to regulate forest pests in which all aspects of a pest-host system are studied and weighed. The information considered in selecting appropriate strategies includes the impact of the unregulated pest population on various resources values, alternative regulatory tactics and strategies, and benefit/cost estimates for these alternative strategies. Regulatory strategies are based on sound silvicultural practices and ecology of the pest-host system and may consist of a combination of tactics such as timber stand improvement plus selective use of pesticides. A basic principle in the choice of strategy is that it be ecologically compatible or acceptable.

Interconnected Snowmobile Trail System (ITS): Snowmobile corridor trails in Maine.

Intermediate Cutting: Any removal of trees from a stand between the time of its formation and the regeneration cut. Most commonly applied intermediate cuttings are release, thinning, improvement, and salvage.

Intermittent Stream: A watercourse that only flows at certain times of the year, when it receives water from some surface source (rainfall or snowmelt) or from the intermittent spring, and ceases to flow during other periods of the year.

Interpretation: Communication and education that forges emotional and intellectual connections between the interests of the audience and the inherent meanings in the resource.

Interrupted Snowmobile Use Trail: A trail that may be temporarily closed due to other management actions, usually timber sale operations.

Invasive Species: A species that is 1) non-native (or alien) to the ecosystem under consideration, and 2) whose introduction causes, or is likely to cause, economic or environmental harm or harm to human health (Ex. Order 13112, Appendix 1).

Invasive Species, Approaches:

Contain: Prevent the spread of the invasive species beyond the perimeter of patches or infestation areas established. Tolerate invasive species within established infestation areas, but suppress or eradicate outside those areas.

Eradicate: Totally eliminate an invasive species from the Forest or location. Eradication methods may include the following, either individually or in combination:

Suppress: Prevent reproduction throughout the target area and reduce the area coverage of the invasive species. Prevent the invasive species from dominating the area but accept low levels.

Invasive Species, Methods of Control:

Biological: The deliberate introduction and establishment of natural enemies to reduce the target species' competitive or reproductive capacities. Includes but is not limited to insects and pathogens such as fungi. The purpose is not eradication, but to reduce densities and rate of spread to an acceptable level.

Chemical: Direct and broadcast application of approved herbicides, following EPA label requirements, USDA policy, and Forest Service policy and direction (e.g. FSM 2150 Pesticide-Use Management and Coordination; FSH 2109.11 Pesticide Project handbook; FSH 2109.12 Pesticide Storage, Transportation, Spills, and Disposal Handbook; and FSH 2109.13 Pesticide Project Personnel Handbook).

Cultural/Land Use: Practices that discourage initial infestation of invasive species. Includes but is not limited to seeding, planting and retaining brush and tree canopy cover, and minimizing the extent and duration of exposed soil during management actions.

Physical/Mechanical: Hand or mechanical labor to physically remove all or any part of the plant. Includes but is not limited to hand digging, mowing, tilling, and burning.

Key Linkage Area (Lynx): Critical areas of lynx habitat to allow movement between areas of suitable habitat. Usually, the factors placing connectivity at risk are highways or private land developments.

Knutson-Vandenberg Act (KV): Federal law (16 USC 576) authorizing the U.S. Forest Service to collect money from a timber sale for resource enhancement, including seeding, planting, and cutting or removing undesirable growth on national forest lands determined to be in need of reforestation.

Land Capability: Inclination of an area to grow a particular broad community (i.e. hardwoods, spruce-fir), due to soil, climate, and geology, if management were not applied. In many places on the Forest, the current community is different from land capability (as indicated by the Ecological Landtype) for the same area because past management altered the vegetation on the site. Given enough time without additional management, the vegetation will revert to the community indicated by land capability.

Land Type Association (LTA): A broad ecological classification reflecting general differences in geomorphic processes, forest composition, and landscape position. Each of the LTAs on the WMNF (Valley, Upper Mountain, Mountain and Valley) is comprised of a unique set of Ecological Land Types.

Lead Climbing (Climbing): The process of climbing a feature from the ground up, using rope and fixed or removable protection to provide some margin of safety for the lead climber. The lead climber attaches the rope to each protection point with a carabiner (an aluminum snap link) as he or she ascends. The leader must then climb above that protection until another protection point is reached. After reaching the top of the climb or the end of a rope length (standard of 50 meters, about 165 feet, but increasing numbers are using 60 meter ropes, about 200 feet), the leader anchors him/herself and belays the second climber (formerly the belayer) up the route. The second removes any clean protection the leader placed along the way. Since the leader must constantly climb above protection, the potential exists for falls (sometimes long falls) to take place if the climber fails to hold on. Thus the risk of injury in lead climbing is greater than with top roping.

Leasable Minerals: These include coal, oil, gas, phosphate, sodium, potassium, oil shale, and geothermal steam (FSM 2811.2). The leasable solid minerals (other than coal) are generally minerals that are found in bedded deposits, which means that they lie in seams or beds which have lateral extent. The main types of leasable minerals are: chlorides, sulfates, carbonates, borates, silicates, and nitrates of potassium (potash) or sodium and related products; sulfur; phosphate and its associated and related minerals; asphalt; and gilsonite. These minerals are leasable on both public domain and acquired lands. If deposits are known to exist and to be economically workable, leases are sold competitively. If deposits are not known, a prospecting permit can be obtained on a first-come, first-served basis, which allows the permittee to explore for the mineral. If the mineral is then found in commercial quantities, a preference right lease can be issued to the permittee. Royalties must be paid on all producing leases. The regulations governing these minerals are found in the 43 CFR 3500 regulations.

Lease: A type of special use authorization that is used when substantial capital investment is required and when conveyance of a conditional and transferable interest in National Forest lands is necessary or desirable to serve or facilitate authorized long-term uses. A lease may be revoked with due process and may be transferred or assigned according to its terms.

Leave No Trace: A program supported by the nonprofit Leave No Trace Center for Outdoor Ethics in partnership with public and private land managers to promote and inspire responsible outdoor recreation through education and research. Four Federal land management agencies, including the USDA Forest Service, actively promote the Leave No Trace principles of responsible, low-impact use to build awareness, appreciation, and respect for our wildlands.

Locatable Minerals: In general, the locatable minerals are those hardrock minerals which are mined and processed for the recovery of metals. They also may include certain nonmetallic minerals and uncommon varieties of mineral material, such valuable and distinctive deposits of limestone or silica. Locatable minerals may include any solid, natural inorganic substance occurring in the crust of the earth, except for the common varieties of mineral materials and leasable minerals. Hardrock (Locatable) Minerals are typically metals that have a unique or special use. Examples include, but are not limited to copper, lead, zinc, magnesium, nickel, tungsten, gold, silver, bentonite, uranium, barite, feldspar, and fluorspar. In terms of use authorization, hardrock minerals are leasable on U.S. Forest Service (USFS) acquired lands and locatable on public domain lands. A claim can be staked for locatable minerals. There is no legal access to hardrock minerals on non-USFS-acquired lands. On USFS acquired lands, if deposits are known to exist and to be economically workable, leases are sold competitively. If deposits are not known, a prospecting permit can be obtained on a first-come, first-served basis, which allows the permittee to explore for the mineral. If the mineral is then found in commercial quantities, a preference right lease can be issued to the permittee. Royalties must be paid on all producing leases. The regulations governing these minerals are found in 43 CFR 3500.

Long-Term Sustained Yield Capacity (LTS): The highest uniform wood yield from lands being managed for timber production that may be achieved and sustained under a specified intensity of management consistent with multiple use objectives.

Lynx Analysis Unit (LAU): A project analysis unit upon which direct, indirect, and cumulative effects analyses are performed. LAU boundaries should remain constant to facilitate planning and allow effective monitoring of habitat changes over time. An area of at least the size used by an individual lynx, about 25-50 square miles.

Lynx Habitat: Lynx habitat in the Northeast includes coniferous and mixed coniferous/deciduous vegetation types dominated by spruce, balsam fir, pine, northern white cedar, hemlock, aspen, and paper birch. It includes consideration of both foraging habitat and denning habitat. Lynx habitat may be categorized as suitable or unsuitable. Suitable habitat is the condition in which vegetation is of the appropriate type and age class to support foraging habitat, denning habitat,

or both. Unsuitable lynx habitat is generally of an appropriate forest type, but is not of the appropriate age class to be considered usable for lynx foraging or denning. On the White Mountain National Forest, habitat is also categorized as unsuitable if it is encompassed within an Ecological Land Type that supports softwoods as the climax forest type. These stands typically have suitable softwood understories, but are overtopped by hardwoods or paper birch overstories. Because the stand database uses overstory forest type to categorize stands, these stands would not be selected as suitable lynx habitat in a query, but they generally provide suitable habitat conditions for snowshoe hare. They are considered unsuitable for the overall Forest mapping exercise until specific site reviews verify that the understory in a particular stand is of sufficient density to support snowshoe hare.

Lynx, Authorized Winter Route/Use Area: Any other route/area, not identified above, that is specified in an outfitter/guide permit or special use permit, for over the snow recreation purposes or other such activities. This item does not include alpine ski areas or identified "core areas" within Nordic ski areas, nor does it apply to access to private land.

Lynx, Designated Winter Route: Routes or trails (linear travel corridors) that are identified by signing, trail markers of any kind, or are shown on maps, brochures, recreation opportunity guides, or electronic media produced or approved by the Forest Service. Routes not specifically designated for winter use, but that may be used during the winter (e.g. hiking trails) are not considered a designated winter route.

Lynx, Groomed Winter Route: A route or trail, usually intended for snowmobile, dog sled, snowcat, or cross-country skiing, on which the snow surface is packed or leveled, with or without set tracks, usually by means of equipment towed behind a snowmobile or snowcat. Most such routes or trails are maintained through agreements with snowmobile clubs, permit holders, event holders, and others for varying periods of time during the winter months.

Management Area (MA): The grouping of land areas allocated to similar management goals such as Management Area 6.2 that puts emphasis on a non motorized dispersed recreation management goal.

Management Concern: An issue, problem, or a condition which constrains the range of management practices identified by the Forest Service in the planning process.

Management Direction: A statement of multiple-use and other goals and objectives, the associated management prescriptions, and standards and guidelines for attaining them.

Management Intensity: A management practice or combination of management practices and associated costs designed to obtain different levels of goods and services.

Management Practice: A specific activity, measure, course of action, or treatment.

Management Prescription: Management practices and intensity selected and scheduled for application on a specific area to attain multiple-use and other goals and objectives.

Mature Forest Habitat: Stands in which the overstory is in the mature age class. Mature forest habitat is typically made up of trees that are eight inches or more in diameter. Mortality is just beginning in these stands, resulting in a few scattered canopy gaps and a small number of snags and cavities in the overstory. Most snags and down logs are small in diameter and within the intermediate or understory layers. Depending on site conditions, thinning and uneven-aged harvest methods can be used in this habitat without negatively impacting habitat quality. Some uneven-aged harvest may enhance vegetative and structural diversity.

MBF (Thousand Board Feet): A measure of one thousand board feet of wood fiber volume either in log form or after conversion into lumber.

MCF (Thousand Cubic Feet): A measure of one thousand cubic feet of wood volume.

Mean Annual Increment of Growth (MAI): the total increase in girth, diameter, basal area, height or volume of individual trees or a stand up to a given age, divided by that given age.

Mineral Weathering: The slow release of elements from mineral soil, pebbles, stones and boulders over time that contribute to forest soil nutrition.

Minimum Flow Requirements: The lowest discharge permissible in a river or stream, after withdrawals, below which no removal of water is allowed.

Minimum Tool Concept: A two-step decision making process used to determine the least intrusive method of accomplishing a proposed action in Wilderness. The first decision determines if the proposed action is needed and necessary in Wilderness. If it is considered necessary, the second step leads to selection of the management action (or method) which will have the least amount of biophysical and experiential impact on Wilderness. Cost and convenience are not deciding factors in determining the minimum requirement.

Mixed Climbing (Climbing): A combination of ice and rock climbing. A typical mixed route requires the climber to use crampons and ice axes on rock edges and flakes to climb up to or past a section of ice.

Mixedwood Forest Habitat: Also referred to as hardwood-softwood forest habitat. Forest habitat in which the canopy is comprised of a mix of northern hardwoods and hemlock, pine, spruce, or fir. Typically this is a northern hardwood stand with at least 25% made up of softwood species. For implementation purposes, this habitat is usually typed as forest type 87 in the CDS database, but stand conditions, not typing in CDS should be relied on to define habitat.

MMBF (Million Board Feet): A measure of one million board feet of wood fiber volume either in log form or after conversion into lumber.

Mobility Device: See Wheelchair.

Mobilize: An ion dissolved into water is transported with the water thereby entering ground and surface waters.

Montane Circumneutral Cliff Community: An outstanding natural community in which seepage from the cliff face has a pH of 6.5 or greater, and plants include calciphile lichens, bryophytes, and plants, such as *Dryopteris fragrans* and *Woodsia glabella*.

Motorized Administrative Use: Use of vehicles such as snowmobiles, ATVs, helicopters, etc. for transportation in the WMNF where Forest-wide or MA direction does not allow public motorized access. Motorized administrative use includes emergency use (e.g., fire, search and rescue) as well as project-related motorized administrative use (e.g., access for timber marking crews, summer work on snowmobile trails, access for maintenance of wildlife openings, packing/grooming of cross-country ski trails) by Forest Service employees, permit holders, and partners.

Motorized Trails: Travel trails designated for Off Highway Recreational Vehicle use.

Motorized Use: Use of vehicles such as snowmobiles, ATVs, helicopters, etc. for transportation on the WMNF by the general public. In Wilderness, this term also refers to any motor-powered implement such as chainsaws, power drills, etc.

Mudding: ATV Riders preferring short wet runs that challenge machines and operators' skills. The riding challenge is more important than the natural setting. This activity does not require trail systems and often takes place as parts of events and rallies.

Multiple Use: Managing National Forest resources in a manner to best meet the needs of the American people, recognizing that not all uses can occur on all acres and that changing needs and conditions over time will change the combination and intensity of use. Productivity of the land and sustainability of ecosystems is maintained, and the interrelationships among resources and the effects of use are monitored and evaluated. Multiple use management does not necessarily prescribe the combination of uses that will give the greatest dollar return or the greatest unit output.

National Forest System (NFS) Road: A classified forest road under the jurisdiction of the Forest Service. The term "National Forest System road" is synonymous with, and replaces, the term "forest development road" as used in 23 U.S.C. 205.

Native Materials: Materials that are gathered on-site. Dimensional lumber is considered non-native material.

Native Species: A species or genotype that is naturally found in local ecosystems.

Natural Community: A system of interacting plants and their common environment, recurring across the landscape, where the effects of human intervention are minimal.

Natural Disturbance: A change in vegetative composition, age class, or structure due to natural occurrences, such as wind, fire, or landslides that are not caused or directly affected by human activity.

Navigable Waters: Navigable streams or waters are those which are used, or are susceptible of being used in their ordinary condition, as highways for commerce, over which trade or travel is or may be conducted. Does not apply to streams or waters which are used merely as public highways for floating logs.(TITLE XXII, 271.9, PILOTS, HARBOR MASTERS, AND PUBLIC WATERS, NH Revised Statute).

Nephelometric Turbidity Unit (NTU): The measure of how cloudy a water sample is by using a nephelometer using the optical property that causes light to be scattered and absorbed.

Net Public Benefits: An expression used to signify the overall long-term value to the nation of all outputs and positive effects (benefits) less all associated inputs and negative effects (costs) whether they can be quantitatively valued or not. Net public benefits are measured by both quantitative and qualitative criteria rather than a single measure or index. The maximization of net public benefits to be derived from management of units of the National Forest System is consistent with the principles of multiple use and sustained yield management.

No-Disturbance Buffer: An area around protected raptor nests in which management or other activities that would negatively impact nesting success would be prohibited. What activities would be restricted and how large the buffer should be varies depending on proximity, topography, vegetation, and other factors that amplify or deaden sound.

Non-Forest Land: Lands never having or incapable of having 10 percent or more of the area occupied by forest trees, or lands previously having such cover and currently developed for non-forest use.

Non-Motorized Snow Sports: Any pedestrian-based recreation that takes place on snow, such as skiing, sledding, snowboarding, or snowshoeing.

Nonpoint sources: Diffuse flows of pollutants that can enter a water resource feature at many points.

Non-Recreation Special Use Permits: A general definition other than the recreation class of special uses. These include agriculture, community and public information, feasibility, research, training, cultural resources and historical classes, etc.

Northern Hardwood Forest Habitat: Forest habitat in which the canopy is comprised almost entirely of deciduous hardwood trees, such as sugar maple, American beech, yellow birch, etc. For implementation purposes, this habitat includes forest types 76, 81-86, 88-89 in our CDS database, but stand conditions, not typing in CDS should be relied on to define habitat.

Northern White Cedar – Hemlock Swamp: Natural community dominated by northern white cedar, with abundant hemlock, red maple, and seepage indicators. It is usually found in headwater areas influenced by groundwater seepage (Sperduto and Nichols 2004).

Northern White Cedar Seepage Forest: Natural community dominated by northern white cedar that occurs in the seasonally saturated transition zone between upland forest and swamps or along drainages. It typically has a closed canopy, sparse understory, limited moss cover, and moderate levels of upland herbs, including rich-site species (Sperduto and Nichols 2004).

Not Appropriate Forest Land: Lands not selected for timber production in the Forest Plan due to: (a) the multiple use objectives preclude timber production; (b) other management objectives limit timber production activities to the point where management requirements set forth in 36 CFR 219.27 cannot be met; and (c) the lands are not cost efficient over the planning horizon in meeting Forest objectives that include timber production. Lands not appropriate for timber production shall be designated as unsuitable in the Forest Plan.

Nuisance Wildlife: An individual animal whose regular visits to a recreation area involve theft of food, destruction of property, or aggressive behavior toward people.

Oak-Pine Forest Habitat: Forest habitat in which the canopy is comprised primarily of oak or pine species. For implementation purposes, this habitat includes forest types 2-3, and 41-55 in our database, but stand conditions, not typing in CDS should be relied on to define habitat.

Objectives: Are measurable accomplishments intended to move the Forest towards the desired conditions described in the goals. Objectives are generally achieved through site-level projects or activities. However they are not the same as "targets," which are dependent on budgets and their accompanying direction.

Off Highway Recreational Vehicle (OHRV): OHRVs are any motorized vehicles used for pleasure or recreational purposes on any unimproved terrain. OHRVs may run on tires, belts, cleats, tracks, skis or cushions of air. All conventional motorized vehicles, when used for off-highway recreational purposes, are considered an OHRV. Any motor-driven wheeled vehicle on which there is a saddle or seat for the operator or passenger, or both, and which is designed or adapted for travel over surfaces other than maintained roads, whether on bare ground or covered by ice or snow. OHRVs include ATVs, snowmobiles, 4X4 off-highway vehicles, and dirt/trail bikes. See also All Terrain Vehicle, Snowmobile, 4X4 Off Highway Vehicle, and Dirt/Trail Bike.

Off-Trail Use Objective: The stated intent of a hiking trip is to avoid the use of trails, as in bushwhacking or orienteering.

Old Forest Habitat: Desired habitat conditions start with those for mature forest and can include greater size, decadence, structural complexity, etc. No harvest will occur in stands identified to provide old forest habitat.

Old Growth Enriched Upland Forest Community: A forest 200+ years old with abundant sugar maple and two or more of the following site indicator species: blue cohosh, ostrich fern, maidenhair fern, sweet cicily, Dutchman's breeches, baneberry, foamflower, hepatica, wood nettle, round-leaved violet, jack-in-the-pulpit, zig-zag goldenrod, ginseng, or alternate leaved dogwood. These may occur in areas of calcium-rich mineral soil or at the base of steep slopes or ledges, where organic material may accumulate and contribute to enrichment.

Old Growth Forest: Uneven-aged (three or more age classes) forest with an abundance of trees at least 200 years old, multiple canopy layers, large diameter snags and down logs, and a forest floor exhibiting pit-and-mound topography. There should be little or no evidence of past timber harvest or agriculture. Northern hardwood old growth consists primarily of sugar maple and American beech; softwood old growth is largely made up of spruce and hemlock. Stands need to be at least 10 acres in size to be identified as old growth. Anything smaller is a patch of old trees within a younger stand, not a habitat type in its own right.

The Optimal Location Review (OLR): The defined, cooperative process for systematically and objectively determining the best location for the Appalachian National Scenic Trail. The process is described in detail in Appendix I of the A.T. Local Management Planning Guide.

Outfitter (Special Use): Providing through rental or livery any saddle or pack animal, vehicle or boat, tents, or camp gear, or similar supplies or equipment, for pecuniary remuneration (monetary reward) or other gain. The term "outfitter" includes the permit holder's employees, agents, and instructors (WO 2709.11-95-11, 45.3c). Sometimes called "service permits."

Outstanding Mineral Rights: Rights owned by a party other than the surface owner at the time the surface was conveyed to the United States. There is usually no contractual or other legal relationship between the United States and the owner of the outstanding mineral rights.

Outstanding Natural Community: Rare community in need of special consideration to ensure its long-term conservation.

Patch Cutting: A term used to describe a cutting system used in even-aged management. It defines a clearcut 2 to 10 acres in size.

People At One Time (PAOT): A recreation capacity determination expressed in number of people. For developed sites, it is determined by multiplying 5 people per camp or picnic site by the total number of sites in the campground or picnic ground.

Perennial Streams: Permanently present surface water. Flows occur throughout the year, except possibly during extreme drought or during extreme cold when ice forms.

Personal Use (Minerals): Recreational mineral activities which contribute to the personal enjoyment of mineral collecting as a leisure activity and not for the purpose of realizing personal financial gain either through the sale of the material or through an exchange for other goods or services. The exchange of mineral specimens and/or the fabrication by the collector of functional or decorative items from the collected material and the disposal of same are not considered to constitute a commercial activity as long as the motive for doing so is the further enjoyment of a leisure activity and not for profit.

Pitch Pine – Scrub Oak Woodland: A patchy natural community characterized by an irregular canopy of pitch pine over a dense layer of scrub oak and low heaths, such as lowbush blueberry and bearberry. Occurrences may include a mix of pockets of pitch pine forest, scrub oak thicket, heath barren, and grassy openings, as well as areas where all these species occur simultaneously. Fire disturbance is important to maintaining this community (Sperduto and Nichols 2004).

Planning Area: The area of the National Forest System covered by a Regional Guide or Forest Plan.

Planning Horizon: The overall time period considered in the planning process that spans all activities covered in the analysis or plan and all future conditions and effects of proposed actions which would influence the planning decisions.

Point Sources: Discrete controlled flows of pollutants entering a stream through a pipe, well-defined channel, or other conveyance.

Prescribed Fire: Any fire ignited by management actions to meet specific objectives. A written, approved prescribed fire plan must exist, and NEPA requirements (where applicable) must be met prior to ignition.

Present Net Value: Synonymous with Net Present Value. The difference between the discounted value (benefits) of all outputs to which monetary values or established

market prices are assigned and the total discounted costs of managing the planning area.

Proper Functioning Condition: A riparian-wetland area is considered to be in properly functioning condition when adequate vegetation, landform, or large woody material is present to

- dissipate stream energy associated with high water flow, thereby reducing erosion and improving water quality,
- filter sediment, capture bedload, and aid floodplain development,
- improve flood water retention and ground water recharge
- develop root masses that stabilize streambanks against cutting action,
- develop diverse ponding and channel characteristics to provide habitat and the water depth, duration, and temperature necessary for aquatic life forms, and to
- support greater biodiversity.

Prospecting (Minerals): Delineation of an area in which exploration would follow by gathering indirect evidence of mineral or energy resources. Indirect data gathering techniques include, but are not limited to: conducting geophysical or geochemical surveys, sampling outcrops, geologic mapping, and drilling holes to gather general geologic or stratigraphic information.

Public Water Supply: As defined in the Safe Drinking Water Act, have at least 15 service connections or serve at least 25 people per day for 60 days of the year. Public water supplies will be identified using New Hampshire and Maine inventories. Additional public water supplies may be identified provided the criteria above are met.

Pulpwood: Wood cut and prepared primarily for manufacture into wood pulp.

"Q" Factor: A method used in uneven-aged timber management to express the desired number of trees by diameter class. A "Q" factor of 1.5 means that each diameter class would have 1.5 times the number of trees than the next highest diameter class.

Recreation Events Special Use Permits: A special use designation within the Recreation Special Use category of "Facility Related Activities". Recreation events include organized events of a temporary nature, such as animal, vehicle, or boat races; fishing contests; rodeos; adventure games; and fairs (SFSM 2721.49)

Recreation Opportunity Spectrum (ROS): A system that provides a framework for defining the different types of outdoor recreation opportunities the pubic might desire. The spectrum describes six different outdoor recreation opportunity classes: Primitive, Semi-Primitive Non-Motorized, Semi-Primitive Motorized, Roaded Natural, Rural, and Urban. The ROS defines and integrates a range of outdoor settings with recreation activities allowed in management areas. For example, motorized use is not allowed in a non-motorized ROS class.

Recreation Opportunity Spectrum (ROS) Inconsistency: When a particular aspect of the physical, social, or managerial setting does not match the overall ROS objective of a particular area. Some inconsistencies are present at the time of ROS inventory, and others may appear after the inventory.

Recreation Permits (Special Use): a class of special use permits for recreation uses that serve the public, protect public health and safety, and protect the resource. (FSM 2720) These include such categories as group use, facility related activities, and winter recreation. Within each of these categories there could be several "designations" of special use permits.

Reforestation: The renewal of forest cover either by seeding, planting, or natural means.

Regeneration Forest Habitat: Forest in which almost all the trees are 0-9 years old with less than 30 square feet of basal area in a mature overstory. Can be created through natural disturbance (e.g. wind, fire) or the following silvicultural treatments: clearcutting, seed tree harvest, and shelterwood harvest to 30 basal area or less or with removal harvest within 10 years of original harvest.

Regeneration Habitat: Habitat resulting from the renewal of a crop of trees by either natural or artificial means.

Regeneration Harvest: A timber harvest that removes selected trees in the existing stand to a density that allows for the establishment of a new stand.

Regulated Harvest: The volume scheduled in calculations of the allowable sale quantity which is harvested from suitable commercial forest land.

Removable (or Clean) Protection (Climbing): Equipment designed to be removed after each ascent without altering the rock. Technology has provided more secure removable protection in the form of spring loaded camming devices, tapered wedges known as "nuts" or "chocks," passive camming devices, and slings temporarily placed over flakes or horns. Clean protection currently requires some type of naturally-occurring break, crack, or other rock feature for placement. Smooth, blank faces cannot currently be protected without drilled, fixed protection.

Research Natural Area (RNA): Area on National Forest System lands designated to be permanently protected and maintained in a natural condition to preserve and maintain landscape scale, ecosystems, and species diversity, and to serve as baselines for comparison to manipulated ecosystems.

Reserved Minerals: Mineral rights retained by grantor in a deed conveying land to the United States.

Resource Advisor: The person primarily responsible for identifying and evaluating potential impacts of fire operations on natural and cultural resources, and for promoting excellence in the integration of resource concerns (1996 Resource Guide, PMS 313, NFES 1831). Resource advisors have the expertise to help minimize impacts of fire management and are present to help ensure relevant policies are followed, to minimize impacts, and to help get the most benefit from the activity.

Responsible Line Officer: The Forest Service employee who has the authority to select and/or carry out a specific planning action.

Riparian Area: Geographically delineable areas with distinctive resource values and characteristics that are comprised of aquatic and riparian ecosystems.

Riparian Ecosystem: A transition between the aquatic ecosystem and the adjacent terrestrial ecosystem; identified by soil characteristics or distinctive vegetation communities that require free or unbound water.

Riparian Management Zone: This zone begins 25' from the bank. The width of the zone depends on the stream order or size of the pond.

Road: A motor vehicle travel corridor over 50 inches wide, unless designated and managed as a trail. A road may be classified, unclassified or temporary.

Road Decommissioning: Activities that result in the stabilization and restoration of unneeded roads to a more natural state (36 CFR 212.1; FSM 7703). Activities used to decommission a road include, but are not limited to: reestablishing former drainage patterns, stabilizing slopes, restoring vegetation, blocking the entrance to the road, installing waterbars, removing culverts, reestablishing drainage-ways, removing unstable fills, pulling back road shoulders, scattering slash on the roadbed, completely eliminating the roadbed by restoring natural contours and slopes, or other methods designed to meet the specific conditions associated with the unneeded road (FSM 7712). One or many of the methods described may be used as deemed necessary. Decommissioning removes the road from the transportation system.

Road Improvement*:* Activity that results in an increase of an existing road's traffic service level, expansion of its capacity, or change in its original design function.

Road Maintenance: The ongoing upkeep of a road necessary to regain or restore the road to the approved road management objective (FSM 7712.3).

Road Realignment: Activity that results in a new location of an existing road or portions of an existing road and treatment of the old roadway (36 CFR 212.1).

Road Reconstruction: Activity that results in the improvement or realignment of an existing classified road as defined.

Road, Arterial: Provides service to large land areas. Connects with other arterials or public highways.

Road, Classified: Road wholly or partially within or adjacent to National Forest System lands that are determined to be needed for long term motor vehicle access, including state roads, county roads, privately owned roads, National Forest System roads, and other roads authorized by the Forest Service.

Road, Collector: Serves smaller land areas than arterials. Connects arterials to local roads or terminal facilities.

Road, Forest: As defined in Title 23 Section 101 of the United States Code (23 U.S.C. 101), any road wholly or partially within, or adjacent to, and serving the National Forest System and which is necessary for the protection, administration, and utilization of the National Forest System and the use and development of its resources.

Road, Local: Single purpose road. Connects terminal facilities with collectors or arterials.

Road Operation Maintenance Level (ROML): The level of service provided by, and maintenance required for, a specific road (FSH 7709.58).

Level 1 (Closed for more than 1 year): Assigned to intermittent service roads during the time they are closed to vehicular traffic. The closure period must exceed 1 year. Basic custodial maintenance is performed to keep damage to adjacent resources to an acceptable level and to perpetuate the road to facilitate future management activities. Roads receiving maintenance Level 1 may be of any type, class, or construction standard, and may be managed

at any other maintenance level while they are open for traffic. While being maintained at Level 1, they are closed to vehicular traffic, but may be open and suitable for non-motorized uses.

Level 2 (High-clearance vehicles): Assigned to roads open for use by high clearance vehicles. Passenger car traffic is not a consideration. Traffic is normally minor, usually consisting of one or a combination of administrative, permitted, dispersed recreation, or specialized uses. Log haul may occur at this level.

Level 3 (Passenger vehicles-surface not smooth): Assigned to roads open and maintained for travel by a prudent driver in a standard passenger car. User comfort and convenience are not considered priorities. Roads in this maintenance level are typically low speed, single lane with turnouts and spot surfacing. Some roads may be fully surfaced with either native or processed material.

Level 4 (Passenger vehicles-smooth surface): Assigned to roads that provide a moderate degree of user comfort and convenience at moderate traffic speeds. Most roads are double lane and aggregate surfaced. However, some roads may be single lane. Some roads may be paved and/or dust abated.

Level 5 (Passenger vehicles-dust free; possibly paved): Assigned to roads that provide a high degree of user comfort and convenience. These roads are normally double lane, paved facilities. Some may be aggregate surfaced and dust abated.

Road, New Construction: Activity that results in the addition of forest classified or temporary road miles (36 CFR 212.1).

Road, Private: A road under private ownership authorized by an easement to a private party, or a road that provides access pursuant to a reserved or private right.

Road, Public: Any road or street under the jurisdiction of and maintained by a public authority and open to public travel (23 U.S.C. 101(a)).

Road, Temporary: Road authorized by contract, permit, lease, other written authorization, or emergency operation, not intended to be part of the forest transportation system and not necessary for long-term resource management.

Road, Traffic Service (Levels):

A: Free flowing, mixed traffic; stable, smooth surface; provides safe service to all traffic.

B: Congested during heavy traffic, slower speeds and periodic dust; accommodates any legal-sized load or vehicle.

C: Interrupted traffic flow, limited passing facilities, may not accommodate some vehicles. Low design speeds. Unstable surface under certain traffic or weather.

D: Traffic flow is slow and may be blocked by management activities. Two-way traffic is difficult, backing may be required. Rough and irregular surface. Accommodated high clearance vehicles. Single purpose facility.

Road, Unclassified: Roads on National Forest System lands that are not managed as part of the forest transportation system, such as unplanned roads, abandoned travel corridors, and off-road vehicle tracks that have not been designated and managed as a trail. Includes those roads that were once under permit or other authorization and were not decommissioned upon the termination of the authorization (36 CFR 212.1).

Road-Related Recreation Activities: Include driving for pleasure (together with related parking lots, overlooks, vistas, and interpretive sites), developed campgrounds, day use sites (picnic grounds, water play sites, etc.) and roadside camping.

Roads, Objective Maintenance Level: The maintenance level to be assigned at a future date considering future road management objectives, traffic needs, budget constraints, and environmental concerns.

Roadside Camping: Camping along roads outside of developed campgrounds. At some locations these are specified sites, while at other locations they are not specified. This is considered developed camping as opposed to dispersed camping (backcountry facilities or dispersed campsites).

Rockfall: The relatively free falling or precipitous movement of a newly detached segment of bedrock (usually massive, homogeneous, or jointed) of any size from a cliff or other very steep slope.

Rockslide: A landslide involving a downward and usually sudden and rapid movement of newly detached segments of bedrock sliding or slipping over an inclined surface of weakness, as a surface of bedding, jointing, or faulting.

Route: In climbing, an established line of ascent of a cliff face. This does not include non-technical pathways to the top or base of a cliff.

Sale Schedule: The quantity of timber planned for sale by time period from an area of suitable land covered by a forest plan. The first period, usually a decade, of the selected sale schedule provides the allowable sale quantity. Future periods are shown to establish that long-term sustained yield will be achieved and maintained.

Salvage Harvest (or Cutting): The removal of dead trees or trees damaged or killed by injurious agents other than competition, to recover value that would otherwise be lost.

Salvage Sale: A timber sale for which an important reason for entry includes removal of diseased, infested, dead, damaged or down timber. It also includes associated green trees for ecosystem improvement or rehabilitation. The sale should include an identifiable salvage component of trees which are dead, damaged, diseased, insect infested, wind-thrown, or imminently susceptible to insect attack because of drought related stress. The sale may include trees lacking the characteristics of a healthy and viable ecosystem.

Sanitation Cutting: The removal of trees to improve stand health and to reduce actual or anticipated spread of insects and disease.

Sawtimber: Trees suitable in size and quality for producing logs that can be processed into dimension lumber.

Scenery Management System (SMS): Tool and process developed by USDA Forest Service that provides an overall framework for the orderly inventory, analysis, and management of scenery.

Scenery Management System, Concern Levels: A measure of the degree of public importance placed on landscapes viewed from travel corridors and use areas. They are identified as Levels 1, 2, and 3, with 1 being the highest level.

Scenery Management System, Distance Zone: Landscape areas denoted by specified distances from the observer. Used as a frame of reference in which to discuss landscape attributes or the scenic effect of human activities in a landscape. Distance Zones are defined as:

Foreground: Detailed landscape generally found from the observer to ½ mile away;

Middleground: The zone between the foreground and the background in a landscape. The area located from ½ mile to 4 miles from the observer;

Background: The distant part of a landscape. The landscape area located from 4 miles to infinity from the viewer.

Scenery Management System, Landscape Character: An overall visual and cultural impression of landscape attributes (physical, biological, and cultural) that make each landscape identifiable or unique.

Scenery Management System, Scenic Attractiveness: The scenic importance of a landscape based on human perceptions of the intrinsic beauty of landform, water characteristics, vegetation pattern, and cultural land use. Scenic attractiveness classifications are: Class A – Distinctive; Class B – Typical; Class C – Indistinctive;

Scenery Management System Scenic Classes: Measures of the relative importance, or value, of discrete landscape areas having similar characteristics of scenic attractiveness, user concern, and distance zone viewed in.

Scenery Management System, Scenic Integrity Objective: Measure of the degree to which a landscape is visually perceived to be intact and whole; an indication of the degree of deviation from the character valued by users for its aesthetic appeal. The Scenery Management System identifies the following levels of scenic integrity.

Very High (Unaltered) Refers to landscapes where the valued landscape character "is intact" with only minute if any deviations. The existing landscape character is expressed at the highest possible level.

High (Appears Unaltered) Refers to landscapes where the valued landscape character "appears intact." Deviations may be present but must repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such scale that they are not evident.

Moderate (Slightly Altered) Refers to landscapes where the valued landscape character "appears slightly altered." Noticeable deviations must remain visually subordinate to the landscape character being viewed.

Low (Moderately Altered) Refers to landscapes where the valued landscape character "appears moderately altered." Deviations begin to dominate the valued landscape character being viewed but they borrow valued attributes such as size, shape, edge effect and pattern of natural openings, vegetation type changes or architectural styles from outside the landscape being viewed.

Very Low (Heavily Altered) Refers to landscapes where the valued landscape character "appears heavily altered." Deviations may strongly dominate the valued landscape character. They may not borrow from valued attributes such as size, shape, edge effect and pattern of natural openings, vegetation type changes or architectural styles within or outside the landscape being viewed. However deviations must be shaped and blended with the natural terrain (landforms) so that elements such as unnatural edges, roads, landings, and structures do not dominate the composition.

Scenery Management System, View: The total visible area from a single observer position. Usually determined by enclosure defined by landform and/or vegetation.

Scenic Resource: Attributes, characteristics, and features of landscapes that provide varying responses from and varying degrees of benefits to, National Forest visitors.

Scoping: Includes internal and public involvement to determine the range of issues to be addressed in an environmental analysis.

Section 504 of the Rehabilitation Act of 1973, as Amended: Law requiring that persons with disabilities, solely because of their disability, not be denied access to the programs or activities provided to all other people by any Federal agency.

Section Hiker (AT): Those hiking the entire length of the Appalachian Trail in sections and not all at one time. (See also Thru Hiker)

Seed Tree Cutting: An even-aged harvest method which involves the removal in one cut of the mature timber from an area with a small number of seed bearing trees left singly or in groups for regeneration.

Shade Intolerant: Those trees that need full or near full sunlight to regenerate and grow.

Shade Tolerant: Those trees that can regenerate and grow in shade or varying degrees of sunlight.

Shelter: A type of backcountry facility (see photo)

Adirondack-style shelter at Moose Mountain. (WMNF Photo)

Shelterwood Cutting: The even-aged cutting method that describes the silvicultural system which provides a source of seed and/or protection for regeneration. The old crop (the shelterwood) is removed in two or more successive cuttings. The first cutting is ordinarily the seed cutting (a regeneration cut) though it may be preceded by a preparatory cutting, and the last cut is usually the removal cut.

Silviculture: The art and science of controlling forest establishment, composition, structure, and growth.

Single Tree Selection Cutting: An uneven-aged cutting method where individual trees are selected and cut in a stand while maintaining a prescribed number of trees in each diameter class.

Sinkholes: Described as a "collapse" associated with fresh water dissolving evaporite minerals.

Slash: Debris left after logging, pruning, thinning, or brush cutting, and large accumulation of debris after wind or fire. It includes logs, branches, bark, and stumps.

Slump: A landslide characterized by a shearing and rotary movement of a generally independent mass of rock or earth along a curved slip surface (concave upward) and about an axis parallel to the slope from which it descends.

Snow Compaction (Lynx): In reference to lynx, snow compaction refers to conditions where snow is compacted generally throughout the winter or for long periods of time, as opposed to occasional use that compacts the snow for a period of a few days until the next snowfall occurs. Conditions where snow compaction is sufficient to allow competing carnivores to gain access to an area otherwise unavailable because of deep, fluffy snow, is considered a potential negative impact to lynx.

Snowmobile: Any vehicle propelled by mechanical power that is designed to travel over ice or snow supported in part by skis, belts or cleats. Also called a snowmachine. See Off Highway Recreational Vehicle.

Special Use Permit: A type of special use authorization that provides permission, without conveying an interest in land, to occupy and use national forest land or facilities for specific purposes, and that is both revocable and terminable. A permit is not transferable. There are different classes, categories, and designations of special use permits.

Sport Climbing: A climbing discipline involving ascents of routes established with fixed protection, usually bolts and hangers. Designed to provide an increased level of safety and the opportunity to focus on gymnastic difficulty with lower risk of injury.

Spring: A location where groundwater flows out of bedrock or surficial material onto the land or into a surface water feature such as a stream or pond.

Spruce-Fir Forest Habitat: Forest habitat in which the canopy is comprised almost entirely of balsam fir or red spruce. For implementation purposes, this habitat includes forest types 11-19 in our database, but stand conditions, not typing in CDS should be relied on to define habitat.

Stand: A community of naturally or artificially established trees of any age sufficiently uniform in composition constitution, age, spatial arrangement, or condition to be distinguishable from adjacent communities, thereby forming a silvicultural or management entity.

Standards: A course of action that must be followed, or a level of attainment that must be reached, to achieve management goals and objectives. In general standards limit project-related activities. Deviations from standards must be analyzed and documented in a Forest Plan amendment.

Strip Cut: An even-aged cutting method. It describes the linear configuration of clear cut areas. The regeneration of the stand may be accomplished in two or more stages.

Suitability: The appropriateness of applying certain resource management practices to a particular area of land, as determined by an analysis of the economic and environmental consequences and the alternative uses foregone. A unit of land may be suitable for a variety of individual or combined management practices.

Suitable Forest Land: Land that is to be managed for timber production on a regulated basis.

Surface Disturbance: Removing, digging in, excavating, disturbing, injuring, destroying, or in any way damaging any natural or cultural resources.

Sustained-Yield: The achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the National Forest System without impairment of the productivity of the land.

Talus Slope: Areas of coarse rock debris, accumulated at the base of cliffs, with vegetation ranging from closed-canopy forest to open barrens, depending on talus size, degree of soil development, and level of disturbance. Talus slope/woodlands can be distinguished from those on stable substrates by herb shrub and vine species characteristic of woodland openings, rocky areas or disturbed habitats, such as gooseberry, currants, climbing buckwheat, poison ivy and rock polypody.

Tent Platform (Site): A type of backcountry facility (see photo)

Tent Platform at Ethan Pond, 1979 (WMNF Photo)

Tentatively Suitable Forest Land: Forest land that is producing or is capable of producing crops of industrial wood and (a) has not been withdrawn by Congress, the Secretary, or the Chief; (b) existing technology and knowledge are available to ensure timber production without irreversible damage to soils, productivity, or watershed conditions; (c) existing technology and knowledge, as reflected in current research and experience, provide reasonable assurance that adequate restocking can be attained within 5 years after final harvest; (d) adequate information is available to project responses to timber management activities, and (e) has not undergone analysis to determine if other resource objectives would preclude timber harvesting and thus make the land area unsuitable.

TES Species: Plant or animal species that are designated as threatened or endangered by the U.S. Fish and Wildlife Service or that are designated as sensitive by the Regional Forester.

TES Species, Site Prescription: A written statement describing the actions to be taken to protect an individual TES plant occurrence from a proposed action. Site prescriptions may be as long or as short as necessary.

Thru-Hiker (AT): Those hiking the entire length of the Appalachian Trail at one time. (See also Section Hiker)

Timber Production: The purposeful growing, tending, harvesting, and regeneration of regulated crops of trees to be cut into logs, bolts, or other round sections for industrial or consumer use. For purposes of this subpart, the term timber production does not include production of fuelwood.

Timber Stand Improvement: All noncommercial, intermediate cuttings and other treatments to improve composition, constitution, condition, and increment of a timber stand.

Timber: Wood retaining many of the recognizable characteristics of a tree: round, bark covered and tapering, but without limbs and leaves. In the wood industry usage it may be "standing timber," that is the portion of the living tree with characteristics of value to the wood using industry or cut trees not yet processed beyond removing limbs and tops.

Top Roping (Climbing): A climbing method where the rope runs from a climber on the ground through an anchor at the top of the climb and back down to the belayer. As the climber ascends, the belayer pulls in rope to keep pace with the climber. The climber may let go of the rock without falling, since the rope is kept taut above him/her. Protection for top rope climbs is required only at the top of the climb. The practice only works on climbs less than half a rope length long and where there is access to the top of the feature to create the anchor point. Climbs longer than half a rope length may be top roped by placing the belayer at the top of the feature, if access is available.

Traditional Climbing: A climbing discipline usually involving ground-up ascents of features where removable protection (see definition) is placed by a leader and retrieved by a second, following climber. Generally offers a higher degree of uncertainty and a greater sense of exploration than sport climbing. Risk of injury is often greater, as skill in placing and evaluating protection quality is required.

Trail: An identified component of the Forest trail system (see Forest Trail System).

Trail Use Levels: Use categories determined by the best professional estimate of field and recreation managers using field experience and sporadic monitoring counts over the years. In 1998 and 1999 trails were randomly selected and sampled with trailhead registers in each of these categories to come up with an average people per day (ppd) use, an average noncompliance rate, and a verification of their use category. Very High: 70-90 ppd; High: 29-36 ppd; Moderate: 12-15 ppd; Low: 2-4 ppd.

Transfer Lands (AT): Those New Hampshire lands acquired by the National Park Service specifically for Appalachian Trail protection and administered by the WMNF.

Travel Corridor (sometimes referred to as Travelway): A discernible route not likely to recover naturally within one year. These routes were at one time meant for one or more types of four wheel or tracked vehicles. Examples include timber skid routes, temporary roads, and abandoned roads. These do not include Forest System Trails, incidental trails, or classified Forest System roads.

Undertaking (Heritage Resources): A project, activity, or program funded in whole or in part under the direct jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; those requiring a Federal permit, license or approval; and those subject to State or local regulation administered pursuant to a delegation or approval by a Federal agency. (Section 106, National Historic Preservation Act of 1966, as amended)

Undesignated Communication Sites: Areas of National Forest System land where, over time, individual communications uses have been authorized. These may be a single communication facility or groups of communication facilities belonging to several different leaseholders. These sites are not designated through the forest planning process.

Uneven-Aged Management: The application of a combination of actions needed to maintain continuous high forest cover, recurring regeneration of desirable species, and the orderly growth and development of trees through a range of diameters or age classes to provide a sustained yield of forest products. Cutting is usually regulated by specifying the number or proportion of trees of particular sizes to retain within a stand, thereby maintaining a planned distribution of size classes. Cutting methods that develop and maintain uneven-aged stands are single-tree selection and group selection.

Uninterrupted Use Snowmobile Trail: A trail that should not be closed by other management actions. Applied to NH Corridor trails and Maine ITS Trails. May require temporary relocation of the trail during management actions. In some cases alternative routes are established and snowmobile use cycles between the two as needed.

Unsuitable Forest Land: Forest land that is not managed for timber production because (a) the land has been withdrawn by Congress, the Secretary, or the Chief; (b) the land is not producing or capable of producing crops of industrial wood; (c) technology is not available to prevent irreversible damage to soils, productivity, or watershed conditions; (d) there is no reasonable assurance that lands can be adequately restocked within 5 years after final harvest, based on existing technology and knowledge, as reflected in current research and experience; (e) there is at present, a lack of adequate information to respond to timber management activities; or (f) timber management is inconsistent with or not cost efficient in meeting the management requirements and multiple use objectives specified in the Forest Plan.

Urban Forest: By Forest Service definition, a National Forest located within 50 miles of populations greater than one million people, and demonstrating unique management challenges and opportunities.

Use-Cycle Approach (Alpine Skiing): In ski areas, periodically moving users between areas of glade skiing to enable regeneration in the unused areas and perpetuate uneven-aged stands of trees. See also Glade Skiing.

Vegetation Management: Manipulating vegetation to reach desired habitat or ecosystem goals. See also Timber Management.

Vernal Pool: Naturally occurring, depressional wetlands that temporarily hold water in the spring and early summer, drying up typically in mid to early summer. They are isolated without an inlet or outlet. They are fishless and allow for successful breeding of certain amphibians and invertebrates.

View, Viewshed: See Scenery Management System, View.

Weed-Free: As free as possible of non-native invasive species plant materials, generally at least 98 percent.

Wetlands: Wetlands will be identified using jurisdictional criteria and/or through the use of the National Wetlands Inventory maps.

Wheelchair or Mobility Device: A device, including one that is battery-powered, that is designed solely for use by a mobility-impaired person for locomotion, and that is suitable for use in an indoor pedestrian area. A person whose disability requires use of a wheelchair or mobility device may use a wheelchair or mobility device that meets this definition anywhere foot travel is permitted. (Forest Service Manual 2353.05 and ADA Title V Section 507c)

"Designed solely for use by a mobility-impaired person" means that the original design and manufacture of the wheelchair was only for the purpose of mobility for a person who has a disability. This does not include after-market retrofit of a motorized unit to make it useable by a person who has a disability. "Suitable for indoor pedestrian use" means useable inside a home, mall, courthouse, etc.

Wildfire: An unplanned, unwanted wildland fire, including unauthorized human-caused fires, escaped wildland fire use events, escaped prescribed fire projects, and all other wildland fires where the object is to put the fire out.

Wildland Fire: Any non-structure fire that occurs in the wildland. Three distinct types of wildland fire have been defined and include wildfire, wildland fire use, and prescribed fire.

Wildland Fire Use: The application of the appropriate management response to naturally-ignited wildland fires to accomplish specific resource management objectives in pre-defined, designated areas outlined in Fire Management Plans. Operational management is described in the Wildland Fire Implementation Plan (WFIP).

Wildland User Interface (WUI): The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels (also "Urban Interface").

Wildlife Opening: Terrestrial opening dominated by native grasses, forbs (e.g., goldenrod, ferns, meadowsweet), and/or shrubs (e.g., blackberries, raspberries, blueberries, alder) that is maintained in an non-forested condition naturally or through stumping, mowing, prescribed burning, brushing, or other means to benefit wildlife. It must remain in shrubby or herbaceous vegetation and have minimal (<15%) overstory canopy conditions. Only areas that are maintained primarily for wildlife benefits are considered wildlife openings; other

herbaceous openings exist on the Forest and may provide wildlife habitat, but they are not considered wildlife openings for the purposes of this Plan.

Wildlife Tree: A live tree greater than 18" dbh with 2 or more main defects that can be used as cavities. In aspen and paper birch communities, the dbh should be greater than or equal to 14 inches.

Wildlife-Human Conflict: An occasional sighting of a bear or other wildlife in the vicinity of recreation sites does not necessarily indicate a problem. However, visits on a regular basis that result in theft of food, destruction of property, or any indication of aggression do constitute wildlife-human conflicts. Rely on biologists to evaluate wildlife behavior.

Wind Towers: Includes individual wind towers for wind energy testing and monitoring facilities (small individual site-specific meteorological towers and instrumentation facilities) as well as wind energy development projects (includes wind turbine facilities, as well as access roads, electrical and transmission facilities, and other support facilities).

Young Forest Habitat: Results from growth of regenerating forest habitat. It also is created when the overstory is removed from a shelterwood harvest more than 10 years after the original harvest. Canopy trees are typically shorter than at maturity and small in diameter, usually less than eight inches.

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Appendix A Summary Analysis of the Management Situation (AMS)

An important part of the Forest Plan Revision process is to consider the current conditions (what is happening on the Forest now) and determine how they compare with the intent of the existing Forest Plan. The Planning Team looks at:

- What areas of the Plan have not been successfully implemented, and why.
- What new factors have arisen since the Forest Plan was adopted.
- What the desired future directions are.
- What is the need (if any) for change.
- What opportunities exist to reach the future condition.

The result of this study is the Analysis of the Management Situation (AMS), a document that is required by the regulations that implement the National Forest Management Act. The following describes how this document was completed, how the information was used, and briefly summarizes some of the supply and demand results from the document.

When the White Mountain National Forest first issued its Notice of Intent to revise the 1986 Forest Plan, the planning team encouraged public involvement through a combination of meetings and opportunities for comment. Three thousand comments were grouped into thirty one potential areas of concern and working papers describing: a summary of the public comments heard, a description of current plan direction, and a summary of monitoring and current information were prepared for each. These areas of concern described the public's perception of what needed to be reviewed during plan revision. At the same time, the planning team grouped the concerns by resource area and specialists were asked to "brainstorm" potential changes in management for each resource that could be made in and outside of revision. At this time, there was no attempt to integrate these concerns across resource areas. Individual specialists described the current condition of the resource, concerns with current plan direction, and the need or opportunity for changing management direction. There was also sometimes a brief assessment of the Forest's capability to expand resource management for the resource to achieve a more desired future condition. The information from this limited internal analysis was described in twenty-seven specialist reports.

The information was presented in the context of the 31 public potential concerns at public planning group meetings where the public and specialists interacted. These meetings brought the internal and external concerns together.

As a result, the topics were combined and split into the 23 Plan Revision Topics displayed in the Need for Change document that accompanied the formal Notice of Intent to revise the Forest Plan.

Subsequent reviews and screening were applied to the twenty three topics, eventually resulting in the identification of three ***issues*** that alternatives would be built around:

1. **Management emphasis through land allocation:** Explores whether the current balance of management emphasis provides the needed direction or if changes should be made.
2. **Timber management and wildlife habitat:** Addresses how much timber is harvested, where it is harvested, and the type of harvest treatment to be used, and how this affects the kinds of wildlife habitat, particularly the young forest habitat conditions preferred by some species.
3. **Recreation management:** Looks closely at how changing activities and increasing use can be managed to prevent unacceptable ecological impacts while still providing a range of high quality recreation opportunities.

While the alternatives dealt with items for which there are different management approaches and some level of disagreement over the approach to use, many of the specific items identified in the AMS and public concerns have been dealt with through standard and guideline changes made during the revision. A number were not carried into the Need for Change proposal due to information from further analysis, integration of resource needs, new research information, priority setting, or the timing was not right. Some were changes not appropriate to Forest planning.

The narrowing of concerns into the three issues identified and the AMS helped identify where more in depth analysis was needed. For example, the socioeconomic assessment, Forest Plan output modeling through SPECTRUM, and the species viability evaluation were outgrowths of this need. That analysis far exceeds the depth of analysis provided in the AMS.

The AMS simply set the stage for further planning actions. As an example, the AMS briefly describes the demand and supply conditions for resource commodities and services, production potentials, and use and development opportunities. In terms of the three issues, the AMS identified:

- Demand for recreation uses will increase for motor and non-motor uses.
- The amount of land available for recreation uses is limited and recreational opportunities are limited. This means that a balance is needed between the opportunities provided.
- There are opportunities to construct new developed recreation sites and demand exists for these sites; but, this again would change the balance of recreational opportunities due to a limited land base and very large number of users.
- There are opportunities to increase recreational use at existing ski areas through year round activities.
- Ski area supply dropped with the closure of the Evergreen and Mittersill areas; but, also increased with the expansion of Loon. There is some opportunity for additional expansion.

- The terrain on the WMNF presents opportunities for additional ski areas but demand for additional areas on the Forest from the general public does not support more areas.
- Sawtimber demand will continue while the market for low value wood is in flux.
- More timber is available for harvesting but other resource and public concerns limit harvest.
- There are additional lands available for Wilderness designation. These will be determined through an updated inventory of roadless areas.
- Recreational values in Wilderness areas could erode if use is not managed.

The AMS documents are available for review on the White Mountain National Forest website at

http://www.fs.fed.us/r9/white/3_WM_fpr_Web/forest_plan/revision/ams/analysis_of_the_management_situa.htm

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Appendix B
Proposed and Probable Practices, Goods Produced, and Other Information

Introduction

The purpose of this appendix is to display an estimate of the goods and services provided, the proposed (Decade 1) and probable (Decade 2) management practices expected, and other information including land classification.

The outputs and proposed and probable practices listed are projections based on available inventory data and some are based on computer modeling. **NOTE: The outputs and amounts listed below are estimates and are subject to annual budgets for funding the various resource programs on the Forest. Actual amounts may vary from these and will be monitored.**

Land Classification

Lands identified as suitable for timber management include producing timber as part of multiple use direction. These are lands that contribute to the timber sale program on a regularly scheduled basis. Table B-01 shows how acres of these lands compare to the total acreage of National Forest System land.

Table B-01. Acres of Land Suitable for Timber Management.

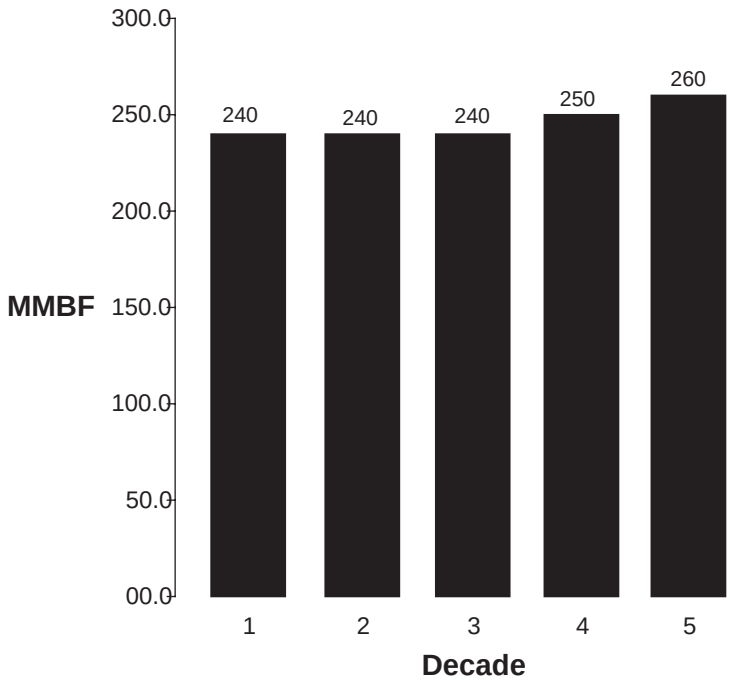
Classification	Acres
Total National Forest System land	796,700
Non-forest and water	23,115
Legally withdrawn (Wilderness, Experimental Forests, Scenic Areas, RNAs)	138,570
Land not physically suited for timber production (low site index, regeneration not assured, etc.)	185,558
Inadequate inventory information (incomplete inventory)	21,189
Land not appropriate for timber production due to other resource management (campgrounds, AT, other unique areas, etc.)	147,709
Land suitable for timber management	281,292

Allowable Sale Quantity (ASQ)

The allowable sale quantity of timber (ASQ) is the maximum amount of volume that may be offered and sold during a given decade of Forest Plan implementation from land identified as suitable for timber management. The amount of timber that may be sold annually may exceed 1/10 of the ASQ as long as the decadal ASQ is not exceeded.

Figure B-01 shows the volume of timber in million board feet (mmbf) that can be harvested in each decade on a long term, sustained yield capacity. In both the first and second decade the ASQ is 240 MMBF or 400 million cubic feet (MMCF).

Figure B-01. Volume of Timber per Decade.



Estimated Volume of Sawtimber and Pulp Produced — Decades 1 and 2

Table B-02. Estimated Volume of Sawtimber and Pulp, Decades 1 and 2.

	Decade 1	Decade 2
Sawtimber (average mmbf/year)	13.7	12.8
Pulp (average mmbf/year)*	10.6	11.1

* Volume is shown in mmbf for comparison purposes. 2,000 pulp cords = 1mmbf

Estimated Silvicultural Practices for Decades 1 and 2

Table B-03 lists the estimated acreage of silvicultural practices that would be used to work toward the vegetative and other multiple-use desired conditions and objectives of the Forest Plan. The table displays the amount of each harvest treatment for the first two decades of plan implementation based upon modeling. Actual treatments during plan implementation may vary from these modeled outputs. Even age regeneration harvest set the tree stand back to age zero, meeting the 0-9 year old age class objective. As the name implies uneven-age treatments are intended to create and maintain an uneven-aged condition.

Table B-03. Estimated Management Practices, Decades 1 and 2.

Estimates of Management Practices*	Decade 1 Acres	Decade 2 Acres
Even-Aged Regeneration Harvest	9,400	12,000
Even-Aged Intermediate harvests	5,600	9,700
Uneven-Aged Harvest	19,300	4,000
Total harvest	34,300	25,700

* All scheduled harvest is planned in management area 2.1

Estimated Practices (Forest-wide) — Decade 1

Table B-04 lists other Forest management activities that are proposed to work toward the desired conditions and objectives during the first 10 years of plan implementation.

Table B-04. Estimated Practices (Forest-wide), Decade 1.

Activity or Practice	Unit of Measure	Estimated Amount for First Decade
Stream habitat restoration	miles	30
Restore fish passage	road crossings	10
Net increase non-motorized hiking trail construction	miles	Up to 25
Net increase snowmobile trail construction	miles	Up to 20
Net increase developed campground sites	sites	Up to 32
Net increase backcountry facility capacity	PAOT*	Up to 40
Roads construction	miles	10
Roads reconstructed	miles	70
Roads decommissioned	miles	5 - 40
Improved watershed/soil conditions	acres	At least 250
Wildland fire use	fires	4 - 8

*PAOT = Persons at one time

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Appendix C
Eligible
Wild & Scenic Rivers

Eligible Wild and Scenic Rivers

River	Management Area	Miles of River	Classification
Franconia Branch	5.1	4.3	Wild
	6.1	0.7	Wild
Hancock Branch	2.1	4.9	Recreational
	6.1	1	Scenic
N.F. Pemi	5.1	6.5	Wild
E. Branch Pemi	2.1	1	Recreational
	6.1	2.8	Scenic
	5.1	9.2	Wild
Shoal Pond Brook	5.1	3.5	Wild
Baker River	6.2	1.2	Scenic
	2.1	0.3	Recreational
Mad River	2.1	9.5	Recreational
	6.1	1.5	Wild
	8.5	1	Wild
Ammo River	2.1	6.1	Recreational
Upper Zealand	2.1	2	Scenic
Wild Ammo	2.1	9.8	Recreational
Tunnel Brook Upper	2.1	1.7	Scenic
	6.1	1.3	Wild
Tunnel Brook Lower	2.1	1.8	Recreational
	2.1	2.5	Recreational
Little Tunnel	2.1	0.9	Recreational
	6.2	0.8	Wild
N. Branch Gale	2.1	2.7	Scenic
	2.1	1.2	Recreational
	6.2	1	Wild
S. Branch Gale	2.1	2.9	Scenic
	2.1	0.7	Recreational
	2.1	0.4	Recreational
Little River	2.1	0.7	Wild
	2.1	2	Scenic
	6.2	2.1	Wild
Isreal	2.1	0.3	Scenic
	6.1	1	Wild

River	Management Area	Miles of River	Classification
Peabody River	2.1	8.5	Recreational
	7.1	1	Recreational
	8.5	1.4	Wild
W. Branch Peabody	2.1	1	Scenic
	5.1	4.3	Wild
Upper Ammo	2.1	0.9	Wild
	2.1	6.2	Scenic
	2.1	5	Recreational
Mill Brook	2.1	0.2	Scenic
	2.1	3.9	Scenic
W. Branch Upper Ammo	6.2	0.6	Wild
	2.1	0.5	Wild
	2.1	4.2	Scenic
Cold	2.1	3.3	Scenic
Whiteface	2.1	0.7	Wild
	5.1	1.8	Wild
Wonalancet	5.1	2.1	Wild
Swift	6.1	1.1	Scenic
	2.1	9.3	Scenic
Sawyer	2.1	8.5	Recreational
	6.1	2.5	Wild
	2.1	4	Recreational
	2.1	2.5	Recreational
Saco	2.1	5.2	Scenic
	5.1	1	Scenic
Dry River	5.1	6.7	Wild
Rocky Branch	5.1	4.8	Wild
	6.2	1.3	Wild
	2.1	4.8	Scenic
Ellis River	2.1	2.3	Recreational
	2.1	2.3	Recreational
	8.5	2.5	Recreational
	8.5	1.7	Wild
E. Branch Saco	2.1	6.2	Scenic

River	Management Area	Miles of River	Classification
Slippery Brook	2.1	5.7	Scenic
Lucy Brook	6.1	1.4	Wild
	2.1	2	Scenic
Wild River	2.1	7.2	Recreational
	2.1	1	Wild
	9.1	2.3	Wild
	6.3	2	Wild
	6.2	2.2	Wild
W. Branch Pleasant	5.1	0.7	Wild
	2.1	1.3	Wild

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Appendix D
Age Class Definitions by Habitat Type

Forest habitats on the White Mountain National Forest have been divided into four broad age classes: regeneration, young, mature, and old. Regeneration forest is typically 0-9 years old, following a stand-replacing natural disturbance or harvest. Young forest starts at age 10 and lasts 30-60 years, depending on the forest type. Mature forest encompasses the ages at which harvest is most desirable for each forest type, while old forest starts after the traditional rotation age for each forest type. This appendix documents the ages at which each age class starts and ends by habitat type.

Habitat type	Age class*	Age in years
Spruce-fir	R	0-9
	Y	10-39
	M	40-89
	O	90+
Mixed wood	R	0-9
	Y	10-59
	M	60-119
	O	120+
Northern hardwood	R	0-9
	Y	10-59
	M	60-119
	O	120+
Aspen-birch	R	0-9
	Y	10-39
	M	40-69
	O	70+
Oak-Pine	R	0-9
	Y	10-69
	M	70-119
	O	120+
Hemlock	R	0-9
	Y	10-69
	M	70-119
	O	120+

*R = regeneration forest; Y = young forest; M = mature forest; O = old forest

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Appendix E
Wilderness Management Plan

Contents

1.0 Introduction

The many components of 1964 Wilderness Act created numerous challenges for land management. In addition to recognizing Wilderness as "an area where the earth and its community of life are untrammeled by man," the act provides for recreational access as well as consideration of ecological, geological, scientific, educational, scenic, and historic values. These different values can lead to contradictory management objectives. This plan is aimed at managing the White Mountain National Forest Wildernesses in such a way that these somewhat incongruous values all receive proper attention. Thus, the plan sets forth an agenda and a program of work for WMNF Wilderness management that aims to assure we maintain a balance among primitive recreation, ecological integrity, and other values of a heavily used urban national forest.

There are currently five Wildernesses on the WMNF. They are:

The ***Great Gulf***, 5,500 acres, designated by the 1964 Wilderness Act.

The ***Presidential Range-Dry River***, 29,000 acres, designated by the 1975 Eastern Wilderness Act and expanded in the 1984 New Hampshire Wilderness Act.

The ***Pemigewasset***, 45,000 acres, designated by the 1984 New Hampshire Wilderness Act.

The ***Sandwich Range***, 25,000 acres, designated by the 1984 New Hampshire Wilderness Act.

The ***Caribou-Speckled Mountain***, 14,000 acres, designated by the 1990 Maine Wilderness Act.

These lands are managed to allow natural processes to continue with minimal impediment, to minimize the effects and impacts of human use, to provide primitive and unconfined recreation opportunities, to foster appreciation of the qualities of wilderness landscapes, to continue use for educational and scientific purposes, and to recognize their evolving roles in the history of the landscape.

This management plan describes processes and actions aimed toward further realizing these goals. Our intent is to provide strong, clear management, in order to maintain Wilderness character. These values include a balance of use and preservation, an understanding of and support for protection of these lands, and a perpetuation of Wildernesses' roles as representatives of landscapes minimally affected by the impacts of human use.

Further, this plan is written in part as a response to known threats to Wilderness and Wilderness character. Among these threats are ecological issues, such as: loss of or threats to biological/ecological processes and biodiversity; deterioration of water quality from increased erosion, unsuitable camping practices and improper disposal of human waste; and threats to native flora and fauna from the spread of noxious weeds and invasive species from sources outside Wilderness. Of equal concern are threats to social aspects of Wilderness, such as increasing use, which leads

to crowding and loss of solitude, and a failure to perceive and integrate a human ecology/cultural history component of eastern Wilderness.

Managing to maintain Wilderness character implies many competing priorities. Recognizing the challenges of balancing these different priorities — that different areas have different levels of use, that all areas serve purposes, and that because of this all areas have different management needs — we have chosen a zoning approach to delineate where and to what extent activities and impacts will be acceptable within each Wilderness. We have defined audiences to target for specific Wilderness education messages, and itemized steps to be taken in reaching those audiences. This education effort informs all aspects of our management strategy.

We selected indicators for measuring Wilderness conditions and set clear standards, beyond which direct management action may become necessary. These management actions are described in this plan to outline and direct appropriate responses to impacts that exceed these standards.

This management document is tiered to the Land and Resources Management Plan for the White Mountain National Forest, and should be used in conjunction with specific Management Area direction and standards and guidelines for MA 5.1. It integrates concepts outlined in "Thinking Like a Mountain: A Wilderness Agenda" and the National Recreation Strategy, and follows a model of the Limits of Acceptable Change (LAC) process for maintaining Wilderness conditions. This plan should be used as a tool for defining an annual program of work within Wilderness, and ultimately toward realizing a vision of Wilderness stewardship.

2.0 Zoning

In order to reach the ideal of balancing use and preservation, we conducted an assessment of the current conditions and the requirements for effective future management. This assessment was aimed at realizing the overall goals of maintaining wilderness character, offering outstanding opportunities for solitude, and providing recreation access for enjoyment of the areas as Wilderness.

In our assessment, we used the following criteria to understand both distinctions and commonalities among different areas: use levels, facilities, campsites, vegetation/soils, managerial presence, and social conditions. It became clear that certain classes of areas exist, most significantly related to the level of use each area receives. To understand the spatial nature of this class distribution, we delineated four different Wilderness zones and mapped them across the individual Wildernesses. (These maps are located in Section 7.) The zones themselves each serve a purpose in the overall Wilderness management strategy. Each has unique characteristics in terms of ecological characteristics, social conditions, and management needs. The zones are labeled A,B,C, and D. Though use levels were not the determining factor in applying this zoning scheme, they can be helpful in understanding the distinctions among zones; the zones generally run from least (Zone A) to most heavily used (Zone D).

It is worth noting that these zones and the descriptions of them below typically represent the conditions during a particular area's peak use season or represent the highest development level within the zone. For example, some trails receive heavy use during the summer and fall months, but receive almost no use in the winter and spring. In these cases, the zones will reflect conditions during summer and fall. However, we will manage to maintain seasonal variation; that is, we will not manage to allow a trail that receives heavy use in the summer and low use in winter to become a year-round high use trail.

There are certain specific, known locations within Zone A where social or soil and vegetation conditions diverge from the general descriptions for that zone. Seasonally, during spring skiing in Oakes Gulf and on the Great Gulf headwall, it is possible to experience frequent encounters with other visitors — though usually only on a few sunny weekend days with good snow conditions. Further, the access to Owl's Head and the route through Lost Pass — both of which pre-exist Wilderness designation — display soil compaction and vegetation loss. These four locations are the exceptions to peak-use, peak development rule, and offer acceptable and desirable Wilderness recreation opportunities within Zone A.

In Section 3, which addresses monitoring issues, we present specific indicators presented to measure the consistency of conditions within each zone, and standards to ensure that conditions do not migrate toward the increasingly modified, impacted side of the scale. It is an important goal of this plan to assure that no area is allowed to move from a lower to a higher use zone.

2.1 Zone Descriptions

2.1.1 Zone A — Areas 500 feet or more from all trails

This zone includes the trailless areas of WMNF Wilderness, and represents the largest area of WMNF Wilderness. The landscape appears largely unmodified, supports no maintained trails or facilities, has few restrictions, has low managerial regulation, has little direct management activity, and has exceptional opportunities for visitors to experience both solitude and a very primitive and unconfined recreation.

Social Conditions

Encounters with other visitors or with management are non-existent to infrequent. The environment offers the highest degree of challenge, self-reliance, and risk. There is an outstanding opportunity for solitude, and visitors will experience primitive, unconfined recreation within this area.

Facilities/Infrastructure

No maintained or constructed facilities present. Very little or no obvious on-the-ground evidence of human presence or activity, except for occasional historical artifacts.

Campsites

Very low density of campsites. Campsite impacts are not visible from year to year; sites are difficult to discern and generally are rehabilitating naturally. Designated sites are not established.

Vegetation/Soils

The Forest vegetative composition may have been affected by pre-designation activities such as timber harvesting. There is very little or no vegetation loss, soil compaction, or lasting alteration of the duff and litter layer resulting from human use. Areas do not receive regular, recurring use. Any existing impacts in these areas are generally rehabilitating.

Managerial Presence

Management focuses on sustaining and protecting the natural ecosystem, allowing natural events and processes to occur with minimal or no management. Agency patrols are rare, primarily to monitor existing conditions. Efforts will be made to minimize regulations, but they may be utilized in specific areas for protection of Wilderness character. Signs will not be present except in rare instances for resource protection.

2.1.2 Zone B — Areas within 500 feet of low-use trails

This zone includes the lowest-use, least developed trails within WMNF Wilderness. It offers the greatest opportunity for solitude and/or an unconfined recreation experience along a maintained trail system.

With the exception of the developed trail system, the landscape appears largely unmodified, supports only these minimally maintained trails but no other facilities, and has regular opportunities for visitors to experience both solitude and a primitive recreation confined only by the presence of the trail system.

Social Conditions

Encounters with other visitors or with management are infrequent. The environment offers a high degree of challenge, self-reliance, and risk. There is a great opportunity for solitude, and visitors will generally experience primitive and unconfined recreation within this area.

Facilities/Infrastructure

The trail system is the primary infrastructure. Primitive trails and trail structures consistent with WMNF Level 1 trail specifications (FSH 2309.18) may be present. No other facilities will be constructed or maintained. Historical artifacts may be present and are sometimes concentrated and may be obvious. Other impacts will not be readily apparent.

Campsites

Very low density of campsites. Campsites may be discernable, but are generally rehabilitating and not receiving regular, recurring use. Designated sites are not established.

Vegetation/Soils

The Forest vegetative composition may have been affected by pre-designation activities such as timber harvesting. There is very little or no vegetation loss, soil compaction, or lasting alteration of the duff and litter layer resulting from human use except on trails. These trails are more primitive and receive less maintenance. Areas do not receive regular, recurring use outside the trail corridor. Any existing impacts in these areas are generally rehabilitating.

Managerial Presence

Management focuses on sustaining and protecting the natural ecosystem and providing primitive access for visitors. Agency patrol will be on a regular basis, primarily for monitoring and education. Efforts will be made to minimize a regulatory approach, however, regulations will be utilized for protection of Wilderness character. Signs may be present at trail junctions and in rare cases for resource protection.

2.1.3 Zone C — Areas within 500 feet of moderate-use trails

This zone includes the moderate-use, moderately developed trails within WMNF Wilderness. As outlined below, Zone C is in general more highly used and more highly developed than Zone B. Despite this, Zone C offers visitors an opportunity to experience escape from more highly developed landscapes while still being able to access a maintained trail system.

In most places, the landscape appears largely unmodified. Exceptions include the trail system and associated structures and lasting campsites, including some designated sites. Facilities such as bridges may exist, but shelters and toilets do not. The area is likely to have site-specific as well as blanket regulations, with generally frequent managerial presence. Direct management activity including enforcement of regulations occurs.

Social Conditions

Encounters with other visitors or with management are likely, especially along trails and at established campsites. There is a high degree of challenge and risk, and a lower degree of self-reliance than in Zones A and B. There is a generally moderate opportunity for solitude.

Facilities/Infrastructure

The trail system and associated structures are the primary evidence of past human presence and activity. Trails and associated structures are consistent with WMNF Level 2 trail specifications (FSH 2309.18). Bridges may exist for public safety or resource protection only. No other facilities will be maintained or constructed. Historical artifacts may be present and are sometimes concentrated and may be obvious. Other impacts will not be readily apparent.

Campsites

Campsite density is low to moderate. Within standards, there are sufficient sites to accommodate peak use without the creation of new sites. Bare mineral soil may exist on sites, and most sites will persist from year to year. Designated campsites may be present and exist for resource protection.

Vegetation/Soils

The Forest vegetative composition may have been affected by pre-designation activities such as timber harvesting. Moderate soil compaction and loss of vegetation, litter and duff is expected on many trails and campsites. User-created trails may be present, especially in destinations and camping areas. Minimal erosion may occur on a small percentage of the disturbed sites and may be mitigated to ensure resource protection. Riparian and lakeshore conditions may show signs of human impacts in localized areas, and these are expected to persist from year to year.

Managerial Presence

Management emphasizes sustaining and protecting natural conditions, while providing access for and accommodating a moderate level of human recreation use. Agency patrol will be on a regular basis, for monitoring, education, and enforcement purposes. Management actions will be necessary to protect Wilderness character, and may be indirect or direct. Overall management presence will be more noticeable to visitors. Site specific or blanket area regulations may be implemented, especially related to camping or campfires. Signs will be present at trail junctions and at designated campsites and will be used for resource protection.

2.1.4 Zone D — Areas within 1/4 mile of developed facilities or 500 feet of high use trails

This zone includes the most heavily used and most highly developed trails and areas within WMNF Wilderness. It represents the smallest area of WMNF Wilderness. The landscape within this zone is modified by the developed trail system and associated structures, and may include bridges, primitive shelters and/or toilets, designated campsites, and impacts resulting from recurring recreation use. However, in most places the landscape still appears largely unmodified.

To manage use and protect resource conditions the area likely has site-specific as well as blanket regulations, with frequent managerial presence. Direct management activity including enforcement of regulations occurs. This area has occasional opportunities for visitors to experience solitude as well as primitive and unconfined recreation bounded by the presence of the trail system, existing regulations, shelters, toilets, and campsites.

Social Conditions

Depending on the season, encounters with other visitors or with management are very likely, especially along trails and at established campsites. There is a moderate degree of challenge and risk, and a lower degree of self-reliance than in other zones. There is a moderate opportunity for solitude.

Facilities/Infrastructure

Bridges may exist for public safety or resource protection. Shelters and toilets may exist where identified in Wilderness enabling legislation or where consistent with standards described in this plan. The trail system and associated trail improvements are the primary evidence of past human presence and activity. Trails are managed consistent with WMNF Level 2 trail specifications (FSH 2309.18). Other evidence may include shelters and toilet structures. Historic artifacts may be present and are sometimes concentrated and may be obvious. Other impacts may be apparent.

Campsites

A moderate to high density of established sites may exist. Bare mineral soil may exist on sites, and impacts are recurring and will persist from year to year. Designated campsites may be present and exist for resource protection and to accommodate visitor use.

Vegetation/Soils

The Forest vegetative composition may have been affected by pre-designation activities such as timber harvesting. Moderate to high soil compaction and loss of vegetation, litter and duff is expected in localized areas on many trails and campsites. User-created trails may be present, especially in destinations and camping areas. Minimal erosion occurs on the disturbed sites and may be mitigated to ensure resource protection. Riparian and lakeshore conditions may show signs of human impacts in localized areas, and are expected to persist from year to year.

Managerial Presence

Management emphasizes sustaining and protecting natural conditions, while providing access for and accommodating a moderate to high level of human recreation use. Agency patrol occurs frequently for monitoring, education, and enforcement purposes. Management actions are necessary to protect Wilderness character, and may be indirect or direct. Overall management presence is noticeable to visitors.

Site specific or blanket area regulations may be implemented, especially related to camping or campfires. Signs are frequently present at trail junctions and at designated campsites and are used for resource protection.

3.0 Indicators and Standards

In the previous section, we outlined the zoning scheme that underlies the management activities entailed in this plan. Within each zone, we will utilize an LAC framework to guide our management decisions and actions.* The LAC framework as it is applied here is focused on indicators and standards. Indicators are markers of resource or social conditions. They are not necessarily direct measures of those conditions, however. Thus, an indicator of overuse in a campsite might be visitor counts, or a series of measurements of that campsite's area over time. The indicators we chose as central to assessing the quality of Wilderness and the recreation experience are listed below. Those indicators will feed directly into standards, which are thresholds on a given indicator, beyond which management action may be called for. In the example cited above, a standard could be a pre-established campsite size, beyond which revegetation or campsite closures might be enacted.

Monitoring is a critical component of this process. Through regular measurement of resource and social indicators and consistent comparison of those measurements to established standards, a reasonable understanding of the degree to which we are able to maintain Wilderness character can be achieved. Without monitoring, neither benchmarks nor trends can be evaluated. In the following sections, we outline our chosen wilderness indicators, the standards set for those indicators, and our plan for monitoring those indicators. Finally, we outline the ways in which we will gather for Forest-wide discussions of proper Wilderness management actions.

In the remainder of this section, we elaborate on each of the elements in the LAC process. We first provide narrative descriptions of the categories of indicators used to understand resource and social conditions within Wildernesses. From there we turn to descriptions of the specific indicators we will use within each category. These indicators and standards are summarized in Table E-01. Based on the information in Table E-01, we then provide a series of tables that give details of zone-specific standards, monitoring procedures, and possible management actions to be used in achieving the goals of this plan.

3.1 Wilderness Indicators

Based on the LAC framework outlined above, we chose four categories of indicators as significant identifiers of resource concerns. Those indicators fall into the categories of biophysical, social, aesthetic, and ecosystem process. Each is described below, along with a short excerpt from the Wilderness Act that served as the primary (though not entire) focus in determining the scope of that individual indicator. See Table E-01 for a summary of these indicators.

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* It's important to note that our monitoring activities are not completely driven by the LAC process. In some cases, our efforts will be aimed solely at monitoring wilderness conditions.

3.1.1 Biophysical Indicators

"…retaining its primeval character and influence…protected and managed so as to preserve its natural conditions and which…generally appears to have been affected primarily by the forces of nature" Wilderness Act, Section 1(c).

These are measures of the effects of human activity on the biological health and quality of the environment. They are typically large-scale and are often influenced most significantly by actions and events outside Wilderness. These indicators are categorized distinctly from others because the primary concern is for the health and quality of ecosystems and ecosystem components such as watersheds, air quality, wildlife and vegetative populations, rather than for the quality of the human experience. While recognizing that an unhealthy ecosystem has an effect on the human Wilderness experience, it seems that we should be concerned with polluted water, or acid rain, or endangered species for many reasons above and beyond the effect on human recreation experience. Individual as well as collective human-to-land impacts that cause concern primarily because of the effects on the land are categorized here.

3.1.2 Social Indicators

"…has outstanding opportunities for solitude or…unconfined type of recreation" Wilderness Act, Section 2(c).

These measures are immediate and local, involving direct contact among Wilderness users and between Wilderness users and agency personnel. These indicators are categorized distinct from others because they are strictly a measure of how people affect other people, and the primary concern is for the human experience in terms of type, quality, and frequency of interaction with others. These experiences may have a direct link to the quality of the ecosystem or the appearance of the surrounding landscape.

3.1.3 Aesthetic Indicators

"…without permanent improvements…with the imprint of man's work substantially unnoticeable…has outstanding opportunities for…primitive… recreation" Wilderness Act, Section 2(c).

These are measures of how direct human effects on the immediate landscape affect the human experience of the area as Wilderness. They typically are local in scope, are constrained to an immediate area, and result primarily from recreation use.

These indicators are categorized distinctly because the primary concern is for the human experience as it derives from the health and quality of the immediate, local landscape. These are measures of both human-caused impacts to a biophysical resource and the resulting effects of those impacts on the Wilderness experience. However, these types of impacts are unlikely to have lasting, significant effects on the larger-scale health of ecosystem components. As such, the driving force to mitigate them stems from the human experience.

3.1.4 Ecosystem Process Indicators

"A wilderness, in contrast with those areas where man and his works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man…" Wilderness Act, Section 2(c).

These measures of process and change on the land occur separately from the direct influence of human action. They are usually broad scale and large in scope. These indicators are categorized distinct from others because in many cases there is no direct human involvement in the process affecting change on the land. However, in recognizing the need for baseline data to inform management decisions, these processes should be monitored closely to understand natural change in the area.

3.2 Application of the Wilderness Management Process

3.2.1 Biophysical Indicators

Indicators may include air quality, water quality, threatened and endangered species, invasive species, and indicator species* as identified in the Forest Monitoring Plan (see Table E-01).

Standards will be common to all zones within Wilderness.

Management Actions may not affect individual sites, depending on the scope and source of the exceeded standard.

Though in many cases the effects and actions available to manage and administer Wilderness in terms of these indicators are site-specific and within control of managers, they are sometimes beyond the manager's administrative scope (e.g., air quality issues). Standards are set, and methods to measure and ensure that these standards are met involve other federal or state laws, other federal and state agencies, and other disciplines.

3.2.2 Social Indicators

Indicators may include number of contacts per given segment of trail per survey period, number of contacts per given destination point per survey period, assessments of visitor experience quality, and perception of crowding at determined destination points (see Table E-01).

Standards are based on use trends as monitored at the same locations and the same times from year to year. A range of survey locations will be determined across zones. Standards differ by zone, and are more restrictive in lower use zones.

* Though invasive species and indicator species concerns are often part of ecosystem processes (and are listed as such here), they will be treated in this plan as biophysical issues.

Management Actions triggered by exceeding standards will include a focused examination of management actions, policies, and general recreation trends that may underlie the specific issue. The level of tolerance and restriction represented by management actions may differ by zone.

There are tools available to manage and administer Wilderness in terms of these indicators, however they are sometimes judged to be ineffective. Because of their often seemingly arbitrary nature, numerical standards in these cases are extremely difficult to set and even more challenging to justify; visitors in some areas have indicated a greater acceptance of higher use levels than increased managerial regulation. Nevertheless, management actions may involve implementation of use restrictions or limitations.

3.2.3 Aesthetic Indicators

Indicators include campsite density, campsite size, and frequency of litter and exposed human waste (see Table E-01).

Standards are set for each indicator and often vary by zone.

Management Actions triggered by an excess of standards will often involve direct manipulation of campsites, an increase in managerial presence in the affected area, and may involve the implementation of use restrictions or use limitations.

We have many tools to manage and administer Wilderness in terms of these indicators. Furthermore, clear standards may be set based on the values used to determine current and desired resource conditions. Management actions to mitigate impacts in these areas are usually justifiable and commonly acceptable to visitors.

3.2.4 Ecosystem Process Indicators

Indicators may include ecological indicator species, natural fire, natural disturbance, and invasive species (see Table E-01).

Standards and **Management Actions** are largely dictated by the Forest Monitoring Plan, Standards and Guidelines, and Fire Plans.

Tools to monitor Wilderness in terms of these indicators are largely based in the natural sciences. These processes must be carefully monitored to increase understanding of Wilderness conditions.

3.3 Standards, Methods, and Management Actions

See Tables E-02 to E-07

Table E-01. Wilderness indicator framework.

	Wilderness Character	Indicators	Standards	Management Actions
Biophysical – Human effects on the land, primarily broad scale.	"… an area … retaining its primeval character and influence … protected and managed so as to preserve its natural conditions … generally appears to have been affected primarily by the forces of nature."	• Air Quality • Water Quality • Wildlife/TES • Invasive Species • Indicator Species	Standards are often defined by other legislation and measured by specialists other than Wilderness Managers.	Excess of standard may trigger action, but most likely will not greatly restrict Wilderness recreation opportunities.
Social – Direct and immediate human effects on other humans.	"… outstanding opportunities for solitude or … unconfined type of recreation."	• Visitor Use, Trail • Visitor Use, Destination • Experience Quality • Perception of Crowding	Standards are definable and measurable, but can be viewed as subjective and arbitrary.	Excess of standard triggers focused examination of management actions and policies. Data informs our decision-making and serves warning that use-related problems may increase.
Aesthetic – Human effect on the land that primarily affects the experience by other humans of an area as Wilderness.	"… without permanent improvements … with the imprint of mans work substantially unnoticeable … outstanding opportunities for … primitive … recreation."	• Campsite density • Campsite size • Litter and human waste	Standards are definable and measurable.	Excess of these standards triggers controlling actions on Wilderness visitors.
Ecosystem Process – Change and effects on the land not directly influenced by human action.	"A wilderness, in contrast with those areas where man and his works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man."	• Presence of ecological indicator species • Absence of natur-al fire/ disturbance • Invasive species	Dictated by Forest Monitoring Plan.	• Dictated by Forest Monitoring Plan • Develop Wilderness Fire Plan

Table E-02. Standards, monitoring methods, and management actions for visitor trail use.

	Zone A	Zone B	Zone C	Zone D
Standard	N/A	3 consecutive years showing an increase in total use.		
Method of Measure, Frequency	N/A	Select three sample locations, one per zone per Wilderness. Monitor use annually: Sample use on determined dates and times. Measure total number of users encountered during sampling period. Measure group sizes encountered during sampling period. Analyze data on 3-year intervals. Utilize same trail segments and sampling dates and times for duration of this plan.		
Manangement Action	N/A	1. Focused assessment of management actions including group-use policies, education message, and information delivery. 2. Survey of users.		

Table E-03. Standard, monitoring methods, and management actions for visitor destination use.

	Zone A	Zone B	Zone C	Zone D
Standard	3 consecutive years showing an increase in total use.			
Method of Measure, Frequency	Select 1 destination area per zone per Wilderness. Measure total number of users encountered during sampling period. Measure group sizes encountered during sampling period. Measure maximum and minimum total users at any time during sample period. Monitor use annually. Analyze data on 3-year intervals. Utilize same destinations and sampling dates and times for duration of this plan.			
Management Action	1. Focused assessment of management actions including group-use policies, education message, and information delivery. 2. Survey of users.			

Table E-04. Standards, monitoring methods, and management actions for perceptions of crowding and experience quality.

	Zone A	Zone B	Zone C	Zone D
Standard	N/A	Majority of visitors indicate perception of overcrowding.		
Method of Measure, Frequency	N/A	Survey once for baseline information and once halfway through the life of the Plan. Survey will focus on visitor perceptions of crowding at selected sites within Wilderness and quality of recreation experience. Survey will also assess whether information delivery and education messages are helping visitors find the appropriate recreation opportunity within or outside Wilderness.		
Management Action	N/A	Focused assessment of management actions including group-use policies, education message, and information delivery.		

Table E-05. Standards, monitoring methods, and management actions for campsite density.

	Zone A	Zone B	Zone C	Zone D
Standard	0 lasting campsites with no visible impacts lasting more than 1 year.	0 sites within 500' of each other, 0 sites within 200' of trail.	0 sites within 200' of each other, maximum total of 2 sites within 500' of each other.	3 sites within 200' of each other, maximum total of 5 sites within 500' of each other.
Method of Measure, Frequency	Survey along 1 selected stream drainage within each Wilderness each year. Survey 1 trailless peak above 2,999 feet within each Wilderness each year, as appropriate.	Complete inventory once during the life of the Plan.		
Manangement Action	1. Active site revegetation. Written reminder to all VIS centers reinforcing the established education message for this zone. Examine management that may contribute to a change in use patterns. 2. Increase focused patrols in the affected area.If initial actions do not resolve issue, conduct focused management assessment to consider: 3. Enact closure order for affected area. 4. Consider implementation of limited overnight-use system.		1. Post revegetation signs. Written reminder to all VIS centers reinforcing the established education message for this zone. Examine management that may contribute to a change in use patterns. Analyze group-use policies and act accordingly. 2. Increase focused patrols in the affected area. 3. If initial actions do not resolve issue, conduct focused management assessment to consider: 4. Enact or expand closure order for affected area. 5. Consider implementation of limited overnight-use system.	

Table E-06. Standards, monitoring methods, and management actions for campsite size.

	Zone A	Zone B	Zone C	Zone D
Standard	No net increase in size.			Up to 10% net increase in size over the planning period.
Method of Measure, Frequency	Survey along 1-2 selected stream drainages, each year. Survey of 1-2 trailless peaks above 2999 feet, each year.	Complete inventory once during the life of the Plan.	Complete inventory once during the life of the Plan. Select 10 sample sites. Measure campsite area at sample sites once during the life of the Plan. Monitor remaining campsites for area change. Utilize same sample sites for duration of this Plan.	
Manangement Action	1. Active site revegetation. Written reminder to all VIS centers reinforcing the established education message for this zone. Examine management that may contribute to a change in use patterns. 2. Increase focused patrols in the affected area.If initial actions do not resolve issue, conduct focused management assessment to consider: 3. Enact or expand closure order for affected area.	1. Active site revegetation. Written reminder to all VIS centers reinforcing the established education message for this zone. Examine management that may contribute to a change in use patterns. Analyze group-use policies and act accordingly. 2. Increase focused patrols in the affected area. — If initial actions do not resolve issue, conduct focused management assessment to consider: 3. Enact or expand existing closure order for affected area.		1. Post revegetation signs. Establish site boundaries and re-vegetate expanded area. Begin focused examination of all site dimensions within zone. Rehabilitate any expansion exceeding standard. Examine management that may contribute to a change in use patterns. Analyze group-use policies and act accordingly. 2. Increase focused patrols in the affected area 3. Enact or expand existing closure order for affected area.

Table E-07. Standards, monitoring methods, and management actions for litter and human waste.

	Zone A	Zone B	Zone C	Zone D
Standard	Inability for workforce to effectively control litter and human waste through basic operations and maintenance.			
Method of Measure, Frequency	As discovered and documented in incident reports.	As discovered on regularly scheduled patrols and documented in incident reports.		
Manangement Action	1. Focused intensive education effort at trailhead and other non-Wilderness locations. 2. Implementation of human waste pack-out system.	1. Focused intensive education effort at trailhead and other non-Wilderness locations. 2. Increased patrols in affected areas. 3. Implementation of human waste pack-out system.	1. Focused intensive education effort at trailhead and other non-Wilderness locations. 2. Increased patrols in affected areas. 3. Consider other management actions including closing or relocating designated sites. 4. Implementation of waste pack-out system.	

4.0 Wilderness Staffing

Proper staffing with Wilderness rangers is essential to ensure consistent education, monitoring and stewardship. Listed below is the recommended minimum staffing for the 5 Wildernesses at the time of Forest Plan Revision. The numbers are based on:

- A minimum starting point of 150 days of a Wilderness Ranger per Wilderness. This would allow for the presence of, on average, one Wilderness Ranger 7 days a week for the field season of May to October.
- Complexity (for example, size, number of campsites, miles of trail and visitation per acre of Wilderness), knowledge of the ground, and professional judgment on what it takes to adequately meet the needs of each Wilderness.

Wilderness	Acres	Baseline Field Staffing Needs (days per field season)
Pemigewasset	45,000	430
Sandwich Range	25,000	180
Presidential Range/Dry River	29,000	150
Great Gulf	5,552	200
Caribou-Speckled Mountain	12,000	150

In addition to the field-based staffing each Wilderness should have another 130 days of time for Wilderness Stewards. These positions would be used primarily to ensure that the Wilderness education, planning and monitoring requirements are met. This time should be staffed with permanent seasonal positions to facilitate consistency over time.

4.1 Summary of Conditions

Below is a summary of conditions within each Wilderness that justify more than 150 days of Wilderness ranger time:

Pemigewasset:

- Presence of a developed campsite at Thirteen Falls
- Large size Wilderness with many miles of trail
- High levels of use with complex use patterns

Sandwich Range:

- Intense human use issues and need for patrols at Black and Flat Mountain Ponds
- Close proximity to Mt. Chocorua and high levels of use
- Required mitigation commitments at former shelter sites

Great Gulf:

- Intense use per acre
- Proximity to Mt Washington and its attractions, associated issues
- High intensity use of designated sites

5.0 Education Plan

5.1 Introduction

Resource managers have come to recognize education as an effective management tool. As a device for affecting visitors' behaviors, it is aligned with and helps implement the 1964 Wilderness Act's idea of wilderness as "an area where the earth and its community of life are untrammeled by man."

The education piece of this wilderness plan is designed as a component of a tiered system which includes the National Wilderness Education Strategy (NWES). It addresses the broad directives of the NWES as they pertain to the unique situations the WMNF faces. Our overall goals in implementing the education component of this plan include:

- Creating a more educated public that will travel lightly in the wilderness and will support wilderness management efforts;
- Developing highly skilled Wilderness rangers;
- Educating Forest Service employees such that they understand the goals of wilderness stewardship;
- Providing consistent public information including signing and Visitor Information Services (VIS) materials; and
- Achieving better overall implementation of wilderness plan.

To reach these ends, we have identified current target audiences and specific initiatives that will be reexamined and adjusted as needed. It is important to note that this document will continue to evolve as differing use trends, needs, and impacts emerge.

Also underlying the goals and objectives in this education plan is coordination with the WMNF conservation education program in delivering the messages outlined below. Doing so will provide the opportunity for dissemination of broader and more consistent messages across the Forest.

5.1.1 Current Effort

The WMNF currently has many Wilderness education initiatives in place. Below are some examples of initiatives currently occurring on the Forest.

- Visitor Information Services and backcountry staff answer questions, provide guidance and model exemplary behaviors in Wilderness.
- Trailhead signs and kiosks are used widely to disseminate information to Forest visitors.

- The Brickett Place now has a thorough interpretive plan and has recently begun to be developed as a wilderness information center.
- As a portal for the Pemigewasset Wilderness, Lincoln Woods provides important interpretive and educational services.
- The ranger stations have been equipped with Wilderness Boxes that contain resources for interpretive displays.
- Formal programs and presentations have been implemented at our campgrounds as well as through venues such as Pinkham Notch Visitor Center's "Wednesday Night with a Ranger."

These initiatives generally lack a cohesive, Forest-wide effort. To date they have had little or no coordinated objective, message, or content. In some cases, the actual audiences have differed from the desired target audiences. These efforts must be reexamined to analyze their effectiveness at relaying the desired messages to proper audiences.

5.1.2 Future Efforts

To effectively protect and manage Wilderness we must have the support of our visitors and other affected publics. A primary mechanism for gaining the support of these visitors and publics is education. By giving individuals relevant messages regarding wilderness stewardship, those individuals will ideally come to understand how they relate to and perhaps benefit from Wilderness. While educational efforts are seldom completely successful, they are a preferred method of shaping beliefs, attitudes, and thus behaviors as they are the least invasive and heavy-handed of available approaches.

Through our educational efforts we hope to inform visitors and other affected individuals such that they change the beliefs and attitudes of those who affect, and benefit from Wilderness. To do so we must provide ample time to implement our plan and evaluate its effectiveness. It is not a short-term fix but a long-term investment.

5.2 Implementation

5.2.1 Target Audiences

1. Internal employees
   a. Wilderness/Backcountry staff
   b. Visitor Information Services staff
   c. Leadership (Forest Leadership Team, Supervisor's Office staff, etc.)
   d. Resource specialists
2. Outfitters and Guides
3. Cooperators
4. Area youth
5. Urban audience
6. Wilderness/Backcountry visitors

7. General Forest visitors
8. Elected representatives

5.2.2 Action Plan Items

1. Wilderness/Backcountry Staffing

Objective: To maintain a field presence in order to take advantage of teachable moments and to ensure compliance of Wilderness rules and regulations.

Field staff will interact with Forest visitors both in and outside of designated Wilderness. Informal education will be achieved daily, responsible practices will be modeled and compliance checks completed – *FY04 and ongoing*. (See Section **4.0 – Staffing** for further reference.)

2. Wilderness Skills Training for Internal Employees and Partners

Objective: To provide the information necessary for coordinated management efforts within the WMNF Wilderness Areas.

Efforts include:

- Hosting a Wilderness Ranger Day – *FY04 and annually thereafter*
- Backcountry wilderness field trip – *FY04 and annually thereafter*
- Other relevant skills training, such as primitive tool use and courses put on by the Carhart Center – *FY04 and as needed thereafter*
- Review of wilderness trail standards for internal and external trail crews – *FY05 and every three years thereafter*

3. Wilderness Training for Visitor Information Services Staff, Information Volunteers, Cooperators, Frontliners, etc.

Objective: Create and host a series of trainings to raise awareness among internal and external customer service personnel of what wilderness is, why it exists, and our responsibilities as wilderness stewards.

- Supply our information-providers with the correct information to be passed on to Forest visitors – *FY04 and ongoing*
- Tie in with VIS and Frontliner trainings to supply our information providers with information needed to understand and deliver to Forest visitors – *FY05 and at least annually thereafter*
- Along with the information from the WMNF Wilderness Management Plan, develop and present a seminar based on the Carhart Center's "Wilderness awareness training module: A framework to increase the understanding of Wilderness values, policies and stewardship among Forest Service employees." – *FY06 and every three years thereafter*
- Develop a regional wilderness ranger training seminar/school that might include the Green Mountain/Finger Lakes National Forest, Adirondack Park, and representatives of other regional land management agencies – *Begin planning FY06*

4. Outfitter/Guide Education

Objective: To provide outfitters and guides with the correct information to be passed on to their patrons and to reaffirm our expectations of their services.

The Outfitter/Guide program has the potential to be one of our most valuable channels for passing on the Wilderness messages that we would like disseminated to the public. Thousands of visitors take advantage of these services annually and look to their providers for modeling and direction. By educating outfitters and guides we can indirectly affect their clientele. Toward this end, we will:

- Assure that appropriate Wilderness information is included in the O/G packet – *FY05 and ongoing*
- Participate in meetings with permitted groups to assure proper Wilderness information is addressed among these groups – *FY05 and ongoing*

5. General Forest Visitor Programs

Objective: To educate visitors who may not otherwise have a chance to visit or learn about Wilderness character, threats, history, and management.

Work with the Conservation Education Specialist to develop wilderness programs to be offered at campgrounds, visitor centers and information centers. Other venues will be explored such as the Highland Center, state parks, local festivals and fairs, etc. – *FY06 and ongoing*

6. Development of Wilderness Information Centers

Objective: To further develop Wilderness Information Centers.

- Implement Brickett Place Wilderness Information Center Interpretive Plan – *FY06*
- Develop an interpretive plan for Lincoln Woods Visitor Center – *FY06*

7. Standardization of Wilderness signs across the WMNF

Objective: To create standard signs and entry points that are easily recognizable as specific to WMNF Wilderness Areas.

Across the WMNF this initiative has been a work in progress but is not yet complete. Further work by all Wilderness managers will be needed to achieve the objective. – *Begun in FY04; in FY05 come to agreement on standard entry signs; in FY06 implement as signs need replacing*

8. Development of a standardized "Why Wilderness" sign for kiosks

Objective: To deliver and/or reaffirm what visitors should expect when visiting Wilderness.

The creation of such a sign is a step toward informing visitors of the rationale behind management actions. It will tie to a larger evaluation of recreation kiosks and serve to inform visitors of what to expect and how to be a responsible visitor. – *FY06 and ongoing*

9. Creation of the Forest Supervisor's Wilderness Steward Award

Objective: To reward and encourage our employees and/or partners in Wilderness Stewardship.

This non-monetary award (large framed print or similar) will be given to an individual or organization that has exemplified Wilderness stewardship. The ability (not an obligation) to present this award will help the WMNF recognize our partners who go above and beyond in providing exemplary leadership in Wilderness stewardship. – *FY05 and ongoing*

10. Development of Wilderness Information Packet for elected representatives and media

Objective: Work with Public Affairs to create an educational packet of information to be sent to our representatives with an open invite for a field trip.

- Create a briefing packet – *FY06*
- Develop ideas for media and/or congressional field trips – *FY06 and ongoing*

11. Increase outreach in local school systems

Objective: To introduce local youth to Wilderness ethics and familiarize them with their local resources.

Coordination of the various in-place and possible future efforts in local schools must be a priority. An agreed upon message and curriculum will be chosen and implemented as part of the Forest Conservation Education Strategic Plan with assistance from the Conservation Education Coordinator. – *Begin in FY06 and ongoing*

12. Urban Audience Outreach

Objective: Work with the Conservation Education Program to develop a Wilderness component of the larger efforts to establish connection between the Forest and urban populations.

Several efforts paralleling the desired objective are currently in place. These initiatives must be examined for their message and cohesiveness. Together with the Conservation Education Program Specialist and Region 9 representatives, Wilderness managers will decide on an appropriate approach or curriculum. – *Begin in FY06 and ongoing*

5.3 Education Messages

5.3.1 Introduction to Established Education Messages for Wilderness

The following are the general proper use messages to be conveyed to the public by frontliners. Although each zone has distinguishing marks of character, management, and level of associated risk, they abut with unidentified boundaries and multiple zones may be encountered even when on a single trail day hike in Wilderness. Proper planning and knowledge of

each zone's defining attributes will lend to safer and more enjoyable visitor experiences while protecting the Wilderness resource.

Upon entering Wilderness there will be noticeable differences from the land left behind—the signs don't have as much information and are fewer in number, the trails may seem less distinct, there aren't large groups on the trail or at campsites. All of this is part of the Wilderness experience that the Forest Service has strived to maintain.

5.3.2 Education Messages for All Zones

Below is a summary of established education messages, following the principles of "Leave No Trace," and generalized for all Wilderness zones:

- Visitors should plan ahead and be well prepared for a range of recreation opportunities with varying levels of challenge and degrees of risk. Self-reliance and proficient navigation skills will make for a safer and more enjoyable visit especially when winter conditions are present and trails may be more difficult to follow.
- Group number should be kept to a minimum, never exceeding ten, while hiking or camping. Multiple unassociated parties may simultaneously occupy a site, designated or otherwise, as long as their total numbers do not exceed ten.
- Travel should be limited to durable surfaces such as trail treadway, rock, sand, or nonvegetated duff whenever possible. Avoid fragile areas such as those that are soft, wet, or lightly vegetated. When going off trail, members of a group should spread out to disperse the impact and avoid the creation of lasting trails.
- Where possible, only designated campsites or established campsites should be selected for use. Avoid lightly impacted campsites and the perimeters of existing sites. Established sites should be, and often must be, at least 200 feet away from trails, water sources, and any other campsites as well as ¼ mile from any tent platforms or designated campsites. Additional restrictions may be utilized in specific Forest Protection Areas. Always minimize impacts, alterations, and number of nights spent in one location.
- When no established campsites are present, only campsites showing no former human impacts should be selected for use. Sites should be at least 200 feet from trails and water sources. Always practice low impact techniques (no lasting alterations, well-planned layout, located in a naturally well-drained area, etc). Never occupy a pristine site for more than two nights. Upon departure, visitors should naturalize the site as best as possible.
- Always pack out all litter. Human waste should be disposed of in a responsible manner (i.e., catholes more than 200 feet from water sources or in outhouses where available).
- Leave all natural and cultural artifacts as they were found. Take away a picture and a lasting memory but leave nature's treasures for others

to enjoy. Humans have also had a hand in shaping the landscape, and human history is inseparably linked to White Mountain Wilderness. Even pieces of logging refuse more than 50 years old are relics that are best interpreted in context and not after being removed.

- Campfires are strongly discouraged and in many areas (e.g., Great Gulf Wilderness, alpine zone) prohibited. Use of a camp stove is preferable. If fires are built use only dead and down fuel and practice low-impact technique (i.e., mound, sheet, pan fires). Use existing fire rings where available. Always make sure fires are out cold before leaving and never burn trash.
- Respect wildlife and maintain adequate distance as not to disturb their natural behaviors. Proper storage of food and packing out of all food waste is vital.
- Show consideration for other visitors and their pursuit of solitude by maintaining distance when selecting sites for rest, camp, etc. Devices such as cellular phones, radios, etc. should be used with discretion, if at all, to avoid encroachment on others' experience.

5.3.3 Education Messages for Zone A

(Note: messages unique to each zone are in italics)

- Visitors should plan ahead and be well prepared for *the most challenging level of off-trail travel and recreation opportunities with the highest degree of risk. Only those comfortable in wilderness navigation should venture into this zone where self-reliance is essential.*
- Group number should be kept to a minimum, *preferably four or fewer people* but never more than ten.
- Whenever possible travel should avoid fragile areas such as those that are soft, wet, or lightly vegetated. Durable surfaces such as rock, sand, or nonvegetated duff are always better route choices. *Members of a group should spread out to disperse the impact and avoid the creation of lasting trails.*
- *Only campsites showing no former human impacts should be selected for use.* Sites should be at least 200 feet away from water sources. *Never occupy a site for more than two nights. Upon departure, visitors should naturalize the site as well as possible.*

5.3.4 Education Messages for Zone B

(Note: messages unique to each zone are in italics)

- Visitors should plan ahead and be well prepared for *challenging travel and primitive recreation opportunities with a high level of risk.* Self-reliance and proficient navigation skills may be needed to facilitate travel on *minimally maintained trails.* These paths may be exceptionally hard to follow under winter conditions.

- Group number should be kept to a minimum, *preferably six or fewer people* and never exceeding ten.
- Whenever possible travel should avoid fragile areas such as those that are soft, wet, or lightly vegetated. Durable surfaces such as trail treadway, rock, sand, or nonvegetated duff are always better route choices. If traveling off-trail, members of a group should spread out to disperse the impact and avoid the creation of lasting trails.
- *Only campsites showing no former human impacts should be selected for use.* Avoid lightly impacted campsites. Sites should be, and often must be, at least 200 feet away from trails and water sources, and *at least 500 feet from any other campsites currently being used by other visitors.* Practice low impact techniques (no lasting alterations, well-planned layout, located in a naturally well-drained area, etc). *Never occupy a site for more than two nights and upon departure, visitors should naturalize sites as well as possible.*
- Pack out all litter. Human waste should be disposed of in a responsible manner (i.e., catholes more than 200 feet from water sources).
- Leave all natural and cultural artifacts as they were found.
- Use of a campstove is preferable. Campfires are strongly discouraged and in many areas (e.g., Great Gulf Wilderness, alpine zone) prohibited. If fires are built use only dead and down fuel, practice low-impact technique (i.e., mound, sheet, pan fires) and conceal all traces of campfire before departure. Always make sure fires are out cold before leaving and never burn trash.
- Respect wildlife and maintain adequate distance as not to disturb their natural behaviors. Proper storage of food and packing out of all food waste is vital.
- Show consideration for other visitors and their pursuit of solitude by maintaining distance when selecting sites for rest, camp, etc. Devices such as cellular phones, radios, etc. should be used with discretion, if at all, as to avoid encroachment on others' experience.

5.3.5 Education Messages for Zone C

(Note: messages unique to each zone are in italics)

- Visitors should plan ahead and be well prepared for *challenging travel and semi-primitive recreation opportunities with a moderate level of risk.* Navigation skills will better facilitate travel on *moderately developed trails* especially under winter conditions.
- Group number should be kept to a minimum, *preferably six or fewer people* and never exceeding ten.
- Travel should be limited to durable surfaces such as trail treadway, rock, sand, or nonvegetated duff whenever possible. Avoid fragile areas such as those that are soft, wet, or lightly vegetated. When going off trail, members of a group should spread out to disperse the impact and avoid the creation of lasting trails.

- *Only designated campsites or established campsites should be selected for use.* Avoid lightly impacted campsites. Established sites should be, and often must be, at least 200 feet away from trails, water sources, and any other campsites as well as ¼ mile from any tent platforms. Additional restrictions may be utilized in specific Forest Protection Areas. Always minimize impacts, alterations, and number of nights spent in one location.
- Pack out all litter. Human waste should be disposed of in a responsible manner (i.e., catholes more than 200 feet from campsites, trails and water sources).
- Leave all natural and cultural artifacts as they were found.
- Use of a campstove is preferable. Campfires are strongly discouraged and in many areas (e.g., Great Gulf Wilderness, alpine zone) prohibited. If fires are built use only dead and down fuel, practice low-impact technique (i.e., mound, sheet, pan fires) and conceal all traces of campfire before departure. Use existing fire rings where available. Always make sure fires are out cold before leaving and never burn trash.
- Respect wildlife and maintain adequate distance as not to disturb their natural behaviors. Proper storage of food and packing out of all food waste is vital.
- Show consideration for other visitors and their pursuit of solitude by maintaining distance when selecting sites for rest, camp, etc. Devices such as cellular phones, radios, etc. should be used with discretion, if at all, as to avoid encroachment on others' experience.

5.3.6 Education Messages for Zone D

(Note: messages unique to each zone are in italics)

- Visitors should plan ahead and be well prepared for *challenging travel and semi-primitive recreation opportunities.* During winter conditions the level of risk will be elevated and navigation skills will better facilitate travel on *more developed trails.*
- Group number should be kept to a minimum, *preferably six or fewer people* and never exceeding ten.
- Travel should be limited to durable surfaces such as trail treadway, rock, sand, or nonvegetated duff whenever possible. Avoid fragile areas such as those that are soft, wet, or lightly vegetated. When going off trail, members of a group should spread out to disperse the impact and avoid the creation of lasting trails.
- *Only designated campsites or established campsites should be selected for use.* Avoid lightly impacted campsites. Established sites should be, and often must be, at least 200 feet away from trails, water sources, and any other campsites as well as ¼ mile from any tent platforms. Additional restrictions may be utilized in specific Forest Protection Areas. Always minimize impacts, alterations, and number of nights spent in one location.

- Pack out all litter. Human waste should be disposed of in a responsible manner (i.e., catholes more than 200 feet from water sources or in outhouses where available).
- Leave all natural and cultural artifacts as they were found.
- Use of a campstove is preferable. Campfires are strongly discouraged and in many areas (e.g., Great Gulf Wilderness, alpine zone) prohibited. If fires are built use only dead and down fuel and practice low-impact technique (i.e., mound, sheet, pan fires). Use existing fire rings where available. Always make sure fires are out cold before leaving and never burn trash.
- Respect wildlife and maintain adequate distance as not to disturb their natural behaviors. Proper storage of food and packing out of all food waste is vital.
- Show consideration for other visitors and their pursuit of solitude by maintaining distance when selecting sites for rest, camp, etc. Devices such as cellular phones, radios, etc. should be used with discretion, if at all, as to avoid encroachment on others' experience.

6.0 Summary

Along with forest plan goals, objectives, standards and guidelines, the elements laid out above set the course of Wilderness management on the WMNF. Zones are defined by resource and social criteria, and education messages are specified for a broad collection of audiences. Specific indicators, standards, and monitoring procedures will guide future management actions.

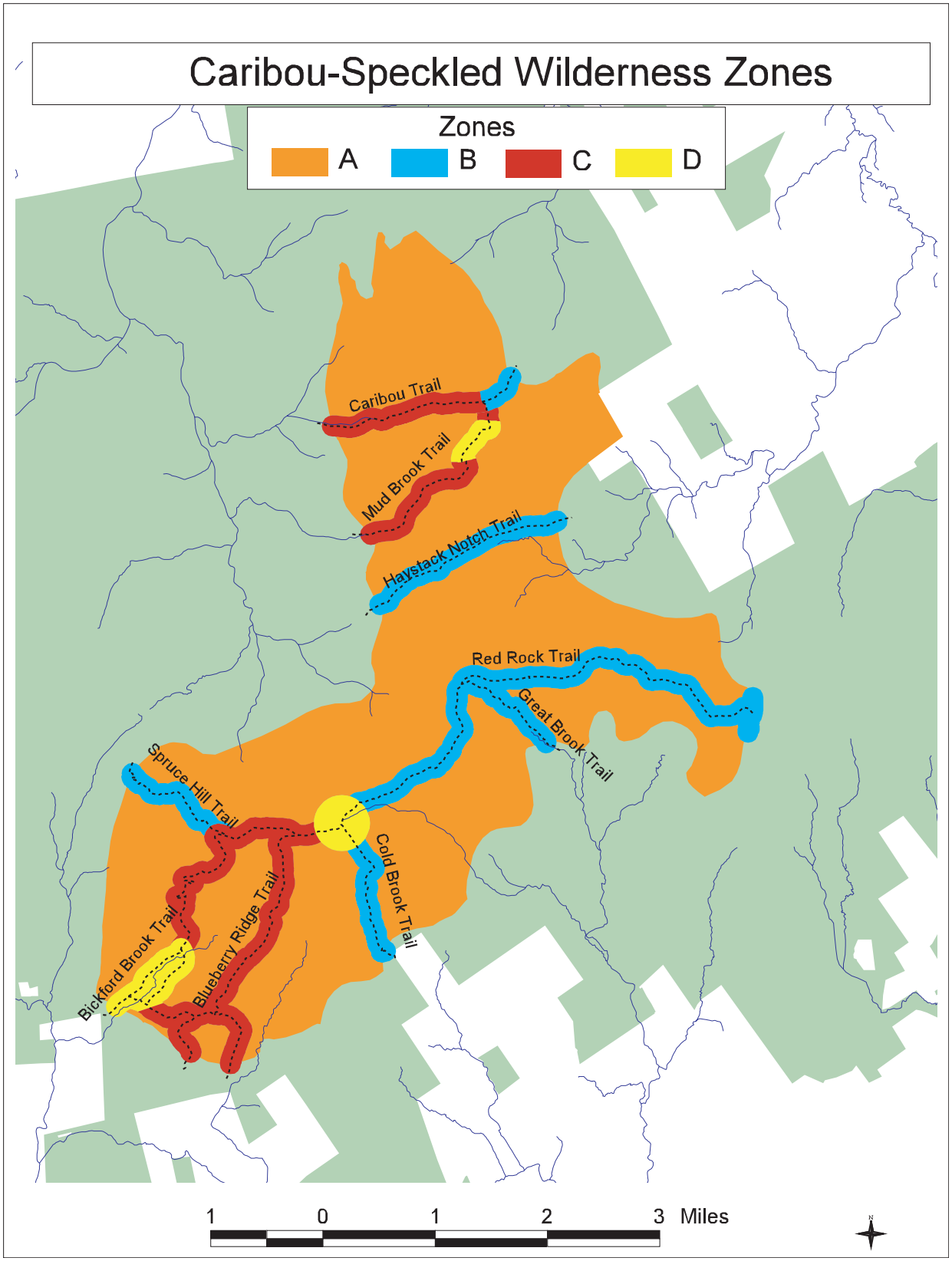
A key element in this management process is an annual meeting of WMNF Wilderness rangers and managers. In this annual meeting, at least the following will take place:

- A review of the previous year's monitoring results and field findings;
- Discussion and agreement on proper management actions needed to address identified problems;
- Discussion and validation of the contents and/or necessary editing of this plan;
- Development of a monitoring schedule and protocol for the following year;
- Discussion and agreement on consistent monitoring protocols; and
- Gathering of information for the annual WMNF State of the Wilderness Report.

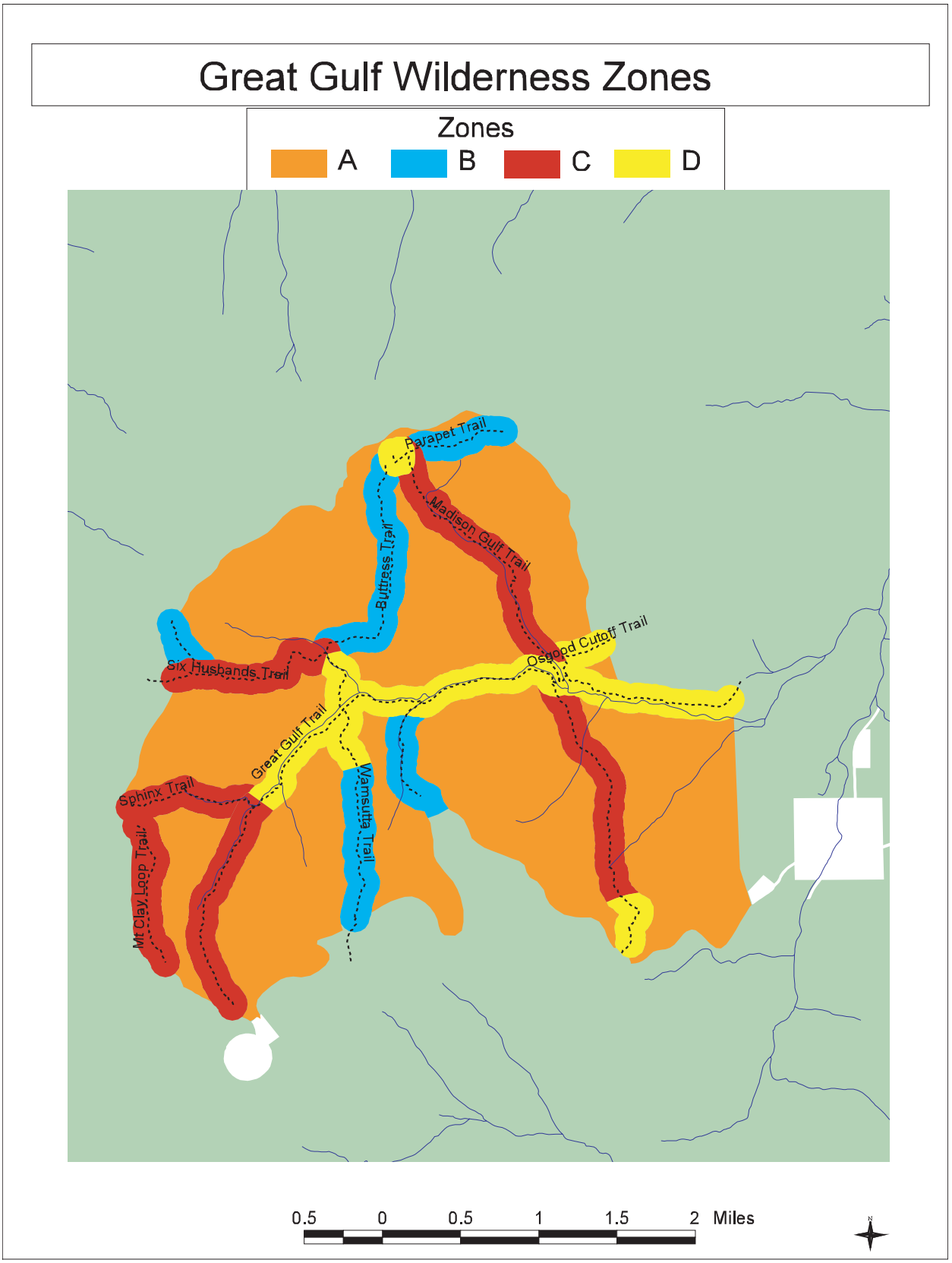
The annual meeting serves as a time to update and evaluate the larger Wilderness management approach, as well as a point at which much of the following year's program of work will be established. The State of the Wilderness Report will be completed in early spring, and will be used as a reference for monitoring, as well as to inform Forest management actions and policy changes. Through the simultaneous processes of maintaining wilderness trails and facilities, of implementing management actions, and of monitoring conditions laid out here, significant strides can be made toward reaching more consistent and immediately relevant management of WMNF Wildernesses.

7.0 Wilderness Zone Maps

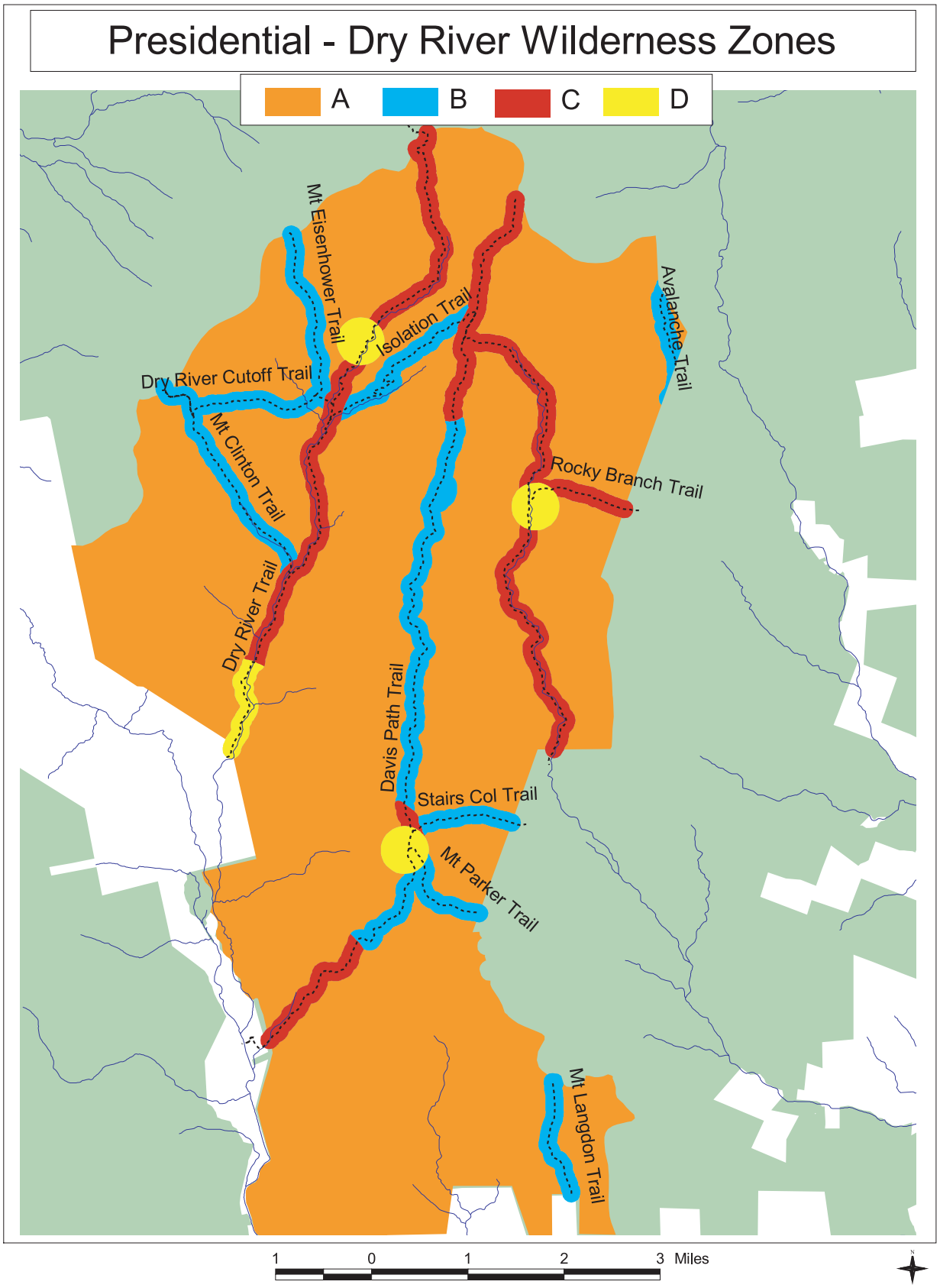
Map E-01. Caribou-Speckled Mountain Wilderness Zones.



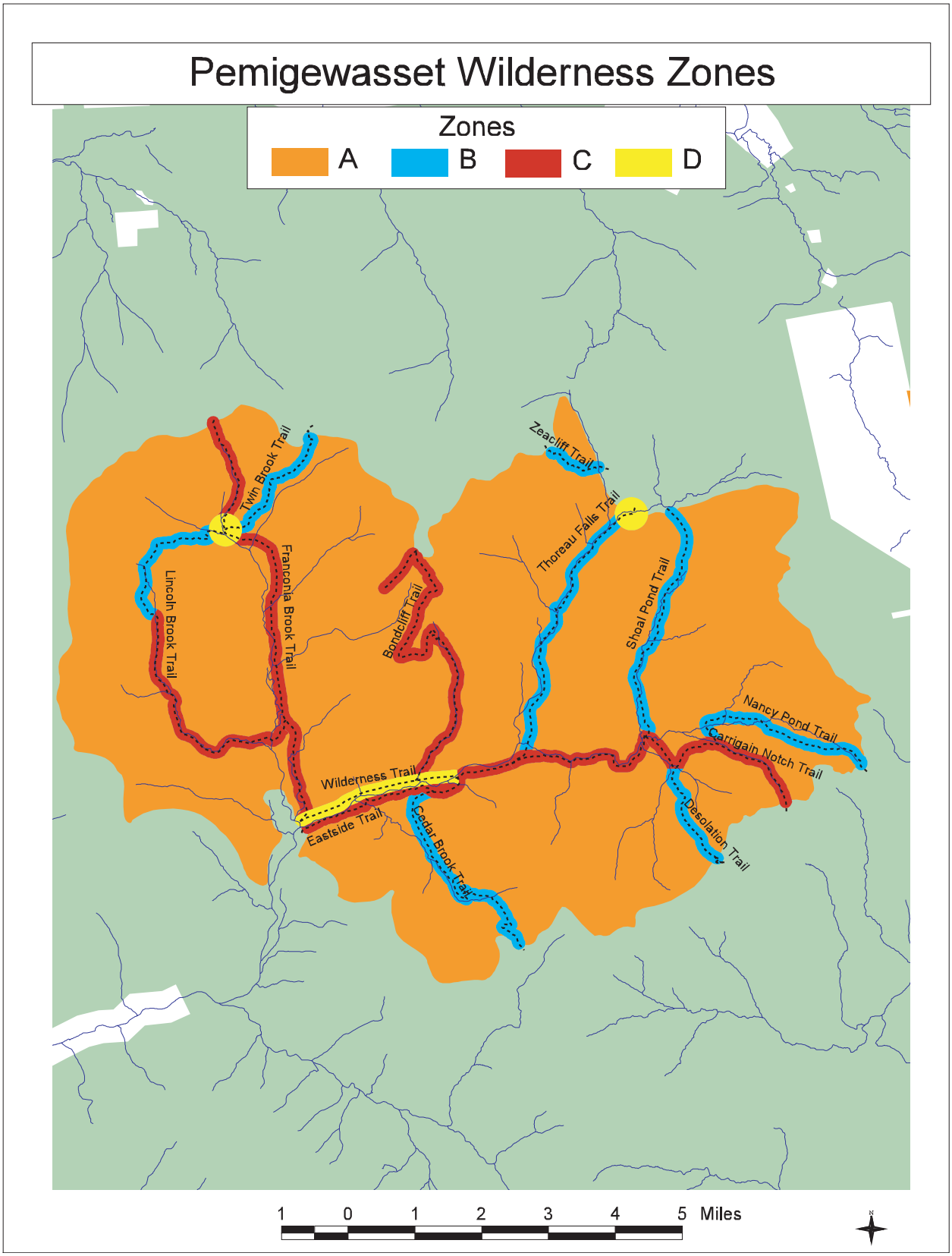
Map E-02. Great Gulf Wilderness Zones.



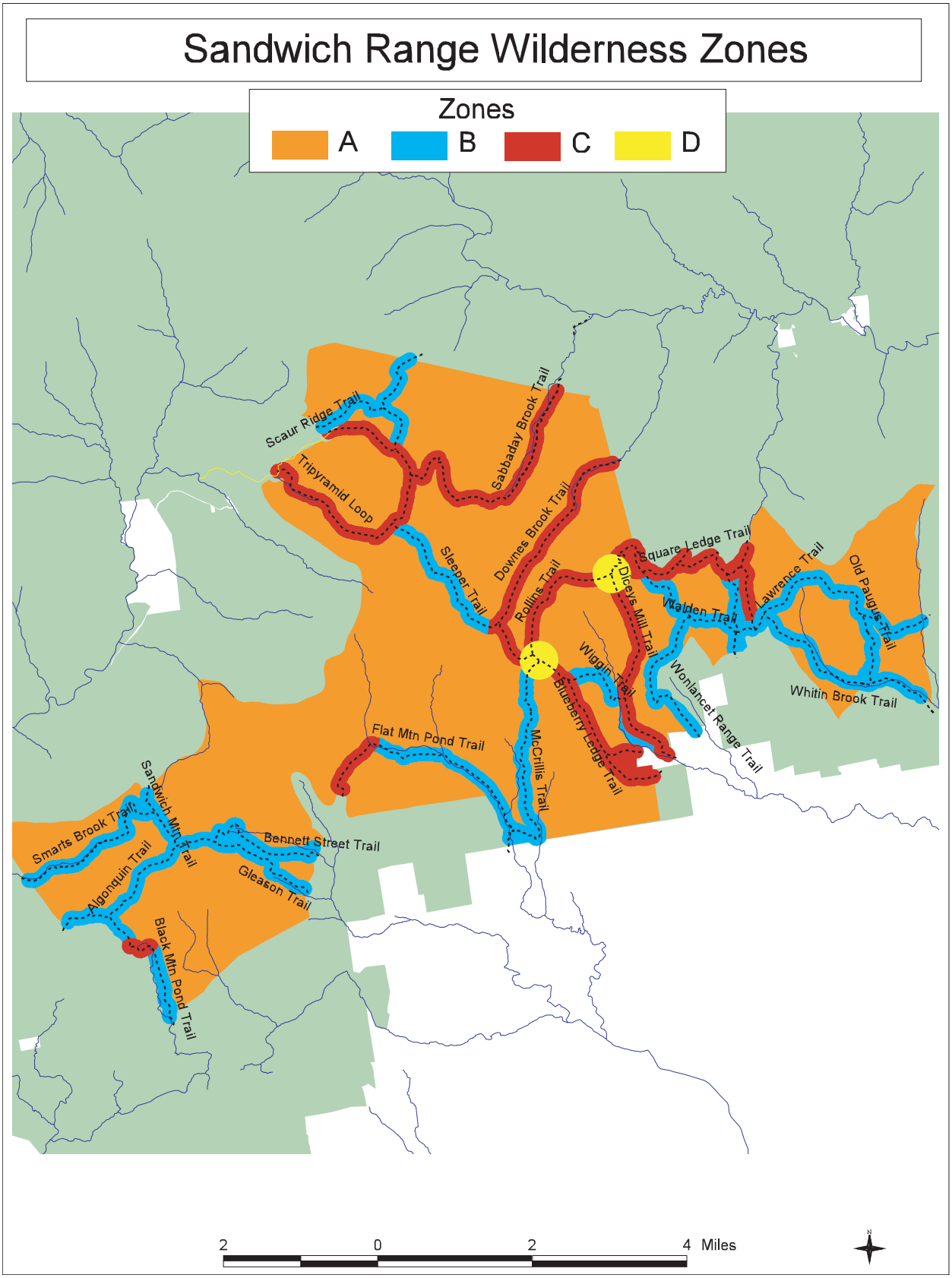
Map E-03. Presidential-Dry River Wilderness Zones.



Map E-04. Pemigewasset Wilderness Zones.



Map E-05. Sandwich Range Wilderness Zones.



White Mountain National Forest

Appendix F
Disposition of 1986 Forest Plan Management Indicator Species

Management Indicator Species	Representative Habitat	Disposition
Robbins' cinquefoil	Alpine	Habitat tracked by 2 alpine community Ecological Indicators (EI); Species effects presented in Rare and Unique Features section of EIS and in Biological Evaluation (BE)
Canada lynx	Low Disturbance Forested	Habitat tracked by high elevation spruce-fir bird suite EI; Species effects discussed in Rare and Unique Features section of EIS and in BA
Blackpoll warbler	High Disturbance Forested; young or resembling young	Habitat tracked by high elevation spruce-fir bird suite EI, which includes Blackpoll warbler
Gray-cheeked (now Bicknell's) thrush	High Disturbance Forested; mature, overmature or old growth	Habitat tracked by high elevation spruce-fir bird suite EI, which includes Bicknell's thrush; Species effects discussed in Rare and Unique Features section of EIS and in BA
Northern goshawk	Mature/overmature hardwoods and mixed woods	Habitat tracked by scarlet tanager MIS
Chestnut-sided warbler	Regenerating hardwoods and mixed woods	Maintained as MIS for regenerating/young hardwoods
Broad-winged hawk	Mature/overmature paper birch and aspen	Habitat tracked by ruffed grouse MIS; Habitat effects also discussed in Vegetation and Habitats section of EIS
Ruffed grouse	All ages of aspen and regenerating/ young birch	Maintained as MIS
Gray squirrel	Mature/overmature oak and oak-pine	Habitat tracked in Vegetation and Habitats section of EIS
Rufous-sided (now Eastern) towhee	Regenerating/young oak and oak-pine	Habitat tracked in Vegetation and Habitats and Rare and Unique Features sections of EIS
Pine warbler	Mature/overmature pine	Habitat tracked in Vegetation and Habitats and Rare and Unique Features sections of EIS
Northern (now Dark-eyed) junco	Regenerating/young pine	Habitat tracked in Vegetation and Habitats and Rare and Unique Features sections of EIS
White-tailed deer	All ages of hemlock	Habitat tracked in Vegetation and Habitats section of EIS; Deer evaluated indirectly in BA
Cape May warbler	Mature/overmature spruce and fir	Mature spruce and fir category retained, but blackburnian warbler used instead as MIS

Management Indicator Species	Representative Habitat	Disposition
Snowshoe hare	Regenerating/young spruce and fir	Habitat type retained, but tracked instead by magnolia warbler MIS
Eastern kingbird and Eastern bluebird	Upland openings — grass, forb, or orchard	Opening habitat tracked in the Vegetation and Habitats section of EIS
Mourning warbler	Upland openings — shrub	Opening habitat tracked in Vegetation and Habitats and Rare and Unique Features sections of EIS
Black duck	Wetlands	Habitat effects discussed in Rare and Unique Features and Watershed sections of EIS
Brook trout	Permanent lakes, ponds, and streams	Habitat effects discussed in Riparian and Aquatics, Watershed, and Rare and Unique Features sections of EIS
Peregrine falcon	Cliffs and talus	Retained as an EI; Additional effects also discussed in BA
Pine (now American) marten	State threatened species	Marten dropped as MIS because it did not represent a particular habitat type or condition; however, now used to evaluate fragmentation and landscape corridor conditions in the Wildlife section, Chapter 3
Osprey	State threatened species	Osprey dropped as MIS because it did not represent a particular habitat type or condition; wetland and pond habitats are evaluated in the Watershed and Riparian and Aquatics effects section, Chapter 3
Common loon	State threatened species	Common loon dropped as MIS because it did not represent a particular habitat type or condition; however, it is specifically tracked as a sensitive species in the BA.
Sunapee trout	State endangered	Sunapee trout dropped as MIS because it did not represent a particular habitat type or condition; it is no longer believed to be present on the Forest.

White Mountain National Forest

Appendix G
Vegetation Interpretations by Forest Habitat Types

*Vegetation Interpretations by Forest Habitat Types**

Habitat Type	Assoc. ELTs	Climax	Softwood Tendency	Clearcut	Light Shelter-wood	Group/ Patch	Single Tree
SM/Ash Enriched	115g,315g 415g	SM	None	SM/Ash/ YB	SM/Ash	SM/Ash/ YB	SM
SM/Ash Dry Pan	115g,315g 415g	SM/Be	None	YB/Ash/ YB	SM/Be/ Ash	YB/SM/ Be/Ash	SM/Be
SM/Be Fine Till	115c,315c 415c	SM/Be	None	YB/SM/ Be	SM/Be	YB/SM/ Be	SM/Be
RM/Be Washed Fine Till	105,305, 405	Be	Low	Be/RM/Y B/PB	RM/Be	Be/RM/ PB/YB	PB/RM
Beech Washed Till	105d, 305d, 405d	Be	Low	PB/B	Be	PB/Be	PB/Be
Softwood Washed Till	105d,305d, 405d	Sp/Hem	Medium	PB/RM	SW/RM	SW/RM	Sp/Hem
Softwood Silty Sediment	115a,315a, 415a	Sp/Fir/ Hem	Medium	RM/YB	SW/RM	RM/YB	Sp/Hem
SW Dry Pan	115a,315a, 415a	Sp/Fir/ Hem	Medium	RM/PB	SW/RM	RM/PB	Sp/Hem
SW Sandy Sediment	115a,315a, 415a	Sp/Fir/ Hem	Medium	RM/PB	SW/RM	RM/Be/PB	Sp/Hem
SW Outwash	111,311, 411	Sp/Fir/ Hem	High	RM/SW/ PB	SW/WP	RM/SWPB	SW
SW Wet Pan	115a,315a 415a	Sp/Fir/ Hem	High	RM/SW/ YB/PB	SW	RM/SWYB/ PB	Sp/Hem
SW Ledge	2,2d	Sp/Fir/Hem	High	PB/SM	SW	PB/SM	SW
HW Ledge	102c,402c	SM/Be	Low	YB/SM	SM	YB/SM	SM/Be

* Leak, W.B. 1982. Habitat Mapping and Interpretation in New England. Res. Pap. NE-49b.

White Mountain National Forest

Appendix H
Third and Fourth Order Streams

A list of third and fourth order streams within the White Mountain National Forest for the application of riparian standards and guidelines. All streams on the Forest not listed here will have riparian widths of 100 feet each side of the stream bank. Third order streams have riparian widths of 300 feet and fourth order streams have 600 foot riparian widths.

Stream Name	Town	3rd Order upper limit	4th Order upper limit
Ammonoosuc River	Crawford's Purchase	Jefferson Brook	Crawford Brook
Baker River	Warren	East Branch	Ore Hill Brook
Beebe River	Sandwich	Outlet of Hall Ponds	
Bog Brook	Mason, ME	SW tributary (900')	
Bull Brook	Beans Purchase	West tributary (1570')	
Carrigain Branch		SE tributary (2167')	
Cold River	Chatham	Basin Brook	
Cold River	Sandwich	Junction of tribs NW of Guinea Hill	
Crawford Brook	Carroll	Sebosis Brook	
E Branch of Baker River	Warren	Blodgett Brook	
E Branch of Pemigewassett River	Lincoln		Carrigain Branch
E Branch of Saco River	Jackson	Slippery Brook	
Ellis River	Jackson	Wildcat Brook	
Evans Brook	Batchelders Grant, ME	Morrison Brook	
Franconia Branch	Franconia	Red Rock Brook	
Gale River	Bethlehem	N and S Branches	
Great Brook	Stoneham, ME	Willard Brook	
Ham Branch	Easton	Slide Brook	
Hancock Branch	Lincoln	N and S Branches	
Hubbard Brook	Ellsworth	SW tributary (1620')	
Israel River	Low & Bur-banks Grant	Mystic and Castle Brook	
Jackman Brook	Woodstock	SW tributary (1460')	
Jericho Brook	Berlin	W and SE tributaries S of Jericho Lake	
Keenan Brook	Randolph	W tributary just S of Berlin town line.	

Stream Name	Town	3rd Order upper limit	4th Order upper limit
Lary Brook	Shelburne	ME/NH line (1020')	
Lost River	Woodstock	Walker Brook	
Mad River	Waterville Valley	Kancamagus/Flume Brook	
Mill Brook	Carroll	Applebee Brook	
Mill Brook	Stark	E Branch Mill Brook	
Moose River	Randolph	Cold Brook	
Mousilauke Brook	Woodstock		Jackman Brook and Lost River
North Fork	Lincoln	Whitehall Brook	
Peabody River	Greens Grant	Nineteenmile Brook	W Branch Peabody River
Saco River	Harts Location	Dry River	Sawyer River
Sawyer River	Livermore	N Tributary (1840')	
S Branch of Gale River	Bethlehem	Thompson Brook	
Stinson Brook	Rumney	Outlet of Stinson Lake	
Swift River	Livermore	Pine Bend Brook	Pequaket Brook
Upper Ammonoosuc River	Randolph	Just south of 528m bridge	Keenan Brook
W Branch Upper Ammonoosuc River	Berlin	N tributary (1690')	
Wild Ammonoosuc River	Easton	Clay Brook	
Wild River	Beans Purchase	Spruce Brook	Bull Brook
Wildcat Brook	Jackson	E tributary (1670')	