Western Mountains Region Management Plan



View of Mahoosuc Mountains from Table Rock

Maine Department of Conservation Bureau of Parks and Lands



January 4, 2011

ADOPTION CITATION

In accordance with the provisions of 12 M.R.S.A. § 1847(2) and consistent with the Bureau of Parks and Lands Planning Policy and Integrated Resource Policy for Public Reserved and Nonreserved Lands, State Parks, and State Historic Sites (revised December 18, 2000), this Management Plan for the Western Mountains Region is hereby adopted.

Just Harris DATE: Jan 4, 2011 RECOMMENDED: Willard R. Harris

Director Bureau of Parks and Lands

APPROVED: Eggl Torus DATE: 1-4-11

Eliza Townsend Commissioner

Department of Conservation

ADOPTED DATE: 1/4/2011 REVISION DATE: 1/4/2026

Table of Contents

Acknowledgements	iii
I. Introduction	1
About This Document	1
What Parks and Lands are included in the Western Mountains Region?	2
II. The Planning Process and Resource Allocation System	5
Statutory and Policy Guidance	5
Public Participation and the Planning Process	5
Summary of the Resource Allocation System	
III. The Planning Context	
Conservation Lands and Initiatives in the Western Mountains Region	10
Recreation Resources and Initiatives in the Western Mountains Region	14
Planning Implications	
IV. Resources, Issues and Management Recommendations for Parks and Lands in	ı the
Western Mountains Region	
Mahoosuc Unit and Grafton Notch State Park	21
Character and Significance of the Mahoosuc Unit and Grafton Notch State Park	21
Natural Resources	25
Historic and Cultural Resources	30
Recreation Resources	31
Timber Resources	37
Transportation and Administrative Considerations	38
Conservation Easements and New Fee parcels	40
Vision for the Mahoosuc Unit and Grafton Notch State Park	42
Mahoosuc Unit Allocations	
Grafton Notch State Park and Mahoosuc Unit Issues and Recommendations	47
Rangeley Lake State Park	
Character of the Park	
Natural Resources	
Recreation and Visual Resources.	
Vision for Rangeley Lake State Park	
Rangeley Lake State Park Issues and Management Recommendations	
Bald Mountain Unit	57
Natural Resources	58
Recreation and Visual Resources	
Timber Resources	
Transportation and Administrative Considerations	
Vision for the Bald Mountain Unit	
Bald Mountain Unit Allocations	
Bald Mountain Unit Management Issues and Recommendations	
Four Ponds Unit	
Natural Resources	
Recreation and Visual Resources.	
Timber Resources	
Transportation and Administrative Considerations	
Vision for the Four Ponds Unit	81

Four Ponds Unit Allocations	81
Four Ponds Unit Issues and Management Recommendations	85
Richardson Unit	89
Character of the Landbase	89
Natural Resources	91
Recreation and Visual Resources	
Timber Resources	97
Transportation and Administrative Considerations	98
Vision for the Richardson Unit	100
Richardson Unit Allocations	100
Richardson Unit Issues and Management Recommendations	103
Various Small Lots in the Western Mountain Region Lakes Area	
Davis (Kennebago) Lot	106
Stetsontown Lot	111
Dallas Plantation Lots (North and South)	112
Smalls Falls (Township E) Lot	116
Rangeley Plantation Lot	118
Lincoln Plantation Lots (East and West)	120
Magalloway Plantation Lot	
V. Monitoring and Evaluation	127
VI. Appendices	129
Appendix A: Public Review Process - Advisory Committee Members; Public Comm	nents and
Bureau Responses	130
Appendix B: Guiding Statutes and Agreements	158
Appendix C: A Summary of BPL's Resource Allocation System	162
Appendix D. Glossary	
Appendix E. References	174
Appendix F. Summary of Western Mountains Region Resource Allocations	175

Acknowledgements

The Western Mountains Region Management Plan was prepared through a collaborative effort involving contributions from the following Bureau of Parks and Lands staff:

Will Harris – *Director*

Alan Stearns – Deputy Director

Amy Hudnor - Management Plan Coordinator

Kathy Eickenberg – Chief of Planning

Peter Smith-Western Region Lands Manager

Bill Haslam—Forester

Ron Hunt – Manager, Southern Region Parks

Gary Best – Assistant Manager Southern Region Parks

Matt Hodgdon - Park Manager, Grafton Notch State Park

Tom Charles – *Chief of Silviculture*

Joe Wiley – *IF&W Wildlife Biologist assigned to the Bureau*

Skip Varney - Off-Road Vehicle Program

Tom Desjardin – Historic Sites Specialist

George Powell – *Boating Facilities Director*

Gena Denis – Geographic Information System Coordinator

Rex Turner - Outdoor Recreation Planner

Stephen Richardson -Forest Engineer

Tom Dinsmore – Property Records Specialist

In addition, much of the material in the Plan related to natural resources, especially geology and soils, hydrology and water quality, natural communities, wetlands, ecological processes, and rare plant and animal species was provided by the Maine Natural Areas Program (MNAP). MNAP staff conducted natural resource inventories for the Bureau and provided a detailed report, written by Andy Cutko, which is quoted from directly and paraphrased throughout the Plan.

Information about historic resources was provided by Tom Desjardin of BPL, and information about pre-history is from the Maine Historical Society's website, mainememory.net.

The Bureau also acknowledges the helpful participation of the Western Mountains Region Management Plan Advisory Committee (Appendix A), and the many members of the public who participated in public meetings held during the preparation of this Plan and submitted comments on the Plan (Appendix A).

I. Introduction

About This Document

This document constitutes a fifteen-year Management Plan for 66,471 acres of state park and public reserved land in the Western Mountains region of Maine managed by the Maine Bureau of Parks and Lands (the Bureau). The Plan summarizes the character of the region and the planning process, but its primary function is to 1) provide a description of the resources found on the properties addressed, 2) describe management issues identified by members of the public and Bureau staff, and 3) put forth management allocations and recommendations to be implemented over the next fifteen-year period.

One objective of the Plan is to provide a balanced spectrum of opportunities across the Bureau's lands and parks, keeping in mind the available opportunities in the Western Mountains region as a whole. In developing the management recommendations for each parcel, the Bureau has considered this broader perspective.

The Western Mountains Region Management Plan is also a commitment to the public that these properties will be managed within prescribed legislative mandates and in accordance with the Bureau's *Integrated Resource Policy* and its stated mission and goals. Future revisions to these commitments will occur only after providing opportunities for public comment. The Plan provides guidance to Bureau staff with responsibility for managing these properties, including a degree of flexibility in achieving the stated objectives. This document is not, however, a plan of operations.

An important aspect of the management of public lands is monitoring and evaluation of proposed management activities in terms of stated objectives. This Plan describes monitoring and evaluation procedures for recreational use, wildlife management, management of ecological reserves, and timber management.

The fifteen-year duration for this Plan is a departure from previous plans prepared for these lands. In 2007, the Bureau amended its policy to increase the Plan interval from 10 to 15 years. This change brings the Plan interval into closer alignment with Bureau forest management plan prescriptions, and most other resource management concerns other than recreation. The Bureau recognizes that some resources and management issues, most notably recreation, may undergo more rapid or unanticipated change over time. Thus, in addition to the fifteen year scheduled Plan revision, a review of current issues and progress on implementing the Plan's recommendations will be undertaken every five years, with a status report issued at that time to the advisory committee. If amendments to the Plan are then proposed, there will be an opportunity for public review and comment prior to their adoption. At the fifteen year interval, the Bureau will undertake a full review and revision of the Plan. The Bureau recognizes that several of the stated objectives will require longer than the fifteen year Plan period to achieve.

What Parks and Lands are included in the Western Mountains Region?

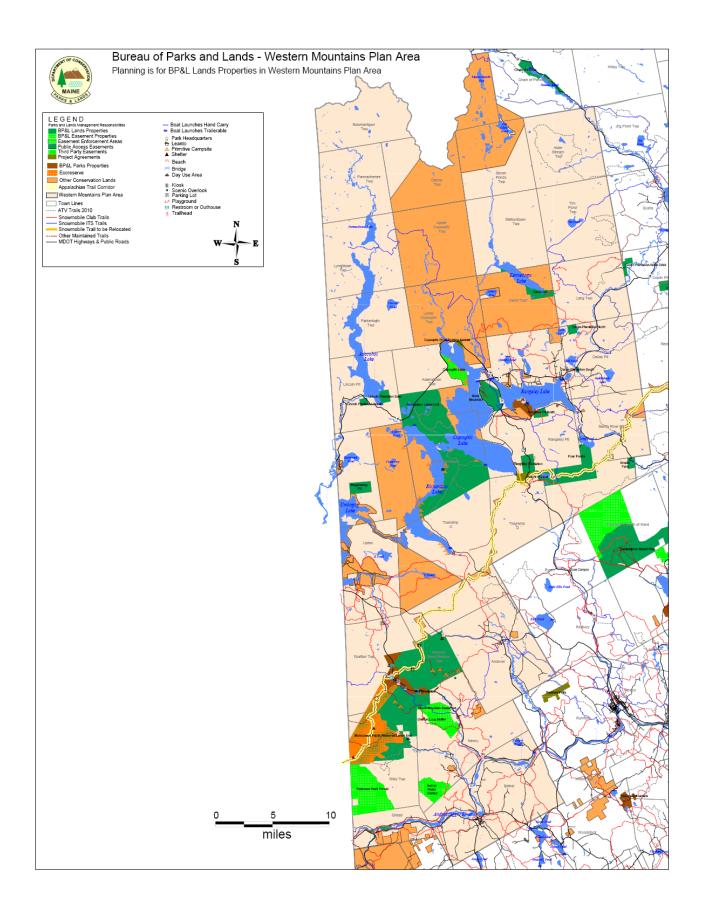
The Western Mountains region, for the purposes of this management plan, is the setting in which Bureau lands are located, begining at the point where Maine's border transitions from being shared with New Hampshire to being shared with Quebec (in Bowmantown Township). The Rangeley Lakes region is in the center of this planning region, and the southern end includes Bethel area and the Town of Gilead.

State Parks and Public Reserved Lands of the Western Mountains Region

State I al RS and I doile Reserved Lands of the Western Wountains Region			
	Acres		
Grafton Notch State Park	3,191		
Rangeley Lake State Park	899		
Mahoosuc Unit	31,764 fee		
	10,093 easement		
Four Ponds Unit	6,018		
Richardson Unit	18,484		
Bald Mountain Unit	1,873		
Dallas Plantation Lots North and South	439		
Davis Lot	960 (common and undivided)		
Lincoln Plantation Lots West and East	919		
Magalloway Plantation Lot	1,044		
Rangeley Plantation Lot	469		
Stetsontown Lot	41		
Township E (Smalls Falls) Lot	370		
Total	66,471 (fee acres)		

The parks and lands included in this plan contain an exceptional variety of recreational resources spanning the spectrum from rugged backcountry to accessible drive-to experiences. Ecological resources include unique alpine and sub-alpine communities, rare plant populations and connecting matrix forests. Fisheries resources and hunting opportunities abound, as well as productive timber resources critical to maintaining the public reserved lands system.

The key focus of this Plan is management allocations and recommendations for the Bureau fee lands mentioned above. However, other private and public conservation projects and lands in this region are an important context for planning the future uses and management of Bureau lands, and will be described in the Planning Context section.



II. The Planning Process and Resource Allocation System

This section describes the Bureau's planning process for development of its management plans and the statutes and policies that guide its management decisions. The planning process includes a robust public participation effort, intended to provide input to the Bureau's management. In addition, the Bureau is guided by statutes requiring and directing the Bureau to develop management plans, and authorizing the Bureau to also create a system of ecological reserves. Overall, management of Bureau lands is guided by the Integrated Resource Policy (IRP), which itself was developed with a significant public process. Finally, the Bureau's forest management, where allowed under the multiple purpose management system defined by the IRP, is conducted sustainably, and is third party certified under the Sustainable Forestry Initiative (SFI) and the Forestry Stewardship Council (FSC) programs. The following describes these important influences guiding the development of this Plan in further detail.

Statutory and Policy Guidance

Multiple use management plans are statutorily required for Public Reserved Lands pursuant to Title 12 MRSA § 1847 (2), and must be prepared in accordance with the guidelines set forth in the Integrated Resource Policy revised and adopted in December 2000 by the Bureau. The Bureau's Integrated Resource Policy document provides further policy guidance for development of resources management plans, and applies to Parks as well as Public Reserved lands. Title 12 MRSA § 1805 authorizes the Bureau to create a system of ecological reserves on Bureau lands identified as potential ecological reserves in 1998 by the Maine Forest Biodiversity Project. These laws and policies direct the Bureau to identify and protect important natural, ecological, and historic attributes; enhance important fisheries and wildlife habitat; provide opportunities for a variety of quality outdoor recreation experiences; and provide a sustained yield of forest products by utilizing forest management techniques and silvicultural practices that enhance the forest environment. Appendix B contains relevant statutory guidance.

Public Participation and the Planning Process

Overall, the development of management plans includes a series of steps, each involving interdisciplinary review, as well as extensive efforts to solicit and consider public comment, in order to achieve a Plan that integrates various perspectives and needs while protecting and conserving the resources of the Bureau's lands. For the Western Mountains region, this included:

<u>Resource Assessments</u>: The first phase of the planning process includes a thorough study of the resources and opportunities available on the Western Mountains Plan public lands. Beginning in the winter of 2008-09, Bureau staff undertook an intensive review of the natural and geological, historic and cultural, fisheries and wildlife, recreation, and timber and renewable resources. The Maine Natural Areas Program (MNAP) performed a natural resource inventory of Bureau lands in the region. Resource professionals from within the Bureau provided information on wildlife, recreation, and timber resources. Mapping and GIS-related information was also obtained as part of this phase.

Staff also participated in reconnaissance field trips to inventory and characterize the land-based resources and recreational features on Bureau lands. A two-day winter trip occurred in March 2009 with a large group of staff, followed by several one day trips by smaller staff sub-groups in the summer of 2009.

<u>Issue Identification/Public Scoping Session</u>: Another component of the planning process involved conducting public meetings to determine and discuss management issues needing to be addressed by the Plan. Two meetings were held in 2010: one on January 28 in Rumford and one on February 4 in Rangeley. A written comment period followed.

Advisory Committee Formation and Review of Preliminary Inventory and Assessment: A Public Advisory Committee was formed in the winter of 2010. Members of this Committee were selected on the basis of their resource expertise, and for their regional and local knowledge in areas important to the management of the Bureau's Western Mountains region properties. On March 25, 2010 this committee met in Farmington to identify strengths, weaknesses, opportunities and threats in the Western Mountains region Parks and Lands, and to propose options to address these issues. The committee also discussed potential resource allocations for the landbase. A written comment period followed.

Advisory Committee Meeting on the First Draft Plan: A first draft of the Plan was posted in August. The Advisory Committee met in Farmington on September 7, 2010 to review the draft and provide feedback. A written comment period followed. Comments from the Advisory Committee on this First Draft Plan, along with any comments from other members of the public and various resource professionals, were considered in developing the Final Draft of the Plan.

Follow up Focus Meeting

As needed, the Bureau holds special focus meetings to address a particular issue. A focus meeting was held on October 14, 2010 in Newry because the topic of hiking trails in Grafton and Mahoosuc properties needed more attention. Advisory committee members were invited and many members of the public attended as well.

<u>Public Meeting on the Final Draft Plan</u>: The Final Draft Plan was posted for review on the Bureau's website on November 20, and was presented and public comment received at a public meeting on December 14, 2010 in Farmington. A written comment period was scheduled from November 20 to December 24.

<u>Commissioner's Review of the Proposed Plan, and Plan Adoption</u>: Comments received on the Final Draft Plan were considered in preparing a Plan for review by the Director of the Bureau and the Commissioner of the Department of Conservation. The Bureau Director and Conservation Commissioner adopted the Plan after review and approval on January 4, 2011.

Summary of the Resource Allocation System

The Resource Allocation System is a land management-planning tool developed in the 1980s, and formalized in the *Integrated Resource Policy* (IRP), adopted in December 2000. The Resource Allocation System, which assigns appropriate management based on resource characteristics and values, is based on a *hierarchy* of natural and cultural resource attributes found on the land base. The hierarchy ranks resources along a scale from those that are scarce and/or most sensitive to management activities, to those that are less so. The resource attributes are aggregated into seven categories or "allocations," including (from most sensitive to least sensitive): special protection, backcountry recreation, wildlife management, remote recreation, visual consideration, developed recreation, and timber management.

This hierarchy defines the type of management that will be applied depending on the particular resource attributes present, with *dominant* and *secondary* use or management designations as appropriate to achieve an integrated, multi-use management. Allocations include:

- o Special Protection Areas (including Ecological Reserves and Significant Natural Areas)
- o Backcountry Recreation Areas (Motorized and Non-mechanized)
- o **Wildlife Areas** (essential wildlife habitat, significant habitats, and specialized habitat areas and features including rare natural communities)
- o Remote Recreation Areas
- Visual Protection Areas
- o Developed Recreation Areas
- o Timber Management Areas

Appendix C includes a more detailed description of the Resource Allocation System categories and the management direction defined for each category. Not all of these allocations are applied in this Plan.

Forest Certification

In 1999 the Bureau made the decision to demonstrate exemplary forest management, a statutory directive (See Appendix B), through participation in two nationally recognized sustainable forestry certification programs. The Bureau was awarded certification of its forestlands under the Sustainable Forestry Initiative (SFI) and the Forest Stewardship Council (FSC) programs in 2002. These third-party audits were conducted to determine if these lands were being managed on a sustainable basis. Successful completion of the FSC/SFI systems also qualified the Bureau to enter into the "chain of custody" program to market its "green-certified" wood. The process for enrollment in this program was completed in 2003, with certified wood now being marketed from Bureau managed lands.

The process for conducting the SFI and FSC audits was rigorous and unique in that the Bureau underwent the two audit programs simultaneously. The audit was comprised of a field analysis of forest management practices at selected sites around the state, and an analysis of the Bureau's financial, personnel, policy development, and record-keeping systems. A Bureau-wide

certification team was implemented to address "conditions" and "minor non-conformances" stipulated in the audit reports, including: significant enhancements to forest inventory data, development of a computerized forest-modeling program, a timeline for updating management plans for the entire land base, improvements in the use of Best Management Practices to protect water quality, and new commitments to public outreach and education programs. The Bureau is required to meet these conditions within certain timeframes in order to keep its certification status in good standing over the five-year certification period.

In 2006, the Bureau hosted its first full recertification by FSC, concurrently undergoing its first surveillance audit by SFI, the latter now required under SFI's updated standards. Although the field portion took place during and immediately after a heavy November rainstorm, Best Management Practices implemented on Bureau lands were working well, and certifiers for both systems were very pleased with Bureau silviculture at all sites visited. As is usually the case, there were several conditions (now called Corrective Action Requests, or CARs) made by each certification system, which the Bureau needed to satisfy as it continues to improve its forest management which has already been certified as being exemplary. Subsequent compliance audits took place in the summer of 2007, 2008, and 2009. Though the audits suggested some areas for improvement in the 2009 audit, otherwise, the outcome of those compliance audits was to award unconditional certification to the Bureau, with no CARs indicated.

Ecological Reserves

The Maine Forest Biodiversity Project (MFBP) was formed in 1994 to explore and develop strategies to help maintain Maine's existing native species and the ecosystems that contain them. The MFBP was a consensus-based collaborative effort involving approximately one hundred individuals representing a diverse spectrum of interests and opinions: landowners, sportsmen, educators, advocates for property rights, foresters, wildlife and land conservation professionals, and representatives of the scientific community, state and federal agencies, and the business community. The inventory of potential ecological reserves conducted by the MFBP took place between January 1995 and October 1997, with guidance from a twenty-member scientific advisory panel.

Based on the work by the MFBP, the Maine Legislature in 2000 authorized the designation of ecological reserves on Department of Conservation lands (12 MRSA § 1805), and 68,974 acres were designated by the Bureau of Parks and Lands Director at that time.

In accordance with the legislative intent, these ecological reserves were established as 1) benchmarks against which biological and environmental change could be measured; 2) habitats adequate to maintain viable populations of species whose habitat needs are unlikely to be met on other lands; and 3) sites for scientific research, long-term environmental monitoring, and education. In addition, public access, hunting, and fishing are among the allowed uses on ecological reserves. The ecological reserves include many of Maine's best examples of alpine meadows, lakes and streams, and old growth forests.

The Mahoosuc Unit contains one of those ecological reserves—the second largest reserve in the system at 9,993 acres. Most of the Reserve (8,458 acres) has been classified as sub-alpine forest,

and 259 acres as alpine ridge. Notable features of the Reserve include: many populations of rare plants, a sub-alpine tarn (Speck Pond) and a rare Cold Air Talus Slope community. The Mahoosuc Ecological Reserve extends from 1,120 feet to 3,980 feet in elevation, leading to the variety of natural communities that have formed.

Beginning in 2002, the Department of Conservation worked with a multi-disciplinary committee to draft an *Ecological Reserve Monitoring Plan* to guide periodic data collection at the landscape, stand, and species levels. The monitoring program is tied closely to other statewide and nationwide forest monitoring programs that use U.S. Forest Service Forest Inventory and Analysis (FIA) methods. To date, 387 permanent monitoring plots have been established on 12 Ecological Reserves, with ongoing monitoring work increasing the number of plots each year. The long-term monitoring program and the value of ecological reserves to this program have been recognized as models for public lands throughout the northeast.

III. The Planning Context

The purpose of the Western Mountains Region Management Plan is to plan for the Bureau's parks and public reserved lands in the region. The Plan has been developed taking into account the context of the region's other conservation lands and recreation resources. Examples of many of the major conservation and recreation resources are provided below, but this is not comprehensive—the full spectrum of resources in this region is rich and diverse and will not be fully described here.

The context for this Plan also includes the changing dynamics of land ownership patterns in the Region, which is affecting traditional uses and the local economy. The surrounding private landscape, dominated by large holdings managed for timber production, continues to shift to an ownership dominated by investor-owned companies. A report by the Open Space Institute predicted in 2008 that in the Mahoosuc Region up to 150,000 acres would be sold in the next 5 to 10 years, noting that landownership changes in the area had already reduced forest-related jobs, increased harvest rates, increased posted property, and encouraged development of previously undeveloped areas (Weinberg and Larson, 2008). In response a number of recent state, regional and national initiatives have targeted this area for recreation and tourism development, and land conservation.

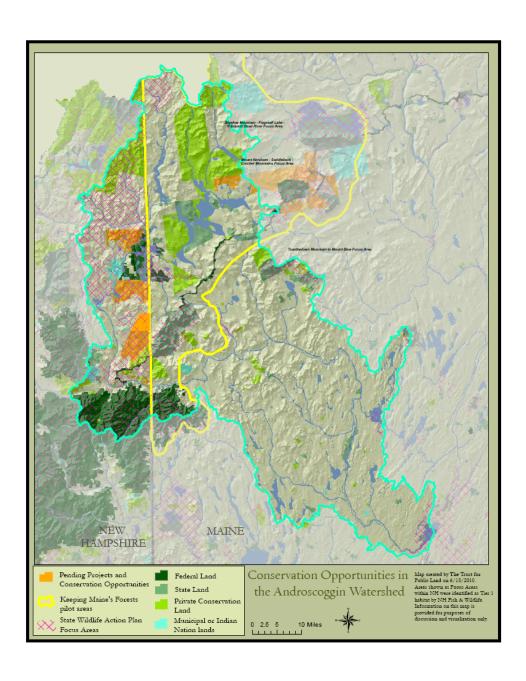
Conservation Lands and Initiatives in the Western Mountains Region

U.S. Forest Service—White Mountain National Forest (USDA Forest Service, 2009)

The White Mountain National Forest (WMNF) is the largest publicly owned block of land in New England (managed by the U.S. Department of Agriculture, Forest Service). WMNF encompasses almost 800,000 acres, includes much of Northern New Hampshire and extends into Western Maine. The Maine portion lies directly south of the Mahoosuc Unit and southwest of the town of Bethel. WMNF is one of the most visited forests in the United States, with approximately 7 million visitors a year.

Management of the WMNF is guided by a "Land and Resource Management Plan" adopted in 2005. The WMNF is managed for multiple uses and features, including: timber management, heritage resources, wildlife and ecological values, and a myriad of recreational opportunities. It also contains six wilderness areas, with the Caribou-Speckled Wilderness (14,000 acres) located in Maine. There are many areas of overlap between management objectives of the WMNF and typical management of Bureau public reserved lands. Examples include forest management with ecological and scenic values at the forefront, and the diversity of recreational opportunities available.

Recreational opportunities in the WMNF include hiking, mountain biking, fishing, hunting, boating, snowmobiling, cross-country skiing and rock-climbing, among others. Mt. Washington, the highest peak in the Northeast, is within WMNF in New Hampshire. Developed recreation sites include four alpine ski areas (operating under special permits from the WMNF) and 23 campgrounds. The Kancamagus Scenic Byway runs through the heart of the forest, and many significant roads run adjacent to and into the WMNF, making it an easily accessible destination. The Maine portion of the WMNF contains the 14,000 acre Caribou-Speckled Wilderness, where topography varies from lower hardwood slopes to exposed rocky peaks. The highest point in the wilderness is Speckled Mountain, at 2,906 feet, and 25 miles of maintained hiking trails lie within the wilderness. The Maine portion also provides camping opportunities. Snowmobile trail ITS 80 traverses a portion of the forest, connecting to Trail 19 in New Hampshire.



U.S. Fish and Wildlife Service—Umbagog National Wildlife Refuge (UNWR, 2009)

Managed by the U.S. Fish and Wildlife Service, Umbagog National Wildlife Refuge (the Refuge) surrounds Umbagog Lake in Northern New Hampshire and Western Maine and is located northwest of the Mahoosuc Unit and southwest of the Richardson Unit. The Magalloway Plantation Lot abuts the Refuge at its southwest corner. The Refuge was established in 1992 to protect wetlands and associated wildlife and to protect migratory birds. Its vision statement sees the Refuge as a link in a network of conservation lands, a center for showcasing good management, important habitat for many species (especially birds) and a place for wildlife-oriented recreation. Surrounding Umbagog Lake, wildlife habitat includes upland spruce-fir and northern hardwood forests, boreal and riverine wetlands, and lake habitats. A total of 229 bird species have been viewed at the Refuge and 137 species are known to breed there. Recreational activities permitted include: hunting, fishing, boating, canoeing and kayaking on lake and rivers, snowmobiling and camping.

In January 2009, a new Comprehensive Conservation Plan and Environmental Impact Statement for the Refuge was adopted. Central to the plan is managing for particular habitats and focal species, and toward this goal placing the well-being of the lake and associated streams as the highest management priority. Managing wetlands, floodplain, and lakeshore habitats as well as upland forest for focal species are also central to Refuge goals. Focal species (whose needs will be central to Refuge management) are priority birds of conservation concern as listed in the Northern Forest Ecosystem Bird Conservation Region.

As part of this plan, wildlife-dependent recreation opportunities are expanded in the Refuge, including expanded parking, trails, interpretive programming, and signage. New uses are allowed, such as bicycling and horseback riding. The Refuge area will be expanded by 47,807 acres (44 percent of this will be conservation easements). Currently the Refuge is only 21,650 acres, so will be more than tripled in size as a result of this plan. The Umbagog plan contains a "Proposed Refuge Expansion" map showing the general area in which it hopes to expand. This area extends east to the conservation easements west of Upper and Lower Richardson Lakes, and southeast, almost to the northern border of the Mahoosuc Unit and Grafton Notch State Park.

Mahoosuc Land Trust Conservation Lands

The Mahoosuc Land Trust was founded in 1989, and is based in Bethel, Maine, but serves the greater region surrounding the Mahoosuc Mountains in Central Oxford County, Maine and Eastern Coos County, New Hampshire. Their mission is "To protect and conserve land and traditional land uses including farming, forestry, recreation, significant habitats, scenery, and water resources for the benefit of the public" (Mahoosuc Land Trust, 2010). They own and maintain a total of 1348 acres of conservation land, including the Stewart Family Preserve (with the popular Puzzle Mountain hike), located close to the Mahoosuc Public Reserved Land Unit, the Rumford Whitecap Mountain Preserve (including another popular hike), and the Grafton Loop Trail parking area. They also own 5,556 acres of easements and collaborated with the Bureau on the acquisition of the Frenchman's Hole parcel, which was added to the Mahoosuc Public Reserved Land Unit. The Mahoosuc Land Trust is part of a collaborative effort in the upper Androscoggin watershed working to establish the Androscoggin Canoe Trail to provides

access to the Androscoggin River via several landing sites between Shelburne Dam in New Hampshire, and Rumford, Maine. They also host guided hikes and interpretive programs.

Rangeley Lakes Heritage Trust- Conservation Lands in the Rangeley Region (RLHT, 2009)

Rangeley Lakes Heritage Trust (RLHT) is a non-profit organization dedicated to preserving the character of the Rangeley Lakes region through land conservation, water quality protection, education, and community outreach. Since its founding in 1991, RLHT has preserved over 12,500 acres of land including 45 miles of lake and river frontage and 15 islands. In addition they host a summer day camp for children and an outdoor adventure series, perform water quality monitoring with the help of volunteers and work to protect waters from invasive plants.

The Bureau has cooperated with RLHT on various conservation projects, and many of RLHT's fee and easement lands are adjacent to Bureau properties. The Bureau's Bald Mountain Unit was originally acquired by RLHT through their application for Land for Maine's Future funds—in fact the effort behind this acquisition led to the formation of the trust. Bald Mountain was later transferred to the Bureau and contains a popular hiking trail with stunning views of the region. Recently, RLHT purchased land on Black Point and South Bog Cove which are adjacent to Rangeley Lake State Park. The trust also owns their own parcels in fee and easement, including land along the Rapid and Rangeley Rivers, and extensive shoreland along Mooselookmeguntic Lake (some of which abuts the Bureau's Richardson Unit). RLHT has adopted management plans for many of their properties, which include specifics of forest management, recreation planning and wildlife management. RLHT works with many partners on various projects, including the Rangeley Lakes National Scenic Byway, Rangeley Region Guides and Sportsmen's Association, and the Forest Stewardship Council.

The Mahoosuc Initiative

The Mahoosuc Initiative is a partnership between several local groups based in the Mahoosuc region and regional groups who share an interest in the region. Their mission and goal is the following: "to provide Mahoosuc communities with information and tools to guide future change for the prosperity and well-being of all residents. The Mahoosuc Initiative seeks to play a leadership role by convening community conversations, providing technical assistance and research, and bringing new federal, state, and private funding to support projects in land conservation, sustainable forestry and other community priorities" (Mahoosuc Initiative, 2007). Partners in the Mahoosuc Initiative include: Mahoosuc Land Trust, Androscoggin River Watershed Council, Tri-County Community Action Program, Northern Forest Alliance, Appalachian Mountain Club, Appalachian Trail Conservancy, The Trust for Public Land, Forest Society of Maine, the Conservation Fund and The Wilderness Society.

In 2007, the Mahoosuc Initiative produced the "Mahoosuc Region Resources Report" in two volumes to help initiate dialog regarding the future of the region among stakeholders. Volume I describes the resource values of the region and the changing economy, land use and demographics. Volume II identifies leadership opportunities and strategies for Mahoosuc communities that want to take a greater role in shaping the future of the region. The report is used as a starting point for a conversation regarding the landscape and economy of the region at

an ongoing series of community forums, aimed at empowering residents and communities to take active roles in shaping the future of the Mahoosuc region.

Mahoosucs Initiative members collectively and individually have been very active participants in conservation projects in the region. Examples include the Grafton Notch Forest Legacy Project which added 3,688 acres to the Mahoosuc Unit and the Stowe Mountain Forest Legacy Project, which led to a Bureau-held conservation easement on private land housing a portion of the Grafton Loop Trail. They are working on the Mahoosuc Gateway/Success Township project that would protect thousands of acres in New Hampshire surrounding the Appalachian Trail just before it enters Maine and the Mahoosuc Unit (and also protecting some side trails leading into the Mahoosuc Unit from the west).

Other projects of the Mahoosuc Initiative include development of a regional touring map and the initiation of the "Mahoosuc Community Wood Energy Project" which aims to use local forests to meet local energy needs and is assessing the potential for wood biomass energy facilities.

Recreation Resources and Initiatives in the Western Mountains Region

The region surrounding and including the Bureau's Western Mountains planning region is rich and varied in its recreation resources. Hiking opportunities range from short day hikes to multiday backpacking trips. The famed Appalachian Trail runs through the region—including the "Mahoosuc Notch" known as the "hardest mile on the Appalachian Trail." Boating opportunities are abundant, from motorboating on the large lakes in the Rangeley region, to canoeing on the Androscoggin River and other more remote streams and tributaries. The Rangeley region has been famous far beyond Maine borders for its brook trout fishing and spectacular scenery since the 19th Century. The snowmobiling network of club and ITS trails are abundant and popular in this region, as well as downhill and cross-country skiing and ice climbing.

In their entirety, the outdoor recreation opportunities in this region are rich, varied and outstanding. As would be expected, this region draws many visitors, from within Maine, the United States and other parts of the world. This section describes some of the major recreational opportunities of the region.

Hiking and Backpacking

<u>The Appalachian Trail</u>: The Appalachian Trail (AT) is a 2,181 mile long footpath, stretching from Springer Mountain in Georgia to Mount Katahdin in Maine. Completed in 1937, the AT is enjoyed by through-hikers (those who hike the entire AT), section-hikers, and day hikers. Shelters and campsites are available throughout the length of the trail, which also passes through many towns and cities. The AT is managed by the National Park Service, the Appalachian Trail Conservancy, over 30 local AT clubs, the USDA Forest Service, and the other public agencies that host the trail (including the Bureau).

The AT runs through the Bureau's Western Mountains planning region—and runs through three Bureau properties—the Grafton Notch State Park, Mahoosuc Unit and Four Ponds Unit. Altogether 25 miles of the AT are located on these properties.

<u>Grafton Loop Trail</u>: This is a high elevation, backcountry trail connecting a series of scenic peaks using the Appalachian Trail on the Grafton and Mahoosuc properties, as well as new trail on Bureau land and private land. The 42-mile trail takes approximately three days to hike. There are nine designated primitive campsites available. Many partners were involved with the Bureau in conceiving of and constructing the Grafton Loop Trail, including the Appalachian Mountain Club, the Maine Appalachian Trail Club, the Mahoosuc Land Trust, the Trust for Public Land, and many others, including the private landowners whose land the Trail crosses.

<u>Day hiking opportunities</u>: The mountainous terrain and stunning large lakes in the Western Mountains region make it an outstanding hiking destination. Some of the day hikes are on public lands, and are described in the Park and Unit descriptions later in this Plan. Many day hikes are on the properties of private landowners (both conservation and industrial landowners). This plan will leave it to the guidebooks to describe all the day hikes in the Western Mountains region though some are referenced above in the Conservation organizations and lands section above. An evolving new website, Mainetrailfinder.com, is also cataloguing hiking trails in this region and is expected to become a major source of information for hikers when fully developed.

Public Boat Access

Boat access to the waters of the Western Mountains of Maine is an important component of its regional economy and way of life. Boat access is provided for motorized and non-motorized boating, with boaters using access points for fishing, short day trips, and long, multi-day paddling trips. Within the public lands and state parks of the Western Mountain Region, there are three trailer accessible boating facilities and two hand carry facilities as shown below.

Boating Facilities on Western Mountain region Parks and Lands

Waterbody	Minor Civil Division	Park or Lands Unit	Ramp Type
Upper Richardson Lake	Richardsontown	Richardson Unit	Trailer
Mooselookmeguntic	Richardsontown	Richardson Unit	Trailer
Rangeley Lake	Rangeley	Rangeley Lake State Park	Trailer
West Richardson Pond	Adamstown	Richardson Unit	Hand carry
Kennebago Lake	Stetsontown	Stetsontown Lot	Hand carry

In addition to the above facilities there are 40 other state-owned or sponsored boat sites in Oxford and Franklin Counties including fifteen hand-carry sites and 25 trailer accessible sites, as shown below. State sponsored sites are typically owned by a municipality, or other governmental body, but may also include private land owners and power companies. All sponsored sites are under contract or permit between the owner and the state to provide public access.

State-owned or Assisted Boating Facilities not on Parks or Lands

Waterbody	Minor Civil Division	Owner	County	Ramp Type
Hancock Pond	Denmark	Denmark	Oxford	Trailer
Richardson Lake	Township C	Oxford Co	Oxford	Trailer
Cupsuptic River	T4 R3 WBKP	DOC	Oxford	Trailer
Lovewell Pond	Fryeburg	DOC	Oxford	Trailer
Bryant Pond	Woodstock	Woodstock	Oxford	Trailer
Saco River	Brownfield	DOC	Oxford	Carry-In
Little Pennesseewassee Pond	Norway	Norway	Oxford	Carry-In
Aziscohos Lake	Lincoln Plt	Seven Islands Land Co	Oxford	Trailer
Moose Pond	West Paris	West Paris	Oxford	Trailer
Kezar Lake	Lovell	Lovell	Oxford	Trailer
Saco River	Fryeburg	Fryeburg	Oxford	Carry-In
Pennesseewassee Lake	Norway	Norway	Oxford	Trailer
South Pond	Greenwood	Greenwood	Oxford	Trailer
Hutchinson Pond	Albany Township	DIFW	Oxford	Carry-In
Saco River	Fryeburg	DOC	Oxford	Carry-In
Androscoggin River	Rumford	Rumford	Oxford	Trailer
	Bethel	Mahoosuc Land Trust	Oxford	Carry-In
Androscoggin River		DIFW	Oxford	Carry-In
Clay Pond	Fryeburg Brownfield	DIFW		
Bald Bog Ellis Pond			Oxford	Carry-In Trailer
Twitchell Pond	Roxbury Greenwood	DIFW DIFW	Oxford	Trailer
			Oxford	
Stanley Pond	Hiram	Hiram	Oxford	Trailer
Concord Pond	Woodstock	DIFW	Oxford	Carry-In
Keewaydin Lake	Stoneham	Stoneham	Oxford	Trailer
Moose Pond	Denmark	Denmark	Oxford	Trailer
Clemons Pond	Hiram	Hiram	Oxford	Trailer
Ellis River	Andover	Andover	Oxford	Carry-In
Androscoggin River	Hanover	DIFW	Oxford	Trailer
Androscoggin River	Hanover	Mahoosuc Land Trust	Oxford	Carry-In
Rangeley Lake	Rangeley	NextEra	Franklin	Trailer
Egypt Pond	Chesterville	DOC	Franklin	Carry-In
Porter Lake	Strong	Strong	Franklin	Trailer
Wilson Pond	Wilton	Wilton	Franklin	Trailer
Rangeley Lake	Rangeley	Rangeley	Franklin	Trailer
Clearwater Pond	Industry	Industry	Franklin	Trailer
Flagstaff Lake	Eustis	DOC	Franklin	Trailer
Mooselookmeguntic Lake	Rangeley	Rangeley	Franklin	Trailer
Little Norridgewock Str.	Chesterville	DIFW	Franklin	Carry-In
Bauds (Stump) Pond	New Vineyard	DIFW	Franklin	Carry-In
Quimby Pond	Rangeley	DIFW	Franklin	Carry-In

Fishing and Hunting

Fishing and hunting are traditional and ever-popular uses of public lands and many private lands in the Western Mountains region. The Rangeley Lakes region has been a renowned destination for hunting and fishing since the 19th Century, when the area was made famous by some of the earliest guides who promoted the region in newspaper columns and at trade shows. Visitors arrived by railroad and often traveled by steamboat to stay at hotels and camps in the region.

Today, fishing in the region remains popular, with landlocked salmon also an attraction as well as trout.

Most of the Western Mountains region is within MDIF&W Wildlife Management District 7, which is particularly known for good moose and bear hunting. Small game hunting is also popular in the region with ruffed grouse and snowshoe hare being the most popular.

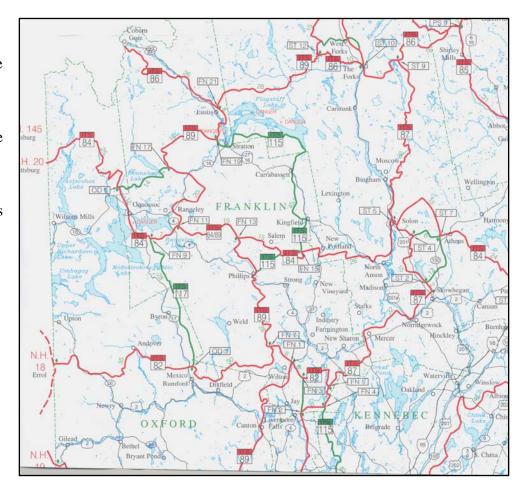
Snowmobiling and ATV riding

The Bureau's Off-road Vehicle Division offers assistance and funding for ATV and snowmobile clubs performing construction, maintenance, and management in the Western Mountain region.

<u>ATV Trails</u>: There are approximately 250 miles of ATV trails in the region (on public and private lands), with only four ATV clubs providing construction, maintenance and management. The Bureau ORV division spends between \$60,000 and 70,000 per year on ATV trail maintenance in the Western Mountains region.

Snowmobile Trails:

There are eight clubs maintaining snowmobile trails in the region (on public and private lands). During the winter of 2008-2009, the Bureau ORV division spent \$246,186 on the maintenance of approximately 565 miles of trails in the region. Most trails are considered vital connections (most are either ITS Connector or Corridor Trails, though there are some local or club trails as well).



Organizations and Initiatives

Northern Forest Canoe Trail (NFCT, 2010)

The Northern Forest Canoe Trail (NFCT) is a long distance paddling trail connecting the major watersheds across the Adirondacks and Northern New England. The 740 mile paddling route traces a history from early Native Americans through European settlers. The NFCT is also the name of an organization "connecting people to the Trail's natural environment, human heritage, and contemporary communities by stewarding, promoting and providing access to canoe and kayak experiences along this



route." NFCT provides maps, books and web-based tools to connect people with this resource, helps connect paddlers with lodging, dining and other recreational resources along the trail, and hosts events. They coordinate volunteer efforts, including Waterway Work Trips and the Adopt-A-Segment program.

A section of the NFCT travels through the Rangeley Lakes region—through Richardson Lakes (with a portage at Upper Dam) and Mooselookmeguntic Lake. Therefore, the route travels along shorelines of the Richardson Public Reserved Land Unit and Rangeley Lake State Park.

Appalachian Mountain Club

The Appalachian Mountain Club is an organization that began in 1876, and promotes the protection, enjoyment and understanding of the mountains, forests, waters, and trails of the Appalachian region. They offer guided outdoor trips, lodging in huts, camps and campgrounds, and youth programs. They also organize volunteers to help with trail maintenance. AMC is also a policy advocate and owner of land and conservation easements.

In the Western Mountains planning region, the AMC maintains the Appalachian Trail and several side trails on the Bureau's Mahoosuc Unit and Grafton Notch State Park south of Route 26.

Maine Appalachian Trail Club (MATC, 2010)

The Maine Appalachian Trail Club (MATC) began in 1935, and is a volunteer, non-profit corporation that manages and maintains 267 miles of the Appalachian Trail in Maine, its facilities and corridor. Its responsibilities include trail design, construction and maintenance, and monitoring of corridor activities. MATC coordinates volunteer opportunities, including: work trips, a trail maintainer program, and a corridor monitor program. They host "care-taker/ridgerunners" in four locations. They also publish "The Official Appalachian Trail Guide to Maine."

The MATC responsibilities in the Western Mountains planning region include the Appalachian Trail from Route 26 northward to Route 4—considered their "Baldpate District". This includes the AT and side trails in the northern portion of the Bureau's Grafton Notch State Park and Mahoosuc Unit, as well as the AT in the Four Ponds Unit.

Planning Implications

The Bureau's parks and lands in the Western Mountains Region lie within Maine's most mountainous region, an area of expansive woodlands and lakes, where the culture and economy have been historically linked to both forest resources and outdoor recreation.

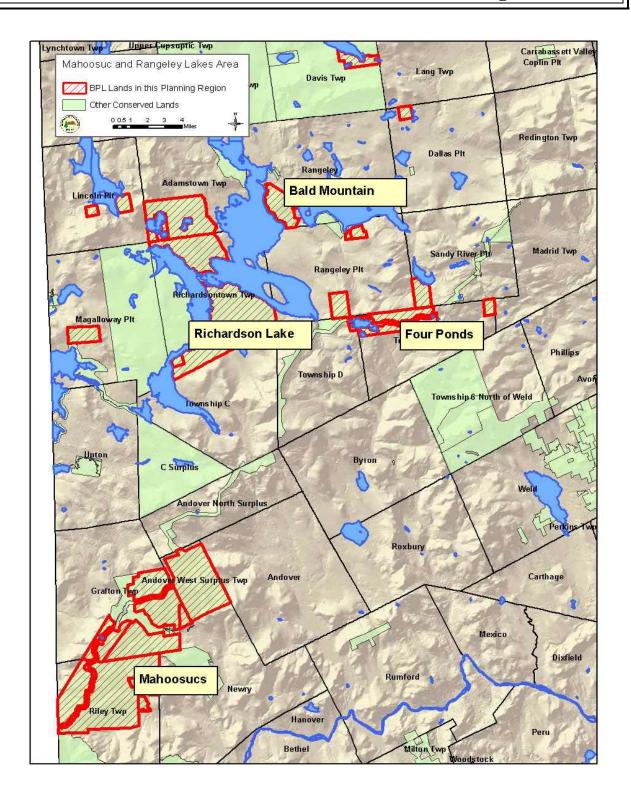
The outdoor recreation opportunities on the public lands are part of a much larger landscapelevel system connecting mountain ranges and historic travel routes—including the nationally significant Appalachian Trail, the Northern Forest Canoe Trail, and an interstate system of snowmobile trails. The Bureau parks and lands serve to complement many of the conservation, recreation and tourism lands and initiatives in the greater region.

The dominant attraction of the area in general and the public lands in particular is its undeveloped character and natural beauty. Careful stewardship is needed to protect these values while managing the public lands for multiple public values, including recreation, wildlife habitat and timber resources.

A remarkable variety of conservation lands, organizations and initiatives distinguishes the Western Mountains region. There is much interest in and many opportunities for development of public-private partnerships to further conservation in this Region, and a growing recognition that land conservation adds value to the sense of place and quality of life important to the Region's economy.

Likewise there are abundant partnership opportunities for development and stewardship of recreational opportunities on Bureau managed parks and lands. The Bureau currently partners with many organizations—hiking clubs, snowmobile clubs, outing clubs, lands trusts, other state agencies— in provision and management and outdoor recreation opportunities. These collaborative relationships are essential to good stewardship of the public lands and parks.

IV. Resources, Issues and Management Recommendations for Parks and Lands in the Western Mountains Region



Mahoosuc Unit and Grafton Notch State Park



Alpine habitat near the summit of Goose Eye Mountain - MNAP Photo

Character and Significance of the Mahoosuc Unit and Grafton Notch State Park

The Mahoosuc Public Reserved Lands Unit together with Grafton Notch State Park, and associated Grafton-Stowe and Robinson Peak conservation easements encompass just over 45,000 acres of mountainous terrain in the heart of the Mahoosuc Range. These lands include some of the State's most magnificent scenic and recreational lands, including over 18 miles of the Appalachian National Scenic Trail. The higher elevations south of Route 26 are dominated by one of the state's largest ecological reserves comprised of an extensive high quality alpine ridge and sub-alpine forest natural communities, while mid and lower-elevation areas are among the most productive timber lands in the state. Less than four hours from Boston and Montreal, and served by the gateway communities of Bethel, Maine to the southeast and Gorham, New Hampshire to the southwest, the area has long been a treasured destination of national and even international significance for backpacking, day-hiking and sightseeing. Canadian visitation to both the Park and Mahoosuc Unit is acknowledged in interpretive panels that are bilingual – French and English.

The Mahoosuc Unit (31,764 acres) features Old Speck Mountain (elevation 4,180 feet), Speck Pond, a 37-foot deep high elevation alpine tarn, and the Mahoosuc Notch, reputed to be the most difficult section of the Appalachian Trail as it passes over and through a steep jumble of rocks

known as a Cold Air Talus Slope where cold air drainage results in ice chunks lasting through the summer months. In all, 18 miles of the AT and 20 miles of side trails cross through the Unit, connecting to trail systems on the surrounding properties. The 9,993-acre Carlo-Speck Ecological Reserve, one of the three largest in the state system and the one with most alpine



Grafton Notch State Park, a 3,191-acre slice through the Mahoosuc Unit adjacent to Route 26, a nationally designated Scenic Highway, features outstanding day-hiking and waterfall viewing opportunities, with several small parking areas allowing visitors easy access to a series of impressive waterfalls and gorges. This State Park also serves as an entrance to the Mahoosuc Unit which abuts the Park to the north and south of Route 26, and includes a trailhead and parking area for accessing the AT and Grafton Loop Trail as well as two overlook trails within the Park boundary (the Eyebrow Trail west of Route 26, and Table Rock Trail to the east).

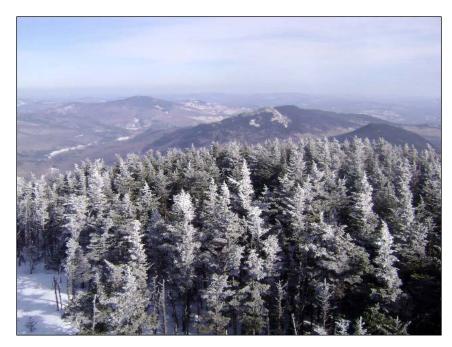
habitat of all (259 acres of alpine ridge), lies within the Mahoosuc Unit. The Bureau manages timber on approximately 16,000 acres of the lower elevation lands.

View of Old Speck from Table Rock in Grafton

Notch State Park



ITS 82, a regionally important snowmobile trail connecting to New Hampshire's snowmobile trail system gains elevation across the Stowe Mountain Easement and Mahoosuc Unit to capture views from a bald on Sunday River Whitecap Mountain, dropping back to parallel Route 26 through Grafton Notch State Park. The trail is maintained by the local snowmobile club.



Acquisition History

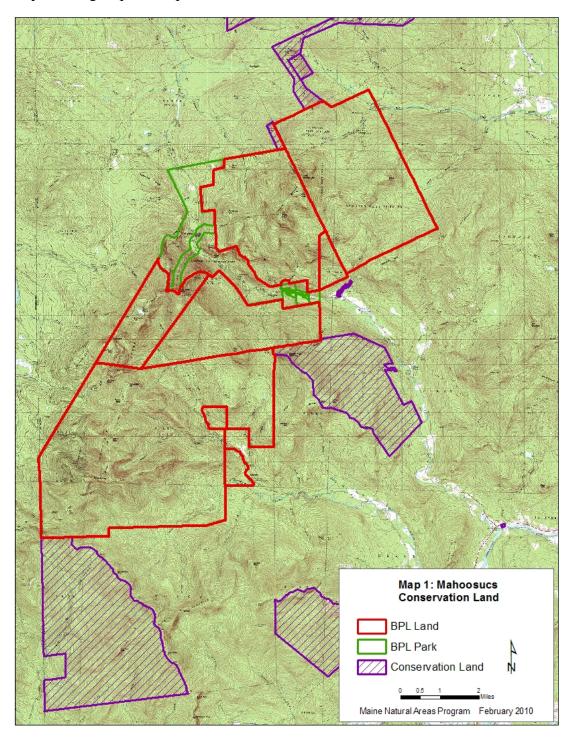
Mahoosuc Public Reserved Land Acquistions

Acquisitions leading to the current Mahoosuc Unit began in 1977-8, when the original public lot in Riley Township (960 acres) was traded and approximately 21,000 acres in three transactions were acquired from Brown Company and International Paper. During the last 10 years, several acquisitions were added to the Unit including: the Wight parcel of 239 acres in Grafton Township (2000); the Frenchman's Hole property (in 2003 including LMF funds), the triangular shaped "Grafton Notch property" of 3,668 acres (in 2007 with Forest Legacy and other funds), and 206 acres of islands and shoreline on the Androscoggin River in the town of Gilead (acquired in 2009). Many non-profit and other partners contributed to and were integral to the Bureau acquiring these properties. Additionally, two Bureau owned conservation easements were added to the Mahoosuc Unit— the Robinson Peak easement (6,730 acres) in Riley Township in 2008 and the Grafton Stowe parcel east of the Unit containing Stowe Mountain (3,364 acres) in 2009. Conservation is a dynamic process in this region, with the Bureau looking pro-actively toward future acquisitions and working toward continuing coordination of conservation initiatives with federal, non-profit, and private partners.

Grafton Notch State Park Acquisitions

Acquisitions of the land for the Park began in 1963 with 2,875 acres purchased from Brown Company. Eighteen more parcels of land were acquired and added to the Park in the 1960s (most in 1964) and many of these parcels were less than five acres. Two more parcels of an acre each were added in 1977, and the Park boundaries have been fixed since that time.

Map showing acquisition parcels.



Natural Resources

A natural resources inventory of the Mahoosuc Unit was conducted by the Maine Natural Areas Program in 2009. The following information was excerpted from this inventory (MNAP, 2010).

Geology and Soils

Many of Mahoosuc's unusual features can be attributed to its geologic history and exposed bedrock. The rugged mountain range resulted from geologic uplift, but the sheer cliffs of Grafton and Mahoosuc Notches were scraped and carved by glacial activity. Talus slopes formed when the freshly carved vertical cliff faces were exposed to the elements. Without vegetation to stabilize the slopes as glaciers retreated, the steepest areas crumbled to form boulder fields that fill some of the valleys such as Mahoosuc and Grafton Notches. Some talus slopes support vigorous moss and lichen communities, while other slopes appear too active to support any substantial vegetation.

Soils in Mahoosuc are dominated by the following soil types, in descending order of importance (adapted from Publicover 2003 and Polak et al 2007):

- Soils of high mountains occur on slopes and ridges primarily above 2500 feet. These soils, consisting of the Enchanted, Saddleback, Surplus, and Ricker series, typically support upper-elevation spruce-fir forests.
- Loamy soils developed from a combination of schist, phyllite, granite and gneiss occur on mid and lower slopes. They are intermediate in material, texture, drainage, acidity and fertility between the granitic soils of the high mountains and the slaty soils of the north slopes. The Lyman, Colonel, and Dixfield series are locally the most common soils in this group and typically support mixedwood and northern hardwood forests.
- Coarse-textured soils developed from granite, gneiss and schist are also found on north-sloping hills, ridges and mountain slopes. Generally well-drained and sandy in texture, they contain many rocks. These soils are very acidic and relatively infertile spodosols that typically support spruce-fir associations. Monadnock, Becket, and Turnbridge series are this group's most common soils in the Mahoosucs.

Hydrology and Wetlands

The Mahoosuc Unit lies within the Androscoggin River drainage. The ridge of the Mahoosuc Unit separates the watersheds of the Sunday River, Chapman Brook, and Bear Brook to the east and a number of smaller tributaries of the Androscoggin to the west. Streams from the Unit are known to be cool and high energy/high gradient, with many riffles, pools, and scenic waterfalls. Brooks are fed by numerous dispersed mountain seeps. There are many unmapped headwater streams.

The rugged topography of the Mahoosuc Unit does not lend itself to wetland formation. The Unit includes only 84 acres of wetlands (both open and forested types) and six acres of open water (Speck Pond). Wetlands are concentrated along beaver meadows and smaller streams.

Ecological Processes

Spruce budworm, wind, water and other natural processes have combined to shape the forests and ecology in Mahoosuc. Spruce budworm (the most recent outbreak occurring in the 1980's) has played a prominent role in forest disturbance at Mahoosuc, decreasing the amount and

quality of fir. Along exposed ridges, budworm damage combined with wind and weather effects created larger and more frequent gaps than in lower elevation forest. The forested communities on the unit show evidence of typical small gap disturbances from ice, windthrow, or natural tree mortality. These gaps increase the complexity of forest structure and add to the diversity of microhabitats in the forest for plants and animals.

Fisheries and Wildlife

The Mahoosuc Unit provides habitat for many of the wildlife species one would expect to see in large habitat blocks of the western Maine woods, including moose, deer, black bear, fisher, beaver, and bobcat. In particular, Unit's high elevation forests *may support* species such as the American marten, Blackpoll warbler, Bicknell's thrush, spruce grouse, boreal chickadee, white-winged crossbill, and three-toed woodpecker. Grafton Notch State Park and the Mahoosuc Unit are part of the Maine Birding Trail. Moose tend to winter at higher elevations where they browse on fir, mountain ash, and yellow birch. High elevation ridgelines also serve as important migratory routes for songbirds, raptors, and bats.

A staff trip to Grafton Notch State Park in June 2009 revealed the following bird species: broadwing hawk, winter wren, ruby-crowned kinglet, ovenbird, black-throated blue warbler, black-throated green warbler, Nashville warbler, red-eyed vireo, least flycatcher, black and white warbler, blackburnian warbler, dark-eyed junco, yellow-rumped warbler, Canada warbler, magnolia warbler, golden-crowned kinglet and white-throated sparrow. This list does not represent an bird census or inventory.

At Speck Pond, small springs enter the pond from all sides and its outlet, Pond Brook, flows southeast into the Bull Branch of the Sunday River. Water quality in Speck Pond is good for coldwater gamefish and the Pond provides a unique backcountry fishing experience. Hatchery-reared brook trout provide the sport fishery because the pond and its small tributary system lack spawning and nursery habitat necessary to support natural reproduction. No other fish species occur in Speck Pond, so survival and growth of stocked trout are good.

The Sunday River and several of its tributaries, including Pond Brook, the Bull Branch, Goose Eye Brook, Miles Notch Brook, and Sargent Brook, support wild brook trout, burbot (cusk), slimy sculpin, white sucker, longnose sucker, and several common minnow species. The richness of fish species in the tributaries declines markedly with elevation, with brook trout becoming dominant in the upper reaches. The uppermost reaches of some streams are completely fishless due to the presence of impassable waterfall barriers.

The Sunday River and the lower Bull Branch also support small populations of rainbow trout, a non-native species that became established from hatchery plantings made many decades ago in the Androscoggin River drainage. The Sunday River and the Bull Branch presently provide sport fisheries for brook trout and rainbow trout that are locally important.



Goose Eye Brook – MNAP photo

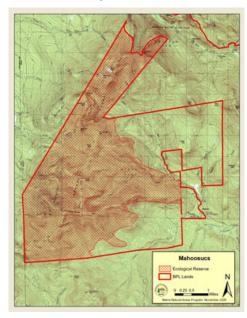
Rare Plant and Animal Species

Eleven rare plant species (a total of fifteen occurrences) are known from the Mahoosucs. Most of these occur within the exposed alpine zone of Goose Eye Mountain or the Baldpates. While none of these alpine species are globally rare, they are boreal species that persist only on mountaintops at the southern periphery of their ranges, and their habitats may be threatened by both recreational use and climate change. Peregrines have nested at Eyebrow Ledge on Old Speck within the last decade, and Lightning Ledge on Mt. Hittie is a historic nest site. The peregrine falcon was taken off the federal endangered species list in 1999, but its breeding population remains listed as endangered in Maine, as its numbers here are still low.

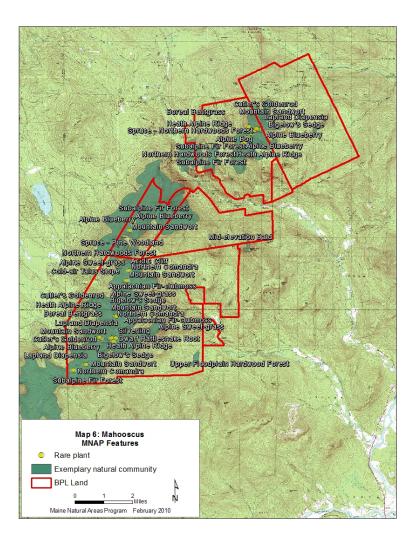
Natural Communities

Over 8,000 acres of the Mahoosuc Unit lies above 2700 feet in elevation. Despite the predominance of high elevation forests, more than half (54%) of the acreage of the Unit is hardwood; 22% is classified as mixed wood and 26% is softwood. Hardwood sites are dominated by Beech Birch Maple forests, mixed wood forests are primarily Spruce – Northern Hardwood, and softwood stands are divided among Montane Spruce Fir Forest and Fir-Heart leaf Birch Subalpine Forest. In general, most of the forests are silviculturally mature (e.g., moderately to well stocked with trees >50 years old), and relatively little forested acreage at the Mahoosucs is early successional. Ten exemplary natural communities have been mapped within the Mahoosuc Unit. The majority of these exemplary areas occur within the Ecological Reserve, and seven of the ten areas are associated with high elevation mountaintops or ridges at Goose Eye Peak, Mahoosuc Notch, Sunday River Whitecap, and Baldpate Mountain.





Mahoosuc Unit Exemplary Communities Maine Natural Areas Program



The Carlo-Speck Ecological Reserve



Extending from 1120 feet to 3980 feet in elevation, the Carlo-Speck ecological reserve is second to only Bigelow in elevational gradient, and it is one of the three largest state reserves. Most of the reserve (8,458 acres) has been classified as sub-alpine forest, and 259 acres have been classified as alpine ridge—the most alpine habitat of any of the thirteen ecological reserves. This alpine ridge, traversed by the Appalachian Trail, supports numerous populations of rare plants. Mahoosuc Notch, a notoriously difficult section of the Appalachian Trail, passes through a jumble of boulders known as a rare Cold Air Talus Slope community, where cold air drainage results in ice chunks remaining through the summer months.

Less than 10% of the reserve was classified as regulated timberland, primarily the hardwood and mixed wood stands on the lower slopes. Most of these stands have been selectively harvested in the past, but some areas, including a beech-birch-maple forest in Mahoosuc Notch, show no evidence of cutting. At intermediate elevations, some transitional conifer-dominated stands also show no signs of past harvesting, with trees over 245 years old.

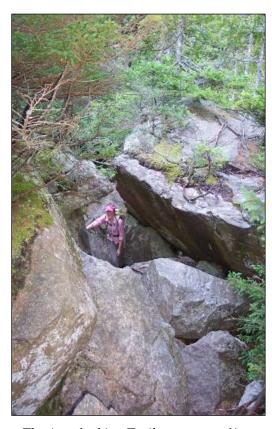
The reserve also includes the 10-acre, 37 foot deep Speck Pond, a sub-alpine tarn. Only two acres within the reserve is wetland.

Rare Species and Exemplary Natural Community Table for Mahoosucs Unit

Rure Species and Exemplary Natural Community Table for Manoosacs Cha				
Common Name	Latin Name	S-RANK	G-RANK	State Status
	Exemplary Natural Com	nunities		
Cold Air Talus Slope		S2	GNR	N/A
Northern Hardwoods Forest		S4	G3G5	N/A
Spruce-Northern Hardwoods Forest		S4	GNR	N/A
Spruce-Pine Woodland		S4	G3G5	N/A
Subalpine Fir Forest	S3	GNR	N/A	
	Rare Plants			
Alpine Blueberry	Vaccinium boreale	S2	G4	SC
Alpine Sweet-grass	Hierochloe alpina	S1	G5	T
Mountain Sandwort	Minuartia groenlandica	S3	G5	SC

One of the most unusual natural communities occurs at Mahoosuc Notch, a striking jumble of car-sized boulders sandwiched between two sheer 400 foot cliffs. The Appalachian Trail traverses the 25 meter wide notch, in places forcing hikers to scramble among and through boulders. The lack of sunlight, cold air drainage, and abundance of boulders results in ice chunks lasting well into the summer. The Cold Air Talus Woodland vegetation is boreal, with abundant Labrador tea, mountain cranberry, rhodora, and stunted black spruce. Adjacent to the hiking trail in the notch, a dense mat of moss covers the shaded boulders. Upslope the vegetation grades into parts Acidic Cliff (on the steepest sections) and parts Red Spruce Mixed Conifer Woodland (nearer to the summit crest).

Another unusual natural community is the Sub-alpine Slope Bog (also called 'hanging bog') on the north-facing slope of East Baldpate. Two approximately one acre patches of shallow peatland vegetation occur on a 20-50% slope over seepy granite. These patches support bog vegetation of Labrador tea, deer-hair sedge and Sphagnum spp. Subalpine slope bogs are known from only a few sites in Maine.



The Appalachian Trail traverses a ½ mile long boulder field in Mahoosuc



200+ year old yellow birch tree in Mahoosuc Notch – MNAP photo

In addition to the uncommon high elevation natural communities, the Mahoosucs harbor a few remnant patches of late-successional to old growth northern hardwood and mixed wood forest. Just north of Mahoosuc Notch, a small (approximately 25 acre) patch of old growth Beech birch maple forest lies at the headwaters of a small stream. This stand is dominated by large yellow birch, with about 25 percent spruce and a relatively open understory of hobblebush. Ages of three cored spruces in the canopy were 85, 152, and 285, suggesting an all-aged stand. Numerous very large yellow birch trees were noted, including one 40 inches in diameter. Another late successional Beech Birch Maple forest occurs on the east side of Grafton Notch along the Appalachian Trail, within the State Park boundary. There are vague signs of harvesting 50 or more years ago, with numerous large yellow birch trees and moderate abundance of largediameter coarse woody debris.

The recent acquisition north of Slide Mountain and along Bull Branch (also known as the Grafton Notch Forest Legacy parcel) also has a few hundred acres of late-successional spruce-fir and mixed forest at high elevation. While some harvesting likely occurred here long ago, the forest structure is largely undisturbed, and cored spruce trees were 127, 165, 180, 196, and 211 years old. Three rare plant species were also found along a headwater seep in this area.

Natural Resource Issues

The nexus of highly sensitive alpine communities and high value, popular hiking trails
presents management challenges. The major challenge from a natural resource
perspective is how to manage recreation to protect alpine communities and rare plant
populations from major impacts.

Historic and Cultural Resources

The earliest human inhabitants of this area, Paleoindians, arrived as the glaciers receded, some 12,000 years ago. As described by the Maine History Project (www.mainememory.com) the largest collection of Paleoindian artifacts in this area is the Vail site on the Magalloway River in western Maine. Now flooded by the Aziscohos dam, the site yielded some 4,000 tools, primarily scrapers, fluted points, wedges, and cutters, suggesting a seasonal encampment occupied over several centuries. Nearby hills constricted the migrating herds and gave hunters an opportunity to intercept them. Similarities between the tools found here and those from sites in Nova Scotia and eastern Massachusetts imply a basic cultural unity across this vast Maritime Peninsula, but the Vail site also contained exotic artifacts, made of materials from as far away as western Vermont, New York, and Pennsylvania. Along their seasonal migrations, Paleoindian hunters undoubtedly met other wandering bands, with whom they exchanged gifts. The disappearance of the Paleoindians some 10,000 to 8,000 years ago is still something of a mystery.

It was a Woodland people known as the Wabanaki who encountered the Europeans when they arrived on the Maine coast at the beginning of the 16th century. Wabanaki – the People of the Dawn – were part of an Algonquian confederation stretching from New England west to the Great Lakes. The Wabanaki Indians, hunted and formed summer settlements near the Androscoggin River. European settlement occurred in the Mahoosuc region in the late 18th century, slower than much of Maine and New Hampshire due to rugged terrain and conflicts with Native Americans. Settlers spread up the Androscoggin River, north from Bethel, and east from the Connecticut River. Early settlers in the rugged Mahoosuc mountains cleared forests to supply building materials and feed local sawmills, and farmed the tough soils in the summer. Wood was moved along the Androscoggin River in the famous log drives of the 19th and 20th centuries. (Mahoosuc Initiative 2007)

The formation of the towns of Berlin, NH, Errol, NH and Bethel, ME began in the late 18th century. The first train in the Mahoosuc region—The Grand Trunk connecting Portland, Maine and the St. Lawrence Valley in Canada—was established in 1851. Tourists using this train to get to the White Mountains and the Rangeley Lakes and the recreational visibility of the larger region grew. The Appalachian Mountain Club formed in 1876 and gradually brought an increased awareness of the Mahoosuc mountains and region. (Mahoosuc Initiative 2007)

Recreation Resources

The Mahoosuc mountain range, which the Park and Unit are a part of, is renowned for its scenic beauty and recreational opportunities. Grafton Notch State Park and the Mahoosuc Unit, along with the Grafton Loop Trail provide a wide variety of exceptional backpacking, hiking and nature observation opportunities. The area has long been a treasured destination of national and even international significance for these recreational pursuits. Below is a brief description of the many waterfall viewing, day hiking, and backpacking opportunities available.

Popular stops along Route 26 in Grafton Notch State Park

Screw Auger Falls

A walking path from a small parking area leads to this 23 foot waterfall lying in a narrow gorge along the Bear River.

Mother Walker Falls

This V-shaped gorge is more than 40 feet and 980 feet long.

Moose Cave

A quarter mile loop trail gives views of this 200 foot long gorge, lying within a 45-foot-deep canyon in the bedrock. Water skirts boulders and disappears temporarily into a cave beneath a huge granite slab.

Spruce Meadow Picnic Area

Lying in the Park's northern portion, this picturesque setting offers picnicking spots overlooking a wildlife-rich march and Old Speck Mountain.

Day hikes in Grafton and/or Mahoosuc originating from the Route 26 parking area

A large parking area along Route 26 in the center of the Park provides access for many hikes, all using the Appalachian Trail for a portion or all of the hike, including:

<u>Table Rock Loop Trail</u> (1.8 miles)

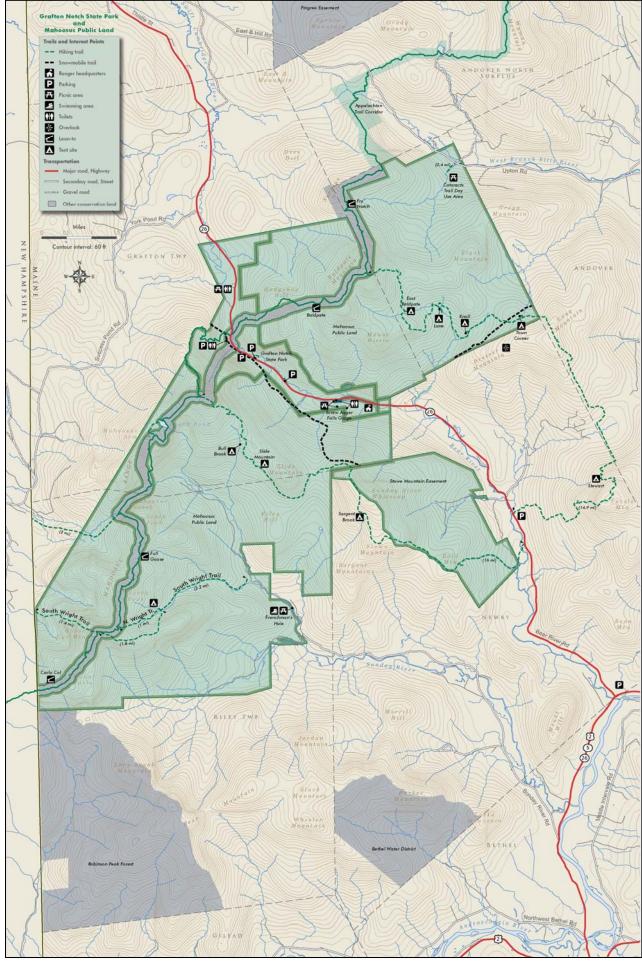
Entirely within the Park, traveling north from Route 26, this popular trail leads to the outcrop of Table Rock. Incredible views of the region and particularly of Old Speck Mountain are offered.



View of Sunday River Whitecap from Table Rock Trail

Eyebrow Loop Trail (2.2 miles)

This trail rises steeply to an "eyebrow" shelf/overlook on Old Speck Mountain at 2,900 feet. Later it meets the Appalachian Trail, which can be used to complete the loop back to the parking area following the Cascade Brook downstream.



<u>Baldpate Mountain Trail</u> (5.8 miles roundtrip West Peak only, 7.6 miles including East Peak) Following the AT northbound from the parking area, hikers can travel across the north slope of West Peak of Baldpate. Continuing for one more mile, the East Peak offers views in all direction. Day hikers return southbound on the AT.



From Summit of E. Baldpate

Old Speck Trail (8 miles round trip)

Old Speck is one of the highest peaks in Maine and offers spectacular views from an observation tower at the summit. Traveling southbound along the AT from the Grafton Notch parking area will take you to the peak.

Day hikes in Mahoosuc accessed from points other than the Route 26 parking area

Wright Trail (7 miles round trip)

This trail follows the scenic Goose Eye Brook before steeply climbing to Goose Eye Mountain and the Appalachian Trail in the southern portion of Mahoosuc Unit. It is accessed from a small parking area off the Bull Branch Road.

<u>Cataracts Trail</u> (1 mile round trip)

This short trail is along the Frye Brook, where hikers can view several falls in the granite bedrock gorge between Baldpate and Surplus Mountain. A picnic area is available at the end of the Trail.

Trails through private land accessed from the Success Pond Road

There are four hiking trails that originate on private land with parking areas off the Success Pond Road to the west. These Trails all meet up with the Appalachian Trail on the southern portion of the Mahoosuc Unit and are named for their destinations: Speck Pond Trail, Mahoosuc Notch

Trail, Goose Eye Trail, Carlo Col Trail. A parcel of land in New Hampshire containing the beginnings of the Goose Eye and Carlo Col Trails is soon to be added to White Mountain National Forest and managed as AT corridor lands.

Backpacking in Grafton and Mahoosuc

Grafton Loop Trail (42 miles)

This is a high elevation, backcountry trail connecting a series of scenic peaks using the Appalachian Trail on Grafton and Mahoosuc, as well as new trail on Bureau land and private land. The trail takes approximately three days, with primitive campsites available. Many partners were involved with the Bureau in conceiving of and constructing the Grafton Loop Trail, including the Appalachian Mountain Club, the Maine Appalachian Trail Club, the Mahoosuc Land Trust, the Trust for Public Land, and many others, including the private landowners whose land the Trail crosses.



View from Sunday River Whitecap Portland Press Herald Photo

Appalachian Trail (2,178 miles)

The Appalachian Trail is a National Scenic Trail stretching from Springer Mountain in Georgia to Mount Katahdin in Maine. Approximately 18 miles of the AT run through the Park and Unit, including the famed "Mahoosuc Notch" which is known as the "toughest mile on the AT". Backpackers completing the entire AT find the Grafton/Mahoosuc portion one of the most challenging (as it is boulder strewn and steep in parts) and scenic (as it follows the ridgelines of the Mahoosuc range and offers great views). Many shorter hikes (as noted above) use the AT in whole or in part.

Other recreational opportunities in Grafton/Mahoosuc

Frenchman's Hole

Frenchman's Hole is a popular swimming area on the south portion of Mahoosuc Unit near Bull Branch Road. A recently constructed parking area enhances access to this swimming hole. Visitors can swim in a deep pool under a 20 foot waterfall.

Snowmobiling

ITS 82—a snowmobile trail that connects Andover to New Hampshire's Trail 18—runs through the Park and Unit. This trail runs along the Bear River south of Route 26, and affords views of Table Rock and surrounding mountains. Snowmobilers don't ride as fast due to the terrain, making it a somewhat 'family-friendly' route. Use is constrained due to the fact that once snowmobilers reach the New Hampshire border, they cannot continue unless their sled is also registered in NH. A club trail, maintained by the State Line Snowmobile Club in Upton, travels

north from ITS 82 just before the NH border. Snowmobilers can travel east on this trail and loop back south returning to ITS 82 in Andover.

Human-powered Winter opportunities

Ice climbing, snowshoeing, winter camping and Nordic skiing are popular uses of the Park and Unit. These activities currently occur without active management by the Bureau.





Old Speck Trail and View

Recreational Resource Issues

• The management system in Grafton Notch State Park and Mahoosuc Public Reserved Land thrives on collaboration and partnerships. Within the Bureau, two branches manage the Park and the Lands Unit--the Bureau's Western Region Lands office manages Mahoosuc Unit, the Bureau's Parks South office manages Grafton Notch State Park. The Appalachian Mountain Club (AMC) works across the Park and Unit, managing both the AT and Grafton Loop Trail south of Route 26. The Maine Appalachain Trail Club (MATC) also works across both the Park and Unit, managing the Grafton Loop Trail and AT sections north of Route 26. The Mahoosuc Land Trust (MLT) played an important role in the development of the Grafton Loop Trail and owns and manages the parking area for the GLT in addition to the Puzzle Mountain parcel—a popular day hike along the GLT.

There are great strengths to this management system. Having a state park along the Notch—which is bi-sected by a National Scenic Byway—allows for the more developed, front-country, accessible recreation experiences which the Maine State Park system can provide. The Mahoosuc Unit, managed as part of the Bureau's Public Reserved Lands system, offers the type of remote and primitive setting that the public reserved lands system is well positioned to provide. The Bureau's managing partners—AMC and MATC—greatly enhance and expand the Bureau's capacity to provide and manage backcountry recreation experiences for the public. They bring expertise on trail-building and maintenance (including incorporating low-impact trail building techniques), managing visitors' experience, and further increase the capacity of the Park and Unit by coordinating

volunteer trail maintenance programs and applying for grants for and performing trail upgrades.

There are also challenges inherent in this management system. There are many areas in which more coordination between Parks, Lands, AMC and MATC is desirable. Providing public information in the form of written materials, signage, kiosks, and on-site staff is an area that could benefit from greater coordination/collaboration. Prioritizing trail upgrades could also benefit from coordination, as there is a high density of trails in the Park and Unit and surrounding private lands, and at times the managing partners are inadvertently competing for limnited trail improvement grant funds. Increasing coordination would take greater devotion of Bureau staff time and other resources, which are currently in short supply. Only two seasonal park staff are devoted to Grafton Notch State Park and Mahoosuc Unit has a forester and seasonal recreational ranger who are both responsible for several additional lands units.

- There is a need for improving information for hikers and backpackers in Grafton, Mahoosuc and the Grafton Loop Trail. Currently, for visitors travelling to the Park for a day hike, the Park AT parking lot contains limited information on trails which could be expanded and developed further. Park staff presence on trails and in the AT parking lot is sporadic by necessity, as the two seasonal staff in the park stay very busy maintaining facilities and assisting visitors in the popular waterfall stops. For backpackers and overnight visitors, available information is likewise limited. They may encounter an AMC caretaker at the Speck Pond camping area in addition to the limited written information in the Park AT parking area. Additionally, signage for the Park indicates camping is not allowed in the Park; however, backcountry camping is available in the Mahoosuc Unit and along the Grafton Loop Trail.
- Significant winter recreational use occurs in the Park and Unit, without active management on the part of the Bureau. Currently in the Park, ice climbing, winter camping, Nordic skiing and snowshoeing are popular winter pursuits including many guided trips. There are opportunities for Parks and Lands to better facilitate this winter recreation, such as communicating with the DOT on a plan for which areas to plow out for parking, and working with the local Nordic ski community to identify appropriate areas for a trail system. Challenges involved with winter recreation management include Bureau staffing (park staff and lands recreational staff are summer seasonal).
- Many hikers value the trails that cross private land onto Mahoosuc Unit that originate from the Success Pond Road (a private road). These trails have existed for decades, are maintained by AMC and provide more diverse hiking options. Additionally, some of these routes facilitate easier access related to emergency situations along the AT. As with any trail on private land, there is a potential that the landowner could close off access to these trails. However, land surrounding the Carlo Col Trail and the Goose Eye Trail is in the process of being acquired by the White Mountain National Forest and will be protected for the public. The Notch Trail and the Speck Pond Trail remain in private ownership until they reach the Mahoosuc Unit and some fear they could be closed to the public.

Additionally, there is a need for information and signage to guide use appropriately on all four trails originating from Success Pond Road, which cross through sensitive areas of the Bureau's ownership in the Carlo-Speck Ecological Reserve. The potential for increasing use from this side of the Unit off the Success Pond Road underscores the need to work with adjacent landowners in managing this use.

Timber Resources

The Bureau manages timber resources where allocated to provide a diverse forested environment and generate high quality – high value products to support Bureau operations and the local economy. Exemplary management that contributes to public values, including recreation and wildlife habitat, is the standard.

Harvest history

Harvests by previous landowners

Prior to State acquisition the most recent harvesting on most acres took place in the 1960s and 1970s. The 1960s-70s harvests were occasionally quite heavy, probably because nearly all the stands were dominated by sawlog size/quality trees, as that's most of what was harvested. "Test notches" were observed on Andover West Surplus, where cutters in the 1960s looked at the interior of some large trees and found them too defective for the markets of that time. As noted above in the Acquisition History section, a few parcels have been added to Mahoosuc Unit recently, and the Newton-Tebbetts acquisition had a 400 acre selection harvest during the 1990s.

Bureau harvests in Riley Township portion of Unit

The Bureau's initial timber sale on the Mahoosuc Unit was begun in 1984 near the north line of the Bull Branch of the Sunday River. This warm-season selection/thinning operation harvested about 11,600 cords from 1,100 acres over a six-year period. In 1987 a companion fall-winter harvest was developed on the southerly border the Mahoosuc Unit in the Sunday River valley. This operation lasted approximately four years and yielded another 4,000 cords. The same area was harvested in 2008 through 2009 and focused on very low value areas. After the access to the Miles Notch Brook area was permitted from an abutting landowner in the 1990s, a sale there from 1992-95 produced 11,000 cords.

Bureau harvests in Andover West Surplus portion of Unit

The initial Bureau harvest into Andover West Surplus, in the Stony Brook headwaters, began in 2003 and lasted six winters, with 9,000 cords harvested. A major operation, estimated to produce over 20,000 cords in approximately four winters, began late in 2008 in the Frye Brook drainage. Through 2009, BPL harvests have totaled over 48,000 cords, 93% hardwoods (by far the highest of any major BPL Unit) and 74% hardwood pulp. Except for a small amount of thinning in younger hardwoods and some large-group selection in the Sunday River re-entry, all harvests have been single tree and small group selection.

<u>Current timber conditions</u> (for regulated acres subject to timber harvesting)

Softwood type covers *just 1.5 percent* of the regulated acres, and is composed of 55 percent spruce, 21 percent cedar, 7 percent fir and 5 percent hemlock. All softwoods except cedar tend toward good quality here, though some old hemlock is defective. Most of the limited softwood area is found at the upper edge of operable ground or in steeply sloping riparian buffers.

Mixedwood is found on *about 14 percent* of Mahoosuc regulated forest. Nearly all of this is spruce-fir/Northern hardwoods, and though some acres may have been shifted from softwood type by past harvesting, most of this type is on soils well suited for growing both softwoods and hardwoods. Spruce is the leading species, 29 percent of mixwood type volume, with yellow birch second at 19 percent, and fir 16 percent. Red maple is 10 percent of type volume, and hemlock, sugar maple, beech, and white birch are all around 6 percent. Quality is generally very good for all species present except for the oldest hemlock, and the beech, which is often badly damaged by the beech bark syndrome.

Hardwood type is much the dominant forest on the Mahoosuc Unit, covering 84 percent of regulated acres, and essentially all of it is Northern hardwoods. Sugar maple is the most common species with 25 percent of hardwood type volume, and the other two Northern Hardwood species are next, yellow birch at 22 percent and beech at 18 percent. After these comes: red maple at 13 percent, spruce and white birch at 6 percent, and fir at 4 percent. Red oak is a minor but important component, most common south and east of Goose Eye, and is significant both for wildlife food, and for high quality/value timber. Hardwood type quality and growth is as good on Mahoosuc Unit as anywhere on Bureau lands, though hardwoods of somewhat lower quality (shorter) are found on steep land higher up on the mountains. Beech quality is variable due to the bark complex, but averages better than on most other Bureau lands.

Timber Management Issues

• Timber management in Mahoosuc must be conscious of scenic concerns from hiking trails, both along the trails themselves, and views from trails along exposed ridgelines. Views from the Grafton Scenic Byway (Route 26) must also be protected. Much of the Mahoosuc is high-value, productive timberland, which contributes to the local economy and assists the Bureau in achieving the financial sustainability of the Public Reserved Lands system. Additionally, the Mahoosuc Unit, and the entire Mahoosuc Range is a highly prized all-season recreational destination—and recreation in the Park and Unit benefit the local tourism economy as well. Achieving the appropriate balance of timber management and recreation—where these uses co-exist in some areas and exist separately in others—is a challenge and opportunity here.

Transportation and Administrative Considerations

The Park and Unit are accessible by motor vehicle in a few different ways (see recreation resources map). Grafton Notch State Park is bisected by Route 26, which gives easy access to parking areas for hiking, waterfall viewing and other activities as noted in the Recreation

Resources section above. This section of Route 26 from Newry to Lake Umbagog is a Maine Scenic Byway—specifically known as the Grafton Notch Byway.

The Mahoosuc Unit has limited vehicular access, to preserve its backcountry character. The Riley Township portion of Mahoosuc Unit is accessible from the Sunday River Road (starting from Route 2 in Bethel). When it reaches the southeast border of the Unit, it crosses the Twin Bridges and branches into two directions. The Sunday River Road continues southwest (upstream) and provides access for timber management in the Sunday River valley for the Bureau and also continues on to land owned by the Sunday River Ski Area. This is currently designated as a *management road with shared use status*—a designation that continues in this plan. This means it is a road the Bureau maintains for timber management access, however, it is open to use by the public for use of passenger vehicles, ATVs, horses and bicycles as long as it remains in service. The Bureau is not obliged to maintain it for public use.

The Bull Branch Road—which branches in a northerly direction after Twin Bridges—provides access for Bureau timber management and access to abutting landowners. Additionally, recreationists access the Wright Trail and Frenchman's Hole. The Bull Branch Road—from Twin Bridges to the Wright Trail parking area—will be maintained as a *public use road* in this plan, open to passenger vehicles, ATVs and bicycles. Beyond the Wright Trail parking lot the road becomes a network of management roads closed to public vehicular use or ATV use.

In Andover West Surplus, the East B Hill Road is a county road that cuts through the northeast corner of the Mahoosuc Unit. It is also used by the public to access the Cataracts Trail (a small parking area is available on the East B Hill Road) and by Bureau foresters for timber management. The East B Hill Road is a *public use road* for the purposes of this plan due to its status as a county road.

All other roads existing in the Mahoosuc Unit are considered management roads closed to public motorized use. Select winter motorized use is allowed—such as grooming for Nordic ski trails in certain areas and existing snowmobile trails (see recreation map).

Transportation and Administrative Issues

• The Sunday River Road, after it enters the Mahoosuc Unit past the Twin Bridges, turns in a southwest direction upstream, and in the 1988 Mahoosuc management plan was designated as a management road for the Bureau and abutting timber landowners. Several factors have increased use of this road since that time. In the 1990s, in response to a new Bureau



policy authorizing ATV use on select public lands gravel roads, the Sunday River Road on the Mahoosuc Unit was additionally designated for shared use. Additionally, there has been increasing use of Jeeps on this road, which are at times are traveling to destinations on abutting lands for off-road use, and in some cases going off road on Bureau lands (which they are not authorized to do). Another factor that has increased, and will continue to increase use of this road is the development of the Sunday River Ski Area, which purchased land south of the Mahoosuc Unit in Riley Township from the former timberland owners. The Ski area plans to increase recreational use of this part of their ownership, which will likely involve an increase of traffic across the Sunday River Road on the Mahoosuc Unit.

The issue to be addressed is the unauthorized off-road use that is occurring on Bureau lands, which travel on the Sunday River Road enables. The road travels through a Bureau timber management zone, and some Jeep and ATV drivers are leaving the main road and traveling onto management roads and skid trails.

Conservation Easements and New Fee parcels

Grafton Notch Stowe Mountain Conservation Easement

In 2009, the Bureau acquired a conservation easement adjacent to the Mahoosuc Unit on 3,363 acres of land owned by the Center for Special Needs Trust Administration. This easement acreage contains the Stowe Mountain (1,820 feet), Bald Mountain (2,072 feet) and Sunday River Whitecap (3,376). It is natural and undeveloped forest land with streams, steep sloping uplands, and exposed ridgelines including alpine and sub-alpine communities. An exemplary Crowberry-bilberry Summit Bald Community occurs on Sunday River Whitecap, and two tributaries to the Bear River—Simmons Brook and Wight Brook run through the easement area. Over four miles of the Grafton Loop Trail travel through this easement area, as well as ITS82 snowmobile trail.

Easement language prohibits residential, commercial or industrial development, and protects recreational, wildlife and ecological values for the public. It assures the availability of the property for traditional, non-intensive outdoor recreation, and protects ecological, wildlife, water quality, and other values. It allows management by the landowner as a working forest. However, there is a "no-cut" zone along the Grafton Loop Trail, which totals 760 acres and varies in width along the trail from 350 feet to 2,500 feet.

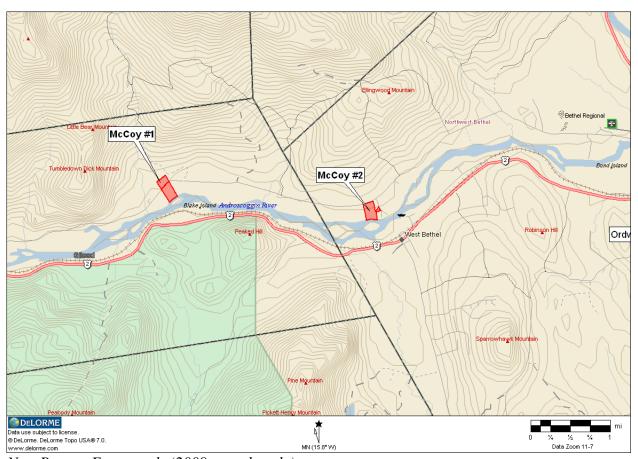
Robinson Peak Conservation Easement

The Robinson Peak Easement was acquired by the Bureau in 2008 from the LBA Forest Stewardship Initiative. It consists of 6,730 acres directly south of the Mahoosuc Unit in Riley Township. Easement language allows public access for traditional, non-intensive public recreation and prohibits residential, commercial or industrial development. Commercial forestry is allowed but not required, and must be performed to ensure a continuing, renewable, and long-term harvest forest products. Minor recreational structures for public use are allowed, such as gravel parking areas and trail improvements.

New Bureau Fee parcels in the town of Gilead

In 2009 and 2010 the Bureau purchased several parcels of Androscoggin River islands and riverfront lands. These acquisitions were part of a larger initiative by the Bureau, The Conservation Fund, Maine Department of Inland Fisheries and Wildlife and other government agencies and land trusts to conserve riparian lands and acquire public access rights for anglers and boaters along the Upper Androscoggin River and the Wild River. In 2009, with the support of The Conservation Fund and MDIFW the Bureau purchased 206 acres of shoreline and islands along the river—including four miles of Androscoggin Riverfront and two miles of Wild River riverfront. In 2010 two additional parcels totaling 43 acres were purchased using Land for Maine's Future Fund.

These lands will be managed by MDIF&W through a management agreement with the Bureau (see Appendix B). The Bureau will continue to work with MDIF&W to inventory and plan for these lands.



New Bureau Fee parcels (2009 parcels only)

Vision for the Mahoosuc Unit and Grafton Notch State Park

The Mahoosuc Unit and Grafton Notch State Park continue to be signature landscapes known regionally and nationally for their spectacular scenery including high mountain vistas and a sculpted gorge with waterfalls. Transected by a National Scenic Highway, these public lands offer a range of high quality recreational experiences, from drive-to picnicking at the gorge and waterfalls along Route 26, to extensive hiking, camping and backpacking opportunities in the remote scenic high elevation areas. Approximately half of the Mahoosuc Public Reserved Lands Unit is sustainably managed for timber while the other half is set aside for protection of important ecological features, wildlife habitat, and for backcountry recreation.

In the extensive high mountain area of the Mahoosuc Unit, recreation is managed for a low intensity backcountry experience, and trails and recreation facilities are carefully managed in the ecological reserve to minimize impacts to the ecological reserve values. The nexus of highly sensitive habitats and high value scenic and hiking opportunities draws ecologists and recreation managers into collaborations to develop and showcase low-impact trail technologies.

Grafton Notch State Park scenic attractions provide an opportunity to experience and learn about the natural resources of the Mahoosuc Region. Visitors can easily and conveniently obtain information at Park kiosks about the recreational facilities and opportunities at the Park, Mahoosuc Unit, and adjacent private lands. The Park is welcoming to visitors who come to enjoy the cooling mists of the waterfalls, enjoy a picnic, walk along gentle trails in the gorge or hike short but rigorous loops to viewpoints on the Eyebrow or Table Rock Trails, or use the Park to stage a multi-day hiking and backpacking trip on the adjoining Mahoosuc Unit or Grafton Loop Trail. Bureau staff are able to communicate with trail stewards and Speck Pond camping area caretakers to provide information about trail conditions and campsite availability, and otherwise assist visitors using the extensive trails network accessed via the Park.

Management of the recreation facilities and recreation uses on the Mahoosuc Unit, Grafton Notch State Park and Grafton Loop Trail models partnerships with private landowners, conservation and recreation organizations. A recreation management coordinator works with Bureau staff and multiple partners to ensure exemplary maintenance of facilities and provide an effective yet unobtrusive presence supporting recreational users and protecting the sensitive ecological areas. Use is carefully monitored and options are explored with partners to expand recreation opportunities when needed in order to avoid levels of use that diminish the quality of the recreation experience or jeopardize the fragile alpine communities.

Management of the timberlands demonstrates exemplary multiple use and sustainable forest management producing high quality sawlogs and retaining a late successional character. Because of the exemplary management, these lands are an important component of the local economy contributing a continued source of jobs and revenue from both timber operations, and as tourism and recreation destination.

Mahoosuc Unit Allocations

The following "allocations" define general management objectives and direction for specific areas within the Mahoosuc Unit. See Appendix C for a description of designation criteria and management direction for the various allocation categories. Allocation maps are found in Appendix F.

Special Protection Dominant

- The Mahoosuc (Carlo-Speck) Ecological Reserve on the southern portion of the Unit. The Ecological Reserve contains many rare plant species and exemplary natural communities.
- An area on the Baldpates containing the Heath Alpine Ridge and Subalpine Slope Bog communities, and surrounding exemplary Sub-Alpine Fir Forest natural communities ranked S3.
- An area on Lightning Ledge—a historic Peregrine Falcon nesting area (natural area).
- The Appalachian Trail corridor and the Grafton Loop Trail (historic/cultural special protection) for 100 feet on each side of the trail where not already contained within a larger Special Protection or Backcountry Non-mechanized Dominant Allocation.

These areas are also designated backcountry non-mechanized as a secondary allocation.

Backcountry Non-mechanized Dominant

- The ridgeline extending east from Old Speck to Slide Mountain and including an area around Sunday River Whitecap Mountain. This includes a 500-foot buffer south of the Grafton Loop Trail, and encompasses an area extending over the ridgeline own to an elevation of approximately 2700 feet as far as Slide Mountain; and a more extended downslope area north of Sunday River Whitecap Mountain. This allocation excludes the ITS 82 snowmobile trail which pre-existed the Backcountry Non-mechanized designation, and will be a designated Developed Recreation Class I corridor through the Backcountry Non-mechanized area.
- The 400 foot buffer extending from the 100 foot Special Protection zone designated on either side of the Appalachian Trail from the point entering the Unit east of Table Rock to an area defined around Baldpate Mountain by the 2,700 foot elevation contour, except where defined as Special Protection.
- A buffer area around the Special Protection areas on the west and east peaks of Baldpate Mountain and the Sub-alpine Fir Forest special protection area west of Baldpate, extending down to an elevation of 2700 feet.

Wildlife Dominant

 Riparian zones of 330 feet on each side are applied on Sunday River, Bull Branch, Miles Notch Brook, Sargent Brook, Wight Brook, Frye Brook and other major streams, except where designated Special Protection or Backcountry Non-mechanized. Additional major riparian zones may be designated by field staff during the silvicultural prescription process.

A Visual Class I allocation is also applied to this allocation along portions of the Sunday River within the Unit, and Bull Branch Stream to the point of the confluence of Speck Pond Brook Stream.

Remote Recreation Dominant

 A 400 foot buffer beyond the 100 foot special protection area on each side of the AT (except where designated Special Protection, or Backcountry Non-Mechanized) and Grafton Loop Trail (except where designated Special Protection, or Backcountry Non-Mechanized or Wildlife Dominant)

This area is also subject to Visual Class I (where not already contained within a larger Special Protection or Backcountry Non-mechanized Dominant Allocation).

Developed Recreation Dominant

- Parking areas—for the Wright Trail, the Frenchman's Hole Day Use Area, and the Cataracts Trail. These areas will be buffered with a Visual Class I allocation.
- The ITS 82 snowmobile trail.

<u>Visual Class I</u>: In addition to areas mentioned above, this will be applied to

- The Cataracts Trail (recognizing that the adjacent management road is by necessity within view of this trail). Note this is the shortened trail to the Cataracts; the former AT trail to the Cataracts is discontinued.
- The East B Hill Road within the Unit.

Timber Dominant

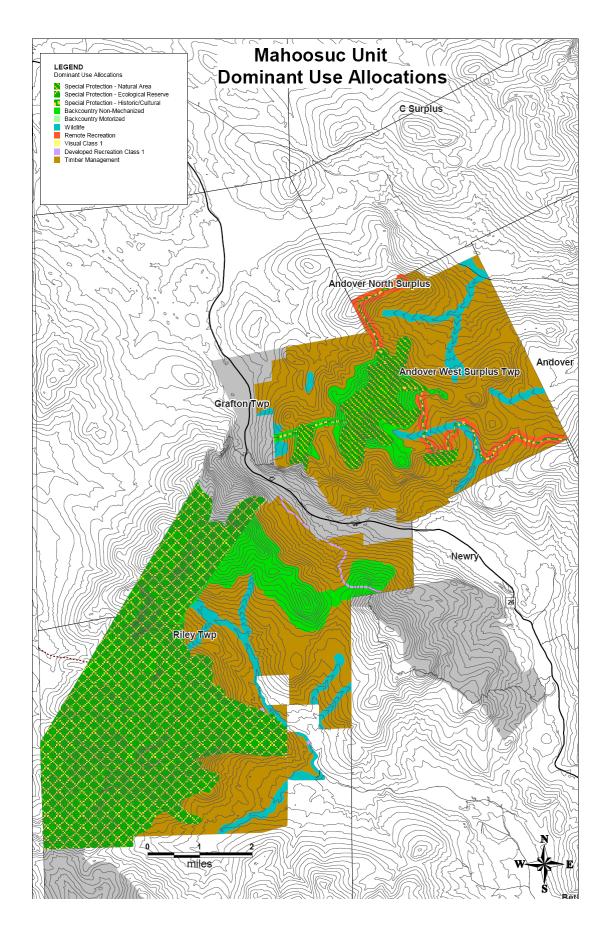
All other areas not allocated above are designated Timber Management dominant. During the silvicultural prescription process, it is determined which timber dominant areas are subject to Visual Class II treatment. A Visual Class II designation assures that timber management will protect views from hiking trails, public roads, and scenic overlooks and other recreation features. The majority of the Timber Dominant acres in the Mahoosuc Unit are visible from one or more of these recreational features and will be subject to Visual Class II treatment.

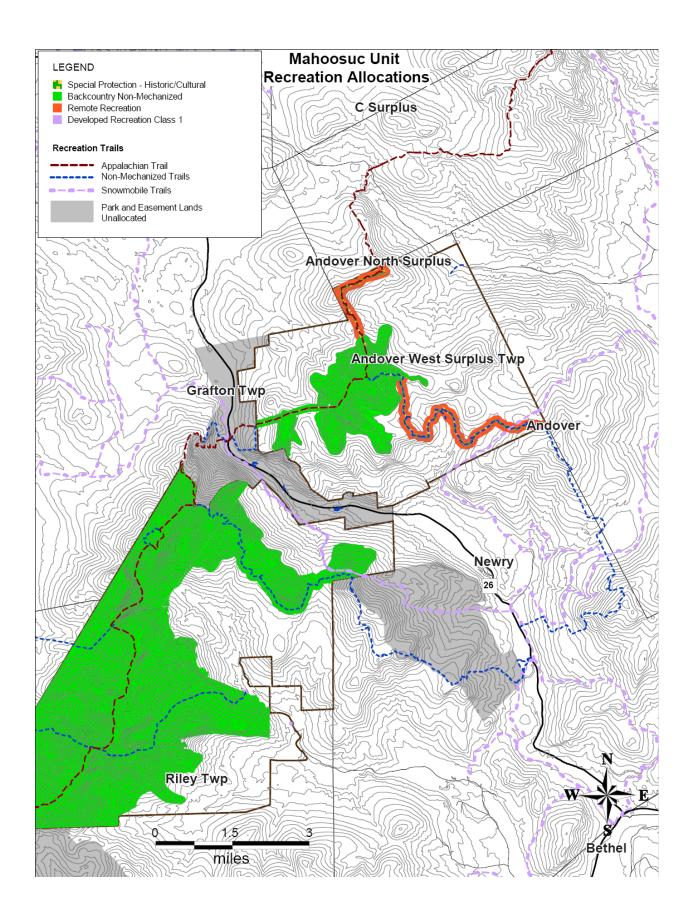
Mahoosuc Unit Allocations

Allocation	Number	of Acres*
	Dominant	Secondary
Special Protection	11,832	
Backcountry non-Mechanized	2,379	11,507
Remote Recreation	598	
Wildlife	1,668	
Development Recreation Class I**	74	
Timber Management	14,617	2,266

^{*}Dominant acreages are representations based on GIS metrics and do not sum total unit acres due to measuring error and limits of GIS precision.

^{**}Approximate—actual acres will be determined in the field





Grafton Notch State Park and Mahoosuc Unit Issues and Recommendations

While allocations define the general management direction, management recommendations define specific actions to be taken during the course of the 15 year Plan period in response to identified management issues.

Issue	Recommendations
Recreation Management	
Sensitive resources: Significant	Work toward achieving an exemplary standard of
recreation use in sensitive alpine and	balancing recreation and environmental protection in
sub-alpine areas in the Mahoosuc Unit	an environment that is both highly valued
creates the need for careful management.	recreationally and highly sensitive ecologically.
	Explore:
	 Upgrading trails or sections of trails by
	hardening and/or adding additional trail
	structures to reduce/prevent erosion.
	 Relocating or eliminating sections of trail if
	necessary.
	 In alpine areas, using specialized alpine trail
	building techniques, encouraging hikers to stay
	on trails by better defining trails (while
	considering the remote, backcountry
	experience).
	 Improving and maintaining existing trails
	should be a higher priority than new trail
	construction (excluding potential trail segment
	relocations). However, new trail construction
	will be considered if high visitor use is causing
	unacceptable impacts in a particular area and it
	is determined that a new trail is needed to
	disperse use.
	• Increasing hiker awareness of ecologically
	sensitive areas through increased information
	and education, delivered through various
	media, signage and possibly a ridge-runner.
	Discouraging use of informal trails that are shown to be causing anyironmental problems.
Coordination: Maintenance of the hiking	shown to be causing environmental problems.
_	Designate a Bureau staff person to organize and facilitate a Grafton and Mahoosuc trail coalition, to
	include a representative from Parks, Lands, MATC,
	ATC, AMC and MLT, to meet at least once annually.
MATC, AMC, and MLT. Greater	Through the coalition: (1) develop periodic trail
	management plans, and work together to implement
<u>-</u>	these plans. (2) prioritize trail upgrades from year to

Issue	Recommendations
resource protection along this trail system.	year, and coordinate in the grant application process. (3) coordinate and improve public information for hikers and share visitor use information.
Hiker Information: Currently there is limited information available for hikers and backpackers about trails in Grafton Notch State Park, and the Mahoosuc Unit, including the Grafton Loop Trail.	 Increase and improve information and service for hikers and backpackers at Grafton Notch State Park and the Mahoosuc Unit. <i>Explore:</i> Designating a summer staff person, ridgerunner or intern to rove the trails and spend time in the Park AT parking lot, giving information to hikers on trail conditions, campsites, etc. Expanding the written information available at the Park AT parking lot including further enhancements to the kiosk, and including a method for hikers to provide information for each other. Printing a new "Map and Guide" which includes Grafton Notch State Park, Mahoosuc Unit and the Grafton Loop Trail. Providing up-to-date information on the Bureau's website on trail conditions, forestry operations, gate status, rules and guidelines, etc. As opportunities arise, participate in larger initiatives (with Mahoosuc Initiative, chambers of commerce, or tourism businesses) to coordinate in information provision. Other methods determined by the Grafton and Mahoosuc Trail Coalition and/or the Parks and Lands staff.
<u>User and trail survey</u> : A systematic evaluation of trail conditions and user experience is needed to more effectively manage trails, especially in fragile alpine areas.	Work with partner organizations to monitor visitor use, experience and trail conditions. Explore options with partners to expand recreation opportunities if needed in order to avoid levels of use that diminish the quality of the recreation experience or jeopardize the fragile alpine communities.
Winter Use Needs: Winter recreational use is occurring in the Park (ice climbing, mountaineering, winter camping). Because there are no Bureau staff on site in the winter, the Bureau has only anecdotal information from user groups about this use. Parking areas are	Gather more information about winter recreation use in the Park. Working with local recreation groups and local officials, develop a communication protocol with the DOT and annually determine appropriate parking areas to be plowed to support winter recreation. Determine if other trail facilities or services are needed to support winter use. Address as

Y	D 1.4°
Issue	Recommendations
plowed by the DOT based on informal communication with Bureau staff and local groups.	resources allow, with partner groups.
Nordic Skiing: Local businesses, outing clubs and schools have expressed an interest in developing the Upper Bull Branch area for groomed Nordic skiing. This area is especially suited to serve as an early winter training area.	Partner with local groups interested in developing the Bull Branch valley for Nordic skiing. Coordinate with groups to designate routes and allow them to groom trails, potentially through a Special Use Permit. After December 1 or the first significant snowfall, whichever is later, manage the Bull Branch Road for non-motorized uses (except Bureau management and grooming for Nordic skiing). This is an opportunity to model how Nordic skiing can work with timber management on Bureau lands.
Regional Nordic trails: There is interest in the larger region of developing a long-distance Nordic ski trail network. Details of this network are not yet developed, but there may be future interest in using the Park and Unit for a portion of this trail system. There has	Currently, there is no specific proposal for locating a groomed Nordic ski trail system other than the general location of the Bull Branch valley. The management road network within timber management areas has been mentioned as suitable in the short-term for this use.
been interest expressed in creating a trail over Miles Notch—in the east end of the Backcountry Non-mechanized allocation, and potentially within the Ecological Reserve.	The resource allocations identified in this plan in the Bull Branch Valley are a blend of ecological reserve, wildlife, backcountry non-mechanized, and timber management. As stated in the recommendation above, the Bureau will be working with local Nordic ski interests to designate routes and allow for trail grooming. The Bureau and Nordic ski groups will have to consider many factors in locating trail—such as up-coming timber operations and terrain. Under the resource allocation system, grooming for Nordic skiing would be easily allowed in the timber dominant allocation, and in the wildlife allocation on existing management roads. If, in the process of designating specific routes for skiing, it is determined that there is a desirable route that extends into the Ecological Reserve or Backcountry Non-mechanized allocations, the Bureau will need to consider whether this is consistent with current policy and statutory guidance. The Ecological Reserve statute and the Bureau's IRP are the guiding documents the Bureau will consult to consider new recreational uses in the Ecological Reserve, and IRP description of the Backcountry Non-mechanized allocation will be consulted for decisions on mechanized grooming in

Issue	Recommendations
	the Backcountry non-mechanized area. Both of these
	documents are available in the Appendix.
Bureau staff limitations: The recreation management issues and recommendations listed above all point to the issue of staffing limitations. Grafton Notch State Park has two seasonal staff who stay very busy maintaining facilities and helping visitors around the popular waterfall viewing areas. The Mahoosuc Unit is served by a forester and seasonal recreation ranger who are divided amongst many other public lands properties. With current staff limitations, the Bureau would be stretched in its ability to implement plan recommendations such as convening a trail coalition, improving hiker	Explore options that could achieve a recreation management system for the Grafton and Mahoosuc lands which is seamless, serves the public well, balances recreational use and ecological protection, and more fully realizes the benefits of the many partnerships which bring energy and capacity to this dynamic recreational area. Explore the feasibility of providing a recreation coordinator to work with the various Bureau staff and management partners to implement the recreation recommendations in this plan. Such a coordinator could also develop and expand the Bureau's partnerships in the region and improve collaboration and coordination with partners. Specifically investigate creating a new permanent
information, lowering environmental impact, monitoring visitor use, and generally providing more collaboration with managing partners and user groups. More broadly, there is a need for increased recreation management capacity on all Bureau lands in this region.	position which could not only serve the Grafton and Mahoosuc area, but the larger Western Maine region. Explore shared funding options for this position, such as a jointly funded position with the Mahoosuc Initiative or local recreation/tourism groups. In the short-term, explore use of a variety of internship programs and grant funding to provide this capacity, recognizing that short-term positions will lack the depth and continuity needed for optimal effect. In the interim, until a new Recreation Coordinator position can be created, designate an existing staff person to fill this role.
Western side trails: The Speck Pond Trail and the Notch Trail originate from private lands to the west of the Mahoosuc Unit and therefore could be closed to public access at the landowner's discretion.	Work with the adjacent landowners to resolve any issues with public use. If the Speck Pond and/or Notch Trail are closed to access by the private landowner, the Bureau will, in consultation with partners, assess whether additional hiking opportunities are needed with in the Park or Unit, and may work with partners to address that need.
Timber Management	
Future Management Guidelines: Timber management guidelines outlined in this Plan reflect current best practices geared to current conditions, which may change	Management of the very limited <i>softwood type</i> acres should maintain significant stocking of softwoods, and encourage softwoods where spruce regeneration is common.

Issue	Recommendations
over time. These recommendations are	
provided to enhance the public's understanding of how the Bureau will manage timber resources on the Mahoosuc Unit. These recommendations are not a "prescription" – only general guidelines.	On <i>mixedwood stands</i> , growing high value hardwoods in mixture with spruce is a desired objective, retaining hemlock for structure and diversity. Some mixedwood stands are located at higher elevations, at the edge of unregulated acres. Here the softwoods might be encouraged more than the hardwoods.
Scenic Protection: Timber management in Mahoosuc must be conscious of scenic concerns from hiking trails, both along the trails themselves, and views from trails along exposed ridgelines. Views from the Grafton Scenic Byway (Route 26) must also be protected.	In hardwood type stands, sugar maple and yellow birch are the key management species, and healthy beech and good quality red maple can also be encouraged, along with any ash. Oak should be favored where it occurs, and oak regeneration should be nurtured. The softwood component, particularly spruce, should be maintained, or increased where spruce is common in the understory. However, conversion to mixedwood or softwood is generally not a priority, except perhaps on the higher/steeper land where hardwoods grow less well. The resource allocations for the Mahoosuc Unit will incorporate a 100 foot no-cut buffer on either side of the Appalachian Trail and all official side trails, and the Grafton Loop Trail. A remote recreation allocation with Visual Class I treatment is the dominant allocation for an additional 400 feet along either side beyond the no-cut buffer (where trails are not already within the Ecological Reserve or Backcountry Non-mechanized allocations). This insures that where forest management occurs close to these trails hikers will not be able to readily discern signs of forest harvesting, and harvesting will be timed to have the least impact on trail users. For timber management areas viewed at a distance from hiking trails, public roads, scenic overlooks, and other recreational features, a Visual Class II
Ecological Values: Because of the ecological values of this Unit, special care is needed when harvesting timber.	reatment will be applied. Prior to harvesting, during preparation of timber harvest prescriptions, consult with the Maine Natural Areas Program whenever harvest will take place in identified examples; communities (allegated)
	identified exemplary communities (allocated wildlife); or in area that was originally proposed by the Forest Biodiversity Project for consideration as an ecological reserve; to ensure that ecological values are maintained.

Mildlife Values: The Bureau has a multiple-use mandate for these lands and must balance and provide recreation, ecological, wildlife, and timber values. Transportation and Administrative Concerns Unauthorized and problematic off road vehicle use occurs on the Southern-most portion of the Mahoosuc Unit. This use is facilitated by the Sunday River Road (which extends into the Mahoosuc Unit west of Twin Bridges and into abutting land to the southwest). Retain the portion of the Sunday River Road (which extends into the Mahoosuc Unit west of Twin Bridges and into abutting land to the southwest). Retain the portion of the Sunday River Road within the Mahoosuc Unit west of Twin Bridges and into abutting land to the southwest). Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. Retian the portion of the Sunday River Road within the Mahoosuc Unit use (including ATV use) for the public. However, do not promote the road as a motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. Retian the portion of the Sunday River Road within the Mahoosuc Unit is prohibited. Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. Retian the portion of the Sunday River Road when active management is not occurring.	Issue	Recommendations
multiple-use mandate for these lands and must balance and provide recreation, ecological, wildlife, and timber values. A babitat protection, including riparian zones and deer wintering areas, among others (see Appendix C for a more detailed description). Wildlife values are always dominant over timber values and recreation values. In addition, the Bureau has Wildlife Management Guidelines that indicate wildlife features that should be maintained in Timber dominant areas, and guide management of special habitats allocated Wildlife Dominant. These guidelines are in addition to guidance provided in the Bureau's Integrated Resource Policy document. Transportation and Administrative Concerns Unauthorized and problematic off road vehicle use occurs on the southern-most portion of the Mahoosuc Unit. This use is facilitated by the Sunday River Road (which extends into the Mahoosuc Unit was a gravel surfaced forest management road with "shared use" status. This will continue its use for Bureau timber management, and allow vehicular use (including ATV use) for the public. However, do not promote the road as a motorized trail destination. Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW		
must balance and provide recreation, ecological, wildlife, and timber values. wintering areas, among others (see Appendix C for a more detailed description). Wildlife values are always dominant over timber values and recreation values. In addition, the Bureau has Wildlife Management Guidelines that indicate wildlife features that should be maintained in Timber dominant areas, and guide management of special habitats allocated Wildlife Dominant. These guidelines are in addition to guidance provided in the Bureau's Integrated Resource Policy document. Transportation and Administrative Concerns Unauthorized and problematic off road vehicle use occurs on the southern-most portion of the Mahoosuc Unit. This use is facilitated by the Sunday River Road (which extends into the Mahoosuc Unit was a gravel surfaced forest management road with "shared use" status. This will continue its use for Bureau timber management, and allow vehicular use (including ATV use) for the public. However, do not promote the road as a motorized trail destination. Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW	<u> </u>	_
more detailed description). Wildlife values are always dominant over timber values and recreation values. In addition, the Bureau has Wildlife Management Guidelines that indicate wildlife features that should be maintained in Timber dominant areas, and guide management of special habitats allocated Wildlife Dominant. These guidelines are in addition to guidance provided in the Bureau's Integrated Resource Policy document. Transportation and Administrative Concerns Unauthorized and problematic off road vehicle use occurs on the southern-most portion of the Mahoosuc Unit. This use is facilitated by the Sunday River Road (which extends into the Mahoosuc Unit west of Twin Bridges and into abutting land to the southwest). Retain the portion of the Sunday River Road within the Mahoosuc Unit as a gravel surfaced forest management road use' status. This will continue its use for Bureau timber management, and allow vehicular use (including ATV use) for the public. However, do not promote the road as a motorized trail destination. Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW		
always dominant over timber values and recreation values. In addition, the Bureau has Wildlife Management Guidelines that indicate wildlife features that should be maintained in Timber dominant areas, and guide management of special habitats allocated Wildlife Dominant. These guidelines are in addition to guidance provided in the Bureau's Integrated Resource Policy document. Transportation and Administrative Concerns Unauthorized and problematic off road vehicle use occurs on the southern-most portion of the Mahoosuc Unit. This use is facilitated by the Sunday River Road (which extends into the Mahoosuc Unit west of Twin Bridges and into abutting land to the southwest). Retain the portion of the Sunday River Road within the Mahoosuc Unit as a gravel surfaced forest management road with "shared use" status. This will continue its use for Bureau timber management, and allow vehicular use (including ATV use) for the public. However, do not promote the road as a motorized trail destination. Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW	*	
values. In addition, the Bureau has Wildlife Management Guidelines that indicate wildlife features that should be maintained in Timber dominant areas, and guide management of special habitats allocated Wildlife Dominant. These guidelines are in addition to guidance provided in the Bureau's Integrated Resource Policy document. Transportation and Administrative Concerns Unauthorized and problematic off road vehicle use occurs on the southern-most portion of the Mahoosuc Unit. This use is facilitated by the Sunday River Road (which extends into the Mahoosuc Unit west of Twin Bridges and into abutting land to the southwest). Retain the portion of the Sunday River Road within the Mahoosuc Unit as a gravel surfaced forest management road with "shared use" status. This will continue its use for Bureau timber management, and allow vehicular use (including ATV use) for the public. However, do not promote the road as a motorized trail destination. Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW	Coologicus, Wilding, and time of Values.	
Management Guidelines that indicate wildlife features that should be maintained in Timber dominant areas, and guide management of special habitats allocated Wildlife Dominant. These guidelines are in addition to guidance provided in the Bureau's Integrated Resource Policy document. Transportation and Administrative Concerns Unauthorized and problematic off road vehicle use occurs on the southern-most portion of the Mahoosuc Unit. This use is facilitated by the Sunday River Road (which extends into the Mahoosuc Unit as a gravel surfaced forest management road with "shared use" status. This will continue its use for Bureau timber management, and allow vehicular use (including ATV use) for the public. However, do not promote the road as a motorized trail destination. Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW		T
features that should be maintained in Timber dominant areas, and guide management of special habitats allocated Wildlife Dominant. These guidelines are in addition to guidance provided in the Bureau's Integrated Resource Policy document. Retain the portion of the Sunday River Road within the Mahoosuc Unit. This use is facilitated by the Sunday River Road (which extends into the Mahoosuc Unit west of Twin Bridges and into abutting land to the southwest). Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW		
habitats allocated Wildlife Dominant. These guidelines are in addition to guidance provided in the Bureau's Integrated Resource Policy document. Transportation and Administrative Concerns Unauthorized and problematic off road vehicle use occurs on the southern-most portion of the Mahoosuc Unit. This use is facilitated by the Sunday River Road (which extends into the Mahoosuc Unit west of Twin Bridges and into abutting land to the southwest). Retain the portion of the Sunday River Road within the Mahoosuc Unit as a gravel surfaced forest management road with "shared use" status. This will continue its use for Bureau timber management, and allow vehicular use (including ATV use) for the public. However, do not promote the road as a motorized trail destination. Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW		
Transportation and Administrative Concerns Unauthorized and problematic off road vehicle use occurs on the southern-most portion of the Mahoosuc Unit. This use is facilitated by the Sunday River Road (which extends into the Mahoosuc Unit west of Twin Bridges and into abutting land to the southwest). Retain the portion of the Sunday River Road within the Mahoosuc Unit was for Twin Bridges and into abutting land to the southwest). Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW		dominant areas, and guide management of special
Transportation and Administrative Concerns Unauthorized and problematic off road vehicle use occurs on the southern-most portion of the Mahoosuc Unit. This use is facilitated by the Sunday River Road (which extends into the Mahoosuc Unit west of Twin Bridges and into abutting land to the southwest). Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW		habitats allocated Wildlife Dominant. These
Unauthorized and problematic off road vehicle use occurs on the southern-most portion of the Mahoosuc Unit. This use is facilitated by the Sunday River Road (which extends into the Mahoosuc Unit west of Twin Bridges and into abutting land to the southwest). Retain the portion of the Sunday River Road within the Mahoosuc Unit as a gravel surfaced forest management road with "shared use" status. This will continue its use for Bureau timber management, and allow vehicular use (including ATV use) for the public. However, do not promote the road as a motorized trail destination. Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW		guidelines are in addition to guidance provided in the
Unauthorized and problematic off road vehicle use occurs on the southern-most portion of the Mahoosuc Unit. This use is facilitated by the Sunday River Road (which extends into the Mahoosuc Unit west of Twin Bridges and into abutting land to the southwest). Retain the portion of the Sunday River Road within the Mahoosuc Unit as a gravel surfaced forest management road with "shared use" status. This will continue its use for Bureau timber management, and allow vehicular use (including ATV use) for the public. However, do not promote the road as a motorized trail destination. Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW		Bureau's Integrated Resource Policy document.
Unauthorized and problematic off road vehicle use occurs on the southern-most portion of the Mahoosuc Unit. This use is facilitated by the Sunday River Road (which extends into the Mahoosuc Unit west of Twin Bridges and into abutting land to the southwest). Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. Retain the portion of the Sunday River Road within the Mahoosuc Unit as a gravel surfaced forest management road with "shared use" status. This will continue its use for Bureau timber management, and allow vehicular use (including ATV use) for the public. However, do not promote the road as a motorized trail destination. Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. Retain the portion of the Sunday River Road with "shared use" status. This will continue its use for Bureau timber management, and allow vehicular use (including ATV use) for the public. However, do not promote the road as a motorized travel is authorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: Example 1	_	
vehicle use occurs on the southern-most portion of the Mahoosuc Unit. This use is facilitated by the Sunday River Road (which extends into the Mahoosuc Unit west of Twin Bridges and into abutting land to the southwest). Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. It of other methods fail, work with MDIFW		
management road with "shared use" status. This will continue its use for Bureau timber management, and allow vehicular use (including ATV use) for the public. However, do not promote the road as a motorized trail destination. Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW	<u> </u>	<u> </u>
continue its use for Bureau timber management, and allow vehicular use (including ATV use) for the public. However, do not promote the road as a motorized trail destination. Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW		
(which extends into the Mahoosuc Unit west of Twin Bridges and into abutting land to the southwest). Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW	-	
west of Twin Bridges and into abutting land to the southwest). Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW	· · · · · · · · · · · · · · · · · · ·	_
land to the southwest). Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW	`	
Work to eliminate the unauthorized vehicular use that leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW		<u> </u>
leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW	land to the southwest).	motorized trair destination.
leaves this road and travels into the less improved timber management roads and skid trails on the Unit. Methods could include: • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW		Work to eliminate the unauthorized vehicular use that
timber management roads and skid trails on the Unit. Methods could include: • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW		
 • Use additional signage as needed to clarify that while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. • Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW 		±
while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. If other methods fail, work with MDIFW		
while motorized travel is authorized on the Sunday River Road, travel off this road into other parts of the Mahoosuc Unit is prohibited. Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. If other methods fail, work with MDIFW		 Use additional signage as needed to clarify that
 other parts of the Mahoosuc Unit is prohibited. Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. If other methods fail, work with MDIFW 		
 Retire and/or block the less improved Bureau timber management roads leaving the Sunday River Road when active management is not occurring. Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. If other methods fail, work with MDIFW 		Sunday River Road, travel off this road into
timber management roads leaving the Sunday River Road when active management is not occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW		other parts of the Mahoosuc Unit is prohibited.
River Road when active management is not occurring. Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. If other methods fail, work with MDIFW		•
occurring. • Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW		
 Reach out to clubs, abutting landowners and organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. If other methods fail, work with MDIFW 		
organizers of ORV events to gain their cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW		
cooperation in eliminating the unauthorized ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW		
ORV use in the Mahoosuc Unit. • If other methods fail, work with MDIFW		
• If other methods fail, work with MDIFW		_
wardens to establish an enforcement presence to deter this use.		

Rangeley Lake State Park

Character of the Park



Rangeley Lake State Park is situated on the southern shore of Rangeley Lake—a lake renowned for fishing and other recreational opportunities and scenic beauty. The park is located partly in the town of Rangeley, and partly in Rangeley Plantation—it is easily accessible from South Shore Road, which connects Routes 17 and 4. The Park offers camping, boating and fishing access, hiking, picnicking and swimming, all within a scenic remote setting. The Park is a destination in itself, and also provides opportunities that complement other recreation offerings the Rangeley Lakes region, a popular tourist and recreational destination.

The Park is most renowned for its campground, beach and boat access site. The campground contains 50 well-spaced campsites and campers can easily walk or drive to the beach and picnic area, located in a somewhat secluded cove, for swimming and picnicking. Day use visitors as well as campers can use the boat access area which includes a trailered ramp and docks with slips for tying boats. Additionally, visitors to lodging establishments in the region can use the Park's beach and boat access site. The Park is notable because it feels somewhat remote, however, it is easily accessible and located a short drive from the downtown center of Rangeley, where dining, shopping and other recreational amenities are available. It is also adjacent to other conservation properties owned by the Bureau and Rangeley Lakes Heritage Trust.

Acquisition History

Rangeley Lake State Park consists of almost 900 acres along the southern shoreline of Rangeley Lake. In 1960, three acquisitions by the Bureau created the Park—which at that time consisted of 718 acres. Since then, multiple smaller Bureau acquisitions have added to the Park acreage, including the most recent addition of 29 acres which occurred in 2009. The current configuration of the Park now includes a contiguous block of forest and shoreline. Shoreline extends for approximately one and a half miles.

Natural Resources

No comprehensive natural resource inventory has been performed. IFW has identified a Deer Wintering Area and Inland Wading Bird and Waterfowl Habitat on the western portion of the Park. Both of these features extend into the Rangeley Lakes Heritage Trust South Bog Property. An active bald eagle nest is located on the 2009 acquisition near South Bog. Further development of this Park should be informed by additional natural resource inventory and analysis.

Recreation and Visual Resources

Rangeley Lake State Park offers a variety of recreational experiences, which are generally clustered in a core area accessible from State Park Road.

Camping

The Rangeley Lake State Park campground is within a heavily forested area. There are fifty single campsites, all located along a one way loop road. These sites are well-spaced and somewhat visually buffered from one another. Forty sites can be reserved, and ten sites are non-reservable, kept available on a first come, first served basis. Several campsites and a restroom are handicapped accessible. Two group campsites are also available—one close to the beach and the other near a ball field.

Boating and Fishing

A boat access site is available to both campers and day use visitors. Docks with slips are available for campers to secure their boats while staying in the park. A trailered ramp is available for campers and day use visitors. Many use this site for launching boats for fishing access—Rangeley Lake is renowned for its populations of landlocked salmon and trout.

Swimming and picnicking

There is a swimming beach available for campers and day use visitors—with a grassy area and steps leading into the water. Picnic spots are situated in a forested area just above the swimming beach, and parking is available. A short hiking trail connects the campground with the beach.

Other amenities

A ball field is available on the west side of the park, accessible from the State Park Road, with its own parking area. This is in close proximity one of the group campsites. There is a small field and playground with views of the lake in close proximity to the campground.

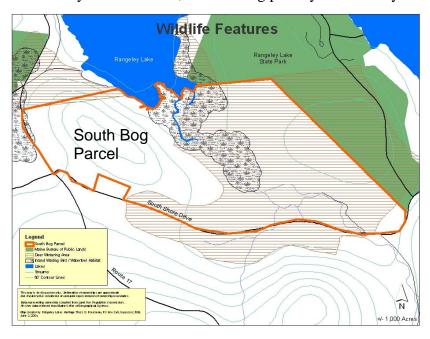
Recreation Resources Issues and Opportunities

Several opportunities exist in the Park that would enhance the visitor experience:

- Add new campsites and add hook-ups to some of the campsites.
- Revitalize the playground area with a new playground and other amenities.
- Develop opportunities at the ball park, which is now currently an empty field.
- Add rustic cabins to the Park available for short term rent by the public.

The challenge becomes how to maintain the character of the Park as a remote, forested camping experience with access to a sparsely developed shoreline, while carefully choosing new amenities which enhance the visitor experience.

The opportunity also has been extended from Rangeley Lakes Heritage Trust to develop a trail that would connect the Park to the South Bog Property. To pursue this proposal, the Bureau would first need to assess whether Park visitors would likely use the trail, and if so, what sort of trail would be desireable. Other factors to be considered include siting the trail to avoid adverse impacts to the nearby IF&W designated Inland Wading Bird and Waterfowl habitat; how connecting the Park with the RLHT South Bog property would affect controlling access to the Park and the ability to collect fees; and insuring privacy and security for campers.



Vision for Rangeley Lake State Park

Management of the Park seeks to develop opportunities that add value to the visitors' experience, while consciously balancing this development with protecting the remote forested camping, swimming, boating and fishing experience. The Park cooperates and collaborates with area partners to provide high quality recreational opportunities and facilities that expand and enrich recreational options for visitors.

Rangeley Lake State Park Issues and Management Recommendations

Issue	Recommendations
Natural Resource Management	
A natural resource inventory has not been performed at Rangeley Lake State Park (NRIs are prioritized on public lands where timber management is performed).	When new facilities (including trails) are planned, use staff and MNAP specialists to perform an inventory of the general site, to locate the facility in an area where natural features will be the least impacted.
Recreation Management	
It is challenging to balance the addition of new visitor amenities with the retention of the remote experience of camping in a forested setting and enjoying the Park's sparsely developed shoreline.	Design new visitor amenity development to blend harmoniously with the remote and scenic character of the Park. Currently, developed areas of the Park (campground, boat access area, etc) are clustered in a core area accessible from State Park Road, yet screened from one another, so the atmosphere of a remote, natural setting is maintained at each site. Follow this well-planned tradition.
There is interest in developing a hiking/walking trail network from the developed recreation core of the Park, into the more remote areas. Rangeley Lakes Heritage Trust has expressed to the Bureau an interest in connecting South Bog property trails with the Park.	Explore the demand for and feasibility of building a hiking trail system from the Park connecting to the RLHT trails on the South Bog property. Consider: (1) the extent and nature of user-demand for such a trail; (2) whether the trail can be sited to avoid environmentally sensitive areas, and (3) if administrative concerns can be addressed, including ability to provide privacy and security to campers, and maintaining the integrity of the fee-collection system. If demand can be demonstrated, and environmental and administrative concerns can be addressed, pursue funding and work cooperatively with RLHT to construct the trail.

Bald Mountain Unit



Bald Mountain(photo center) as viewed from Route 4 Scenic Overlook, across Rangeley Lake

Character of the Landbase

The 1,850 acre Bald Mountain Unit is located near the village of Oquossoc in the town of Rangeley. It stands prominently between Mooselookmeguntic and Rangeley Lakes and is surrounded by roads (Route 17, Route 4, Bald Mountain Rd and Bemis Rd). The Unit is a recreational, scenic and economic asset in the Rangeley Lakes region—a region renowned for outdoor recreation based tourism. Scenic Bald Mountain, the Unit's namesake, is a majestic landscape feature in the Rangeley Lakes region, prominent in the view from Mooselookmeguntic, Cupsuptic and Rangeley Lakes as well as from scenic overlooks on Routes 4 and 17 and many other points. Bald Mountain is conical in shape and rises to an elevation of 2, 443 feet. A popular hiking trail leads to the peak, where natural rock outcroppings and an observation tower allow spectacular views of the region. The excellent hiking, snowmobiling and hunting opportunities on Bald Mountain are popular recreational assets to the local community and tourism economy. In addition to its outstanding scenic and recreational values,

the Bald Mountain Unit is managed for timber production, conducted with utmost care for visual considerations.

Acquisition History

The Bureau purchased the Bald Mountain property from Rangeley Lakes Heritage Trust (RLHT) using Land for Maine's Future (LMF) funds in 1994. RLHT had purchased the property in 1992 from International Paper Reality with the intention of seeking LMF funding in partnership with the Bureau to transfer Bald Mountain to the Bureau. Covenants in the deed agreed to by RLHT and the Bureau guide management toward dispersed outdoor recreation, sensitive forest management and protection of views of the mountain from surrounding lakes.

Natural Resources

(Maine Natural Areas Program, 2010)

Geology and Soils

Bald Mountain is a conical shaped mountain rising abruptly from land between Mooselookmeguntic Lake and Rangeley Lake. Elevation begins at approximately 1,500 feet and ends at 2,443 feet at the summit. Slopes are gentler near the base, but rise steeply near the summit, where there are several large granite outcrops. Bedrock geology consists of acidic granite around the summit, and acidic sedimentary/metasedimentary rock at lower elevations. Soils are dry and acid, with soils at lower elevations well-drained and fertile in many areas.

Hydrology and Wetlands

Wetlands exist on the southernmost portion of the Bald Mountain Unit, where the terrain is much flatter close to Rangeley Lake. Both forested and open wetlands are present. Some of the wetlands are characterized as Shrub Swamp and are dominated by sweet gale and alder.

Rare plant and animal species

No rare plants or animals have been documented.

Natural Communities

Much of the Bald Mountain Unit at lower and middle elevations is Northern Hardwood Forest and Spruce Fir Northern Hardwood Forest. Much of the hardwood area has a history of forest harvest, still containing a range of age and size classes. Some areas were clearcut by the previous landowner, and are now hardwood sapling stands.

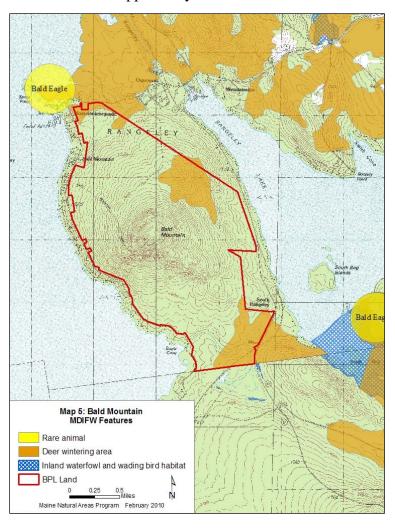
The summit of Bald Mountain is covered by a Spruce-Pine Woodland Natural Community of approximately 200 acres. Short, scrubby red spruce dominates, with balsam fir and heart-leaved paper birch also present. Low-bush blueberry, cushion moss, and lichens are also present. It is an old forest with little evidence showing previous harvest. Trees are older—samples taken show ages of red spruce ranging from 55 to 140 years. However, diameters are relatively small (dbh ranging from 5 inches to 14 inches from the same samples). Contained within the Spruce-Pine Woodland Natural Community, there is a small (about a quarter of an acre) Dwarf Shrub Bog formed in a depression in the rock outcrop. Fir, sphagnum and heath plants are the major components. Although this bog is near the summit of the mountain, it lacks the plant species indicative of true alpine bogs.

A Spruce Slope Forest is present below the summit, growing on thin soils over bedrock. This forest is mixed age as it has blowdowns and some previous harvest of larger spruce. *Fisheries and Wildlife*

Deer wintering areas occur on the southern border of the Unit (extending into adjacent land), on the northeastern portion of the Unit, and on the northern border. The deer wintering area on the northern portion of the Unit near Route 4 is part of an extensive network of deer habitat to the north. Deer use is heavy year-round on the Unit, with deer browsing the young hardwoods. A long establish feeding program in Oquossoc helps contribute to the deer population on the northern portion of the Unit.

Natural Resource Management Issues

• Deer populations are unusually high on the Bald Mountain Unit, due to nearby deer feeding program, resulting in the high need for deer wintering cover regionally, and causing heavy browsing of young hardwoods that are desirable timber management species on the Unit. Opportunity exists to coordinate deer habitat management with



adjacent landowners particularly RLHT and Rangeley Lake State Park.

Recreation and Visual Resources

Non-motorized uses

A popular hiking trail to the summit preexisted Bureau ownership, and this trail was a major motivation for RLHT and others who partnered with the Bureau to preserve the property. A parking area is available off of the Bald Mountain Road on the west side of Bald Mountain. The hike is a short moderate hike of 1.4 miles, and locals as well as tourists, including families with children enjoy hiking to a stunning 360 degree view from the observation tower at the summit. Snowshoeing is also prevalent on the trail. Local tourism businesses and information centers often refer tourists to this trail.



View from Lookout Tower, Bald Mountain, looking west.

A longer trail to the summit originates from a parking area at the Haines Landing boat ramp funded by the Bureau's Boating Facilities Division. The hiking trail is somewhat less popular, as it is not as well-known and is a longer hike to the summit.

Motorized uses

A snowmobile trail—ITS 84—traverses the Unit on the east side. ITS 84 is a corridor trail that travels all the way from the New Hampshire border in Lynchtown TWP, ME to the New Brunswick border in Calais, ME. The portion that traverses the Bald Mountain Unit is used as part of many shorter loop trails in the Rangeley region that give great views of Rangeley Lake. The snowmobile trail network in the Rangeley region is very popular, and an important contributor of the economy. The trail portion on the Bald Mountain Unit is a vital link in this network.

Hunting

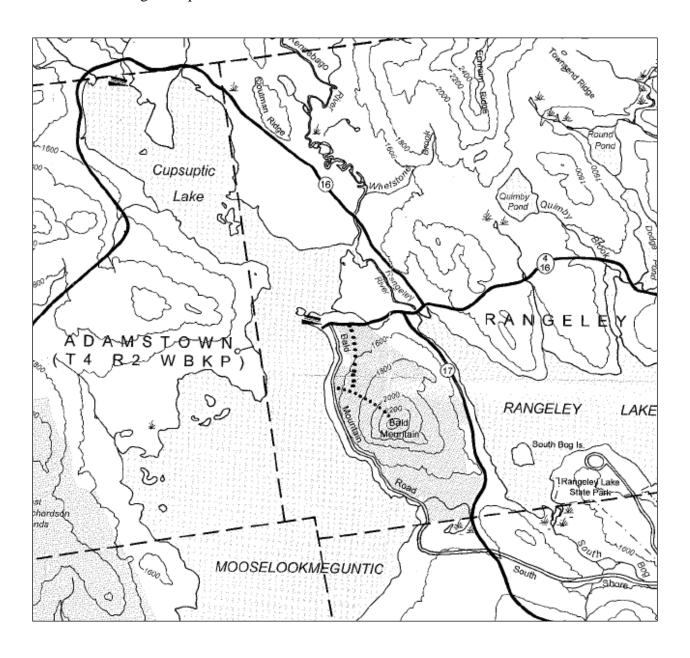
Bald Mountain Unit is used for upland bird, deer and bear hunting. There are two bear baiting sites on the Unit. Hunting is a popular tradition in the Rangeley Lakes region and many local guides use the Unit to provide clients with hunting opportunities.

Visual resources

Bald Mountain is a central landform viewable from formal scenic overlooks in the town of Rangeley located on Route 4 and Rangeley Plantation on Route 17, as well as from Rangeley Lake State Park. Rising between two large lakes, it contributes to the stunning scenery of the region. From the Bald Mountain summit observation tower, hikers can view an impressive landscape including Mooselookmeguntic and Richardson Lake, and across to the White Mountains in New Hampshire. Its scenic value was a major motivator for conservation of the property, acquired using Land for Maine's Future funds.

Recreation and Visual Resource Issues

• The Bald Mountain Trail starting from the parking area on Bald Mountain Road is extremely popular for tourists and locals, including some inexperienced hikers. While the trail is challenging in some places, families with small children and also some elderly visitors use the trail because of its short distance and spectacular view. This is a challenge, as a greater level of maintenance is needed to accommodate the high level of use and higher expectations of users.



Timber Resources

Harvest History

Prior to Bureau ownership, the previous landowner conducted significant timber harvesting up through the early 1990's. There was a large clearcut in the 1980's on the southwest side of the Unit and two smaller clearcuts on the northern portion. For the most part, however, past cutting by the previous landowner was of moderate intensity. The Bureau performed a significant harvest on 700 acres of the Bald Mountain Unit in 2002-5, covering nearly half of the acres regulated for timber harvesting on the Unit. The decision to cover this area in a single harvest was made partly due to the heavy deer browsing of desirable hardwoods. By encouraging regeneration on many hundreds of acres over a short period of time, enough could potentially survive the browsing to establish a new age class with good proportion of sugar maple, yellow birch, and white ash (preferred deer browse species). This harvest produced 7,500 cords, 94 percent hardwoods and nearly 80 percent hardwood pulp.

Current Conditions

Soils on the regulated acres are mainly deep, well drained and fertile. These are the more gently sloped areas away from the steeply sloped summit. The south end of the Unit contains some flatter areas with somewhat poorly drained soils. The Bureau's regulated acres contain 64 percent hardwood type, 35 percent mixedwood type and 1 percent softwood. Mixedwood type is very similar to hardwood type with a higher spruce-fir component. Therefore, the regulated acres are almost predominately hardwoods. Almost 10 percent are dominated by aspen. Another 22 percent are the former clearcuts which are now sapling stands heavy to aspen, birch and Northern hardwoods, with considerable pin-cherry and pockets of spruce-fir. The remaining 70 percent of regulated acres are Northern hardwood forest or Northern hardwood spruce fir forest.

The average volume across Bald Mountain Unit regulated acres is 22 cords per acre. If former clearcuts (which are now sapling stands) were excluded, the average would be about 28 cords per acre. Composition of species outside the sapling stands is: 37 percent sugar maple, 20 percent spruce, 20 percent yellow birch, 8 percent red maple, 5 percent white birch, and 5 percent aspen.

Timber Management Issues

- Timber management on Bald Mountain is challenging due to its visual prominence from many surrounding viewpoints.
- Another timber management challenge is balancing the need to provide wintering cover and browse for the unusually high deer population with other timber management goals.

Transportation and Administrative Considerations

The Bald Mountain Unit is surrounded by public roads: Route 17 on the east, Route 4 to the north, Bald Mountain Road to the west, and the Bemis Road to the south. However, no public use roads exist inside the Unit and none are planned.

Rangeley Region Skeet and Trap Association has a lease to operate a skeet and trap range in the eastern portion of the Unit. This is accessible by a management road—known as the Skiway Road. The Association has the right to perform maintenance on this road.

A wireless communications company has a lease on a two acre parcel, near the summit of Bald Mountain, for the operation of a telecommunications tower, antennas, and associated facilities. The tower is accessible from the Skiway Road up to a gate, then by an access trail to be used by foot (or by snowmobile or ATV by leaseholders only) to provide for maintenance.

The Skiway Road is designated by the Bureau as a service road, closed to the public. It is open for Bureau management needs and for the two leaseholders to perform their operations.

The deed for the Bald Mountain Unit contains some specifications and restrictions that influence management. Specifically, public outdoor recreation is limited to "non-motorized primitive, dispersed outdoor recreation, hunting, and snowmobiling on designated trails." Additionally, views from Cupsuptic, Mooselookmeguntic and Rangeley Lakes must be protected by assuring that any structures, roads, towers or platforms do not significantly detract from the scenic and natural features of the property as viewed from the lakes.

Transportation and Administrative Issues

- It is the Bureau's desire, and the deed to the Bald Mountain property specifies, that the telecommunications tower be as visually unobtrusive as possible. This is challenging due to the proximity of the tower to the summit and observation deck, and the wireless company's periodic requests to expand capacity.
- Some unauthorized motorized use in the Unit occurs via the Skiway Road, which is a service road intended only for use by the Bureau staff and leaseholders.



View of the Communications Tower on Bald Mountain from the hiking trail near summit

Vision for the Bald Mountain Unit

The Bald Mountain Unit is an outstanding example of Bureau multiple use management. Bureau management protects the wildlife, recreational, and scenic values of the mountain while providing high value timber products. Because of its visual prominence and scenic importance, the Bureau's timber and wildlife management are conducted in a way that maintains the appearance of an unmanaged forest.

The Bald Mountain Unit provides high quality hiking, hunting and snowmobiling opportunities that benefit the residents and visitors of the Rangeley Lakes region. Partnerships with local hiking and snowmobile clubs enhance the recreational experience and bring local involvement on the Unit. The hiking trails are designed to accommodate high use and inexperienced hikers and trailheads are informational and easy to locate. The hiking and snowmobile trails provide a forested, natural experience, and include vistas that give recreationists a sense of the vastness of the lakes, forests and mountains that make the region so unique.



Bald Mountain Unit Allocations

The following "allocations" define general management objectives and direction for specific areas within the Bald Mountain Unit. See Appendix C for a description of designation criteria and management direction for the various allocation categories. The allocation map is located in Appendix F.

Wildlife

- Deer wintering areas are designated wildlife dominant. There are three deer wintering areas on the Unit—one adjacent to the northern border of the Unit, one on the eastern border, and one on the southern border. All three deer wintering areas extend into adjacent private land.
- The wildlife allocation on the southern boundary of the Unit also contains open wetlands and a small stream.

Visual

- Visual Class I standards will apply to the immediate area adjacent to the hiking trails to the Bald Mountain summit—both the trail originating from Bald Mountain Road and the trail starting at Route 4 as well as to periphery of the trailhead areas and areas along public roads bordering the Unit (Route 17, Route 4, Bald Mountain Road, Bemis Road).
- Visual Class II standards will apply to the entire Unit.

Developed Recreation

- The snowmobile trail—ITS 84—will be designated Developed Recreation Class I as the dominant allocation.
- The parking area for the Bald Mountain Trail off the Bald Mountain Road will be designated Developed Recreation Class I as the dominant allocation.

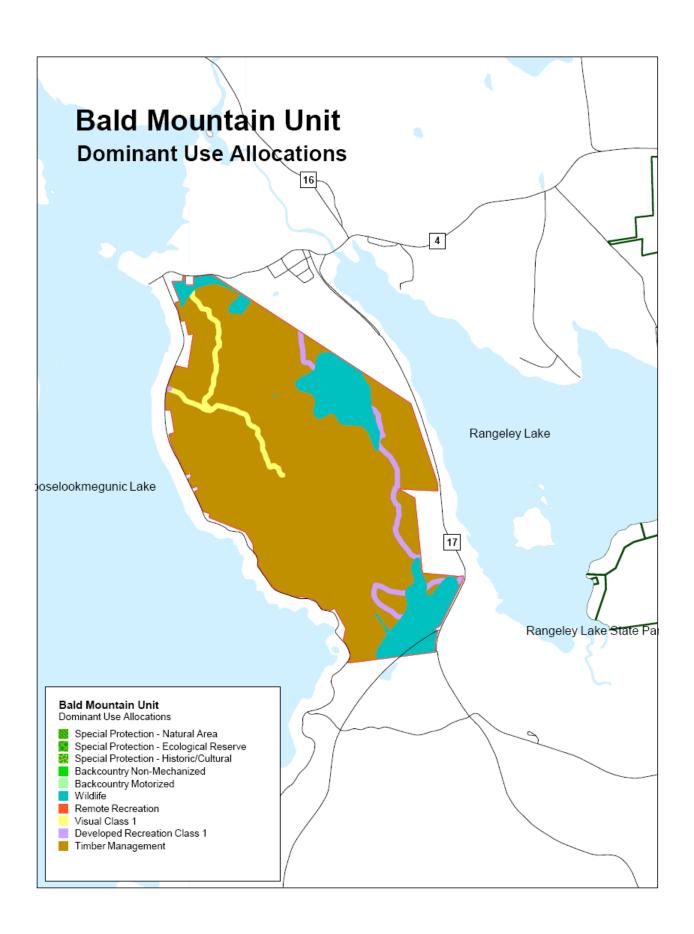
Timber Management

- All areas not designated Wildlife or Developed Recreation dominant will be allocated as timber dominant.
- Timber dominant areas also allow recreation; however, by deed, this is limited to dispersed recreation, excluding motorized recreation except for snowmobiling.

Bald Mountain Unit Resource Allocations Summary

Dominant Allocation	Number of Acres**
Wildlife	265
Developed Recreation Class I	50
Timber Management	1535

^{**}Approximate—actual acres will be determined in the field



Bald Mountain Unit Management Issues and Recommendations

While allocations define the general management direction, management recommendations define specific actions to be taken during the course of the 15 year Plan period in response to identified management issues.

Issue	Recommendations
Natural Resource Management	
High wintering deer populations have resulted from a local feeding program. This has resulted in heavy browsing of young hardwoods on the Unit, as well as the need to provide more deer wintering cover.	Manage for deer wintering cover in the northern portion of the Unit on suitable sites, including areas zoned as deer wintering areas. Coordinate management of deer wintering area on the south portion of the Unit with RLHT (owners of the South Bog property) wherever possible. Continue to utilize silvicultural techniques that account for high deer populations, such as those described in the timber management section above, where appropriate.
Recreation Management	
A high level of maintenance and upkeep are needed on the shorter Bald Mountain Trail. This trail is hiked by people with a range of abilities, from young children to senior citizens. It is also a very popular hike, used by locals and also promoted by the nearby tourism businesses. At times the Bald Mountain Road parking area is full and hikers park along the road.	Upgrade the Bald Mountain Trail to accommodate a wider range of users (though not to a level that is fully ADA accessible). This more accommodating trail type is not typical on Public Reserved Lands, where hiking trails are typically primitive in nature. It is appropriate here to increase the trail's level of accommodation due to the trail's heavy use, short length, and its easily accessible location in an organized town with a thriving recreational tourism industry.
	Partner with volunteers from the Trails of the Rangeley Area Coalition (TRAC) to perform basic upkeep of both the trail from the Bald Mountain Road parking area, and the longer trail from the Route 4 parking area. Place signs at the Bald Mountain Road parking area directing people to the Route 4 parking area and trail when the former lot is full.
Timber Management	
Visual Concerns: Timber management	Continue to perform timber management with the

Issue	Recommendations
on Bald Mountain is challenging due to	utmost consideration for visual concerns. Apply
its visual prominence from many	Visual Class II standards on all Timber Dominant
surrounding viewpoints. In recent years	acres and Visual Class I along hiking trails, public
the Bureau has demonstrated timber	roads, trailheads and parking areas.
management on Bald Mountain that has	
protected views of this scenic asset.	
Timber management guidelines outlined	Manage the Bald Mountain Unit to continue to grow
in this Plan reflect current best practices	fine quality hardwoods and spruce.
geared to current conditions, which may	
change over time. These	Increase the proportion of softwoods where
recommendations are provided to	conditions warrant in the northern half of the Unit to
enhance the public's understanding of	provide for deer use.
how the Bureau will manage timber	
resources on the Bald Mountain Unit.	Perform improvement harvesting on the previous
These recommendations are not a	landowner's clearcuts as soon as economic
"prescription" – only general guidelines.	conditions allow.
Transportation and Administration	
Keeping the telecommunications tower	Continue to require provisions in any lease
as visually unobtrusive as possible is	amendments to protect the views of Bald Mountain
challenging due to the proximity of the	and from the Bald Mountain summit, and make the
tower to the summit and observation	tower as visually unobtrusive as possible. This
deck, and the wireless company's	includes a height limit, among other considerations.
periodic requests to expand capacity.	
The Skiway Road on the eastern side of	Use signage to clarify that public motorized use is not
the Unit is a service road, open to	authorized on this road. Communicate with
Bureau staff and leaseholders. At times,	leaseholders to delineate their access routes. If
it is used to gain unauthorized public	necessary, block side trails off the Skiway Road not
motorized access into the Unit. Not	needed by lessees or Bureau staff, and enlist
much is known about this sporadic use.	enforcement help from MDIF&W for unauthorized
	ATV use.

Four Ponds Unit



Sabbath Day Pond from the Appalachian Trail

Character of the Landbase

The Four Ponds Unit is 6,018 acres located between Routes 17 and 4 south of Rangeley and Oquossoc. It is accessed most commonly via the Appalachian Trail off Route 17 (just east and north of the Height of Land scenic overlook on Route 17—the Rangeley Lakes National Scenic Byway). The Unit is best known for its remote and scenic high elevation ponds. The Appalachian Trail runs through the length of the Unit, with a shelter and camping area on Sabbath Day Pond (3.7 miles from Route 17) and near Little Swift River Pond (8.3 miles from Route 17). Elevation on the Unit ranges from 1740 feet to over 2900 feet. The Unit encompasses the entire shorelines of three ponds (Long Pond, Sabbath Day Pond, Little Swift River Pond) and significant shorelines of three others (Swift River Pond, Beaver Mountain Pond, Moxie Pond, and Round Pond). The Ponds offer a remote, walk in fishing opportunity. Approximately thirty camp leases are scattered around lakeshores of the Unit, with most of them on Long Pond. The snowmobile trail ITS 117 runs north to south through the Unit, one of the few snowmobile crossings of the Appalachian Trail in the region, providing connectivity between Rangeley region trails and trails to the south.

Acquisition History

The Four Ponds Unit began as original public lots in Rangeley Plantation, Sandy River Plantation, and Townships D and E. Eventually the original public lots in Townships D and E were traded out. In 1977-8, 150 acres in Township D (around Long and Moxie Ponds) were acquired from Brown Company and 3,225 acres in Township E were acquired from International Paper. The current configuration of the Four Ponds Unit has been in place since 1978.

Natural Resources

(Maine Natural Areas Program, 2010)

Geology and Soils

The bedrock that underlies Four Ponds consists of sandstones and mudstones deposited during the Silurian period, 443 to 417 million years ago. At that time, an ancestral ocean basin was closing, and mountains were shedding large amounts of sediment into the ocean. These sediments were then subjected to pressure and heat and uplifted to form the Rangeley Formation, Perry Formation, and Greenville Cove Formation, depending on the various types of sediments (Maine Geologic Survey 1995). The surficial geology is dominated by 'thin drift' (till that is less than ten feet deep over bedrock). Soils are comparatively poorly developed and infertile soils typical of deep, dense till areas in northern and western Maine.

Hydrology and Wetlands

The Four Ponds Unit encompasses parts or all of the shorelines of six ponds or lakes. All lie within the Richardson Lakes watershed, except Swift River Pond and Little Swift River Pond, which drain south to the Androscoggin. Bureau land covers roughly one mile of the south shoreline of the 499-acre Beaver Mountain Lake (also known as Long Pond), the largest of the lakes on the Unit. Water quality monitoring data for Beaver Mountain Lake has been collected sporadically since 1984, and the Lake's water quality is considered slightly above average, based on various chemical and physical measures. It is considered moderate in nutrients (mesotrophic), in contrast to other lakes on the Unit. Dissolved oxygen profiles from as recent as 2006 show moderate depletion in deep areas of the lake, and oxygen levels below 5 parts per million may stress certain cold water fish, and a persistent loss of oxygen may eliminate or reduce habitat for sensitive cold water species (PEARL Database). The 264-acre Long Pond has a maximum depth of 114 feet and has been classified as oligotrophic (clear and low in nutrients and aquatic vegetation). Sabbath Day Pond is a 65-acre lake with a maximum depth of 73 feet (PEARL database). The 43-acre Round Pond is a shallow (8 feet maximum depth), oligotrophic lake that is somewhat more acidic (pH 5.3) than other lakes.

Only 125 acres, or just over 3 percent of the Unit, is classified as wetland according to the National Wetlands Inventory. These wetlands, divided evenly between forested and open types, are scattered throughout the Unit along beaver meadows and drainages. The largest single wetland is a 60-acre alder and sedge meadow where an un-named brook enters Beaver Mountain Lake.

Ecological Processes

In the upland forests of Four Ponds, there is variable evidence of spruce budworm, wind and weather damage, and moose browse. These processes particularly overlap at higher elevations, creating a patchy mosaic of stand structures. In addition, field work in 2008 revealed evidence of some fires long ago, including even-aged softwood stands and charcoal remnants in the soil. Small fires, such as those caused by lightning strikes, open up patches of forest that are typically re-colonized by spruce, aspen, or birch, depending on the seed source and intensity of fire. This patchy disturbance contributes to an uneven and diverse forest canopy. Beaver activity is evident in some of the small tributaries in the Four Ponds unit, including a small stream entering Long Pond from the northeast and a tributary to Swift River Pond.

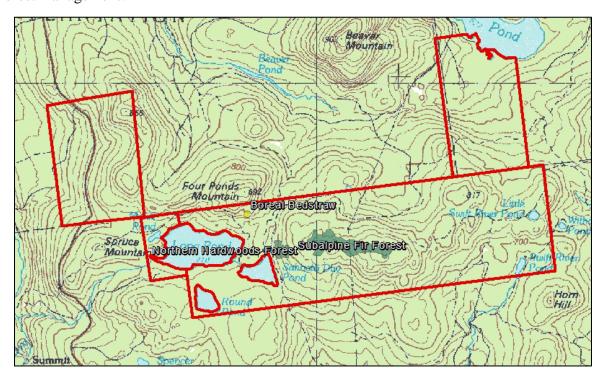
Rare plant and animal species

Only one rare plant species, boreal bedstraw, is known from the Unit. A small population of this rare plant was found in a mountain seep north of Long Pond in 2008. Aside from the arctic char in Long Pond, no other rare animals are known from the Unit.

Natural Communities

Four Ponds supports a mix of northern hardwood, mixedwood, and softwood forest that is characteristic of the region. Reflecting the relatively high elevation of the Unit, only 15 percent is mapped as hardwood forest (primarily the lower slopes of the Rangeley section), while 46 percent is mixed wood and 39 percent is softwood.

In terms of natural community types, the 'matrix' forest on much of the Unit is Montane Spruce – Fir Forest, which in places grades into the mixed Spruce – Fir Northern Hardwood Forest type, with smaller patches of Beech Birch Maple Forest and Fir – Heartleaved Birch Sub-alpine Forest. As noted previously, many areas show signs of past wind/weather events, with frequent but small (less than one acre) patches of blowdowns. Most areas show some signs of previous forest management.



Along the Appalachian Trail east of Sabbath Day Pond, lower slopes support an exemplary Beech-Birch-Maple forest with several large (28-36 inch dbh) somewhat stunted yellow birch and sugar maple. The forest is relatively open, with basal area approximately 80 square feet per acre. A 25 acre patch along the trail exhibits little or no evidence of harvest or other prior human disturbance. The understory is well developed and characteristic of this type, dominated by wood sorrel and hobblebush with heavy moose browse. The density of large trees indicates the presence of an old growth component.

Fisheries and Wildlife

The mid and high elevation, closed canopy forest provides habitat for a number of mammals, including black bear, fisher, bobcat, snowshoe hare, pine marten, and moose. Frequent songbirds in this coniferous forest type include black-throated green warbler, magnolia warbler, blackburnian warbler, northern parula, white-throated sparrow, and ruby-crowned kinglet.

Parts of three mapped Significant Wildlife Habitats are known from the Four Ponds Unit. A 50 acres wetland at the south end of Beaver Mountain Pond is mapped as a moderate value Inland Waterfowl and Wading Bird Habitat (IWWH). Part of another IWWH lies in a basin around Swift River Pond in the southeast corner of the Unit. At least one small wetland serves as a vernal pool (wood frog egg masses were noted in late April), and a number of ruts in a logging road/ATV trail also supported wood frog egg masses. No Deer Wintering Areas are mapped on the Unit.

LURC's Maine Wildlands Lake Assessment (1989) lists all of the ponds as having significant or outstanding fisheries. Round Pond, Long Pond, and Swift River Pond have been stocked with brook trout by IFW since 1989. Long Pond also supports a population of landlocked arctic char – a Special Concern species that occurs in only a handful of lakes in northern Maine. Waters in the "Four Ponds" portion of this unit are characterized by having very limited numbers of fish species, probably due to their remote, high elevation location upstream of steep natural barriers. Brook trout are present in all, either as wild populations (Sabbathday Pond) or as stocked populations (Long Pond, Round Pond, Moxie Pond). Long Pond also supports a robust

population of reproducing Artic charr along with rainbow smelt and a single minnow species (lake chub). Long Pond's charr population was introduced by the Maine Department of Inland Fisheries and Wildlife in the early 1970s in an effort to expand the range of this very uncommon species – charr are known to occur in only fourteen Maine lakes. The limited distribution of Arctic charr in Maine is likely a result of the species' narrow habitat requirements and intolerance of habitat changes, particularly the introductions of new species.

Little Swift River Pond supports a vibrant wild brook trout population, while Swift River



Western side of the Four Ponds Unit, 2009 imagery

Pond's trout fishery is maintained by annual plantings of hatchery fish. No other fish species are present in either pond, so conditions for brook trout are highly favorable.

Beaver Mountain Lake is a large headwater to Rangeley Lake that provides good habitat for a variety of fishes. A small wild brook trout population persists, with most production occurring in an unnamed tributary located on the lake's southwest shore. Landlocked salmon are also present and provide the principal sport fishery. Introduced many decades ago, salmon are now entirely self-sustaining in Beaver Mountain Lake. The lake's outlet - Long Pond Stream - provides superb spawning and rearing conditions for salmon and contributes wild fish to both Beaver Mountain Lake and Rangeley Lake. Rainbow smelts, longnose and white suckers, and four minnow species are also known to occur.

Beaver Mountain Lake attracts many anglers, particularly when high wind conditions prevent safe travel on nearby Rangeley Lake.

Game Fish Species at Four Ponds (from MDIFW)

Pond Name	Size (acres)	Mean Depth (feet)	Maximum Depth (feet)	Fish Species
Long Pond	264	40	114	Arctic Char, Brook Trout, Lake Chub, Rainbow Smelt
Sabbath day Pond	65	21	73	Brook Trout, Lake Chub, Rainbow Smelt
Round Pond	43	5	8	Brook Trout
Moxie Pond	7	7	19	Brook Trout
Swift River Pond	10	5	21	Brook Trout
Little Swift River Pond	7	10	22	Brook Trout

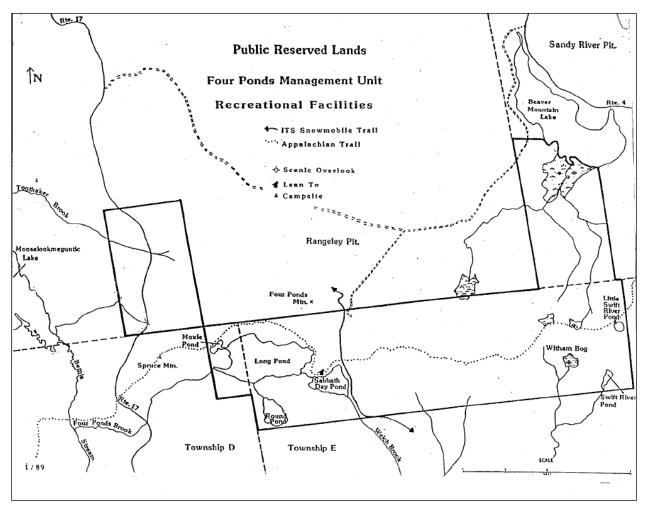
Loons have been documented on a number of the ponds by Maine Audubon, but nesting status is not known, except on Beaver Mountain Pond, where loons have been documented as nesting since 1983.

Other aquatic species known from the Unit include eastern elliptio and eastern floater (two species of freshwater mussels), both in Beaver Mountain Pond.

Recreation and Visual Resources

Non-motorized uses

The Appalachian Trail traverses the center of the Townships E and D portion of the Unit. The trail enters the unit on the West after crossing Route 17, and offers distant views of Mooselookemeguntic and Upper Richardson Lakes on the ascent of Spruce Mountain, less than a mile from Route 17. A second viewpoint, Bates Ledge located 2.7 miles from Route 17, overlooks Long Pond. After passing north of Moxie and Long Ponds, the AT descends to a site between Long and Sabbath Day Ponds where a hiker shelter and a platform campsite are available (3.7 miles from Route 17).



Traveling northbound (easterly across the Unit) on the AT, there is also a campsite on Little Swift River Pond within the Unit located 8.3 miles from Route 17. Several day hikes are possible using the AT on this unit, starting at the parking area at Height of Land overlook on Route 17, and ranging in length from 3.2 miles round trip to Moxie Pond, 7.4 miles round trip to Sabbath Day Pond, and 13.1 miles one way passing across the entire unit and beyond to Route 4, where there is another parking area.

Motorized uses

The ITS 117 runs through the Four Ponds Unit along a management road. ITS 117 is a connector trail running in a north-south direction, connecting the major east-west corridor trails of ITS 84 in the Rangeley region and ITS 82 in the Rumford region. This snowmobile trail is one of few that is authorized to cross the Appalachian Trail in Maine, so it is therefore a vital connection for the Rangeley region snowmobiling to connect to points south (Rumford, Bethel, the Mount Blue State Park trails, etc).

Hunting and Fishing

Remote fishing opportunities are abundant in the Four Ponds Unit. Round, Sabbath Day and Moxie Ponds are fly fishing only. Sabbath Day and Little Swift River Ponds have wild brook trout populations. Moxie, Round, and Long Ponds are stocked with brook trout. Beaver

Mountain Lake—in the Sandy River Plantation portion of the Unit—has a wild landlocked salmon and brook trout fishery.

Hunting opportunities are also abundant on the Four Ponds Unit. The Unit is open to hunting all the typical game species of the region—deer, bear, grouse, etc. Hunting is done by foot here, as there is very limited vehicular access.

Visual Resources

The Four Ponds Unit's Rangeley Plantation parcel protects views for drivers on a section of Route 17—which is part of the Rangeley Lakes National Scenic Byway. Also, the views from the Appalachian Trail and ponds are a significant visual resource. The resource allocations applied in this plan (as they have in past management plans) formalize the protection of these national scenic resources.

Recreation and Visual Resource Management Issues

• Snowmobilers have previously been travelling to the ITS connection east of Sabbath Day Pond from the south end of Mooselookmeguntic Lake across Route 17 north of Height of Land. This snowmobile trail did not cross the AT until a portion of the AT was relocated from a southerly route around Long Pond, to a northern route around it. Following the relocation, this snowmobile trail was considered by the National Park Service to be an unauthorized crossing.



View of Long Pond from the AT

Though this unauthorized AT crossing is not within the Four Ponds Unit, management of the Unit is implicated because the trail travels into the Unit to reach the officially designated snowmobile crossing of the AT on ITS 117.

- An unauthorized hiking trail on the Rangeley Plantation portion of the Four Ponds Unit has existed since the 1980s (or possible earlier). The previous Four Ponds Management Plan stated that it was unknown who developed or maintained this trail, and stated as a management goal to identify the party responsible for the trail and formalize management. The Bureau has been unable to locate who is responsible for this trail, and it appears to not be regularly maintained.
- Beaver Mountain Lake is on the Bureau's Boating Facilities Division priority list for providing public access. The Four Ponds Unit contains shorefront on Beaver Mountain Lake, so the potential exists to locate a boat access facility on the Unit. Issues that have deterred the development of this facility on the Unit include: the Bureau may not have the legal authority to grant public access across the currently existing road closest to the shoreline in the Unit, and existing wetlands and other natural features along the Bureau shoreline constrain the location choice.

• There is some unauthorized ATV travel on the Unit, entering via the ITS snowmobile trail east of Sabbath Day Pond, and the powerline corridor. The snowmobile trail intersects with an authorized ATV trail about two miles south of the Unit, and the powerline crosses the snowmobile trail in the same vicinity. Signage and possibly other measures are needed to keep ATVers from straying off the designated trail.

Timber Resources

Harvest History

Prior to state acquisition, the most recent harvesting on the Twp E portion of the Unit was apparently a light high grade during the 1960s, following a more extensive high grade harvest targeting spruce and yellow birch during the 1940s. This earlier harvest bypassed the fir, too small at the time, which then became the dominant species on most acres. The spruce budworm outbreak in the 1980s caused damage and some mortality of this fir. The Bureau was left with the challenge of managing the very high proportion of mature to over mature fir, much of it on land visible from below and adjacent to the AT. The Bureau initiated harvesting in 1985 on the southwest part of the Twp E ownership, site of the worst budworm damage. Harvests continued through 1995, producing almost 28,000 cords, over 80 percent of that softwood, nearly all fir. In 1998-99 an overstory removal harvest picked up the declining part of the residual from some of these cuts. Though the internal access is generally in place, the Bureau has no deeded access to Twp E. This part of the Unit has had harvesting only on frozen ground. That is likely to continue, due both to access across abutters and character of the land.

Harvests on the Rangeley Plantation portion of the Unit included a small operation in 1981-82, intended to treat about 150 acres but reaching about half that due to the steep slopes being unsuitable for along-the-contour strip cuts. A more extensive harvest began late in 1990 and finished four years later, treating nearly two-thirds of the regulated acres and producing 5,500 cords, of which 55% were hardwoods. On the Sandy River Plantation portion of the Unit, the Bureau conducted fairly heavy harvesting on the middle and upper slopes in the early 1980s, then returned in 2004-06 to partially harvest 75% of the regulated acres, including many entered in the earlier operation. This later harvest was mostly selection treatments, and yielded 5,500 cords, about 51 percent hardwoods. Harvesting on the Plantation Lots has occurred in both winter and summer.

Current Conditions

Over the entire Four Ponds Unit, the acres hold inventory volume which is moderate by BPL standards, averaging about 21 cords per acre. Tree ages and sizes are generally modest compared to Bureau lands at lower elevations, though some yellow birch and sugar maple over 20" diameter at breast height (dbh) are present. Despite the elevation, deep soils here are producing high quality timber products. Tree heights are modest on the higher ground but form and soundness is usually good.

Stand Type Characteristics (regulated acres only, all parcels included):

Softwood types cover 1,600 acres, 34 percent of tract forest, considerably lower than before the harvesting of mature fir. Fir dominated much of the previous overstory and is the leading regeneration species. Softwood types average about 29 cords per acre. Most are found on moderately well to well drained sites, with some on thin/wet soils. Swampy ground is somewhat limited on these high elevation and strongly sloping acres. Spruce (nearly all red spruce) makes up 54 percent of the volume, fir 16 percent, then yellow birch at 10 percent, white birch at 9 percent, and red maple at 7 percent. The spruce is generally excellent quality as is the younger fir, but there is still some older fir that is fairly defective, usually in riparian buffers or the AT outer corridor. Quality is limited in hardwoods within this type. Spruce is the key management species, though fir is abundant in the regeneration and does well on these sites if not held too long. BPL practice is generally to manage fir as an intermediate species while culturing the spruce, but here the fir is likely to remain an important component at all times.

<u>Mixedwood</u> types are found on about 2,400 acres, 51 percent of the regulated area. They are found on all sites but the wettest and driest, and quality is fair to good. Mixedwood acres have the lowest average at 18 cords per acre, as much of this area was formerly dominated by overmature fir harvested in the 1980s and 1990s. A significant part of the mixedwood land was converted from softwood type by the fir harvest. Currently, spruce is 32 percent of type volume, yellow birch 22 percent, white birch 15 percent, and both fir and red maple 11 percent.

<u>Hardwood</u> types cover 700 acres, 15 percent of tract forest. Hardwood types average 21 cords per acre; are most often found on side slopes away from the highest elevations on well or moderately well drained soils; and are more common on the lower slopes and south of the Twp E ridgeline. Though most high value products were removed in the middle 20th century, these

stands contain considerable quality stems, and though shorter than hardwoods on other tracts, can support good diameter growth. Sugar maple is the leading species with 39 percent of type volume, yellow birch is next at 27 percent, with spruce, fir, red maple, and white birch all between 5 and 7 percent. The 1980s-90s harvests concentrated on old fir but also worked in hardwood stands by removing lower quality stems, especially those with ice/snow breakage. Unlike nearly all other BPL hardwood areas, beech is a minor part of the stands and seldom of sufficient vigor to produce many beechnuts.



Andy Mcleod (MNAP field staff) with old sugar maple

Transportation and Administrative Considerations

State Route 17—also known as the Rangeley Lakes National Scenic Byway—runs through the Rangeley Plantation portion of the Unit. The Edelheid Road is a public road which travels into the Sandy River Plantation portion of the Unit around the west shore of Beaver Mountain Lake. These are the only public use roads in the Unit, and no additional public use roads are planned.

All other roads in the Unit are management roads for use by Bureau staff. Most management roads within the Unit are accessed by crossing private roads, and the Bureau obtains permission from private landowners for this purpose.

There are thirty-three camplot leases within the Unit on Long Pond, Round Pond, Sabbath Day Pond and Beaver Mountain Lake. Consistent with Bureau policy, leases in place when the land was purchased will continue to be honored, so long as terms of the leases are followed. Bureau-wide policy on leaseholders states that the Bureau is not obligated to provide motorized access to lease-sites. However, lessees in the Four Ponds area have obtained permission from the private owner of the Four Ponds Brook Road to drive ATVs to the boundary of the Four Ponds Unit, close to Long Pond and Round Pond. Once on the Unit, Long Pond lessees park their ATVs near a common boat dock on Long Pond to obtain boat access to their leases. Round and Sabbath Day Pond lessees must park their ATVs at the Four Ponds Unit boundary and walk in.

Transportation and Administrative Issues

- The Bureau's vehicular access for timber management of this Unit is limited, and in Township E depends entirely on permission from adjacent landowners.
- Leaseholders may not understand the Bureau's policy regarding use of ATVs to access their camps. The Bureau needs to clarify its policy for all Four Ponds area leaseholders. This is especially important due to the proximity of the Appalachian Trail to many camps and the need to avoid motorized crossings of the trail.
- There is some unauthorized ATV use on the Unit from ATVers using the snowmobile trail and powerline, which intersect with an authorized ATV trail about 2 miles south of the Unit.

Vision for the Four Ponds Unit

The Four Ponds Unit provides exceptional remote four-season recreational opportunities that are valued in themselves or as part of extended trail systems of national and statewide importance. The Unit compatibly accommodates portions of the Appalachian Trail, the Interstate Snowmobile Trail system including one of the limited number of snowmobile AT crossings in the state, and an emerging Hut to Hut cross country ski trail envisioned to extend from Bethel in the heart of the Western Mountains to Rockwood in the Moosehead region. Hiking, backpacking and fishing interests experience quiet and solitude and the chance to observe wildlife, and fish in the remote ponds where loons and arctic char evoke a distant past. Winter finds snowshoers, snowmobilers, and cross-country skiers enjoying trails in the western area's more gentle terrain. Partnerships with recreation clubs enhance the recreation experience.

Timber is managed sustainably for high quality products and to protect the scenic character for hikers and snowshoers traversing the Appalachian Trail, and for travelers along Route 17, a National Scenic Byway. Exemplary multiple use management contributes to the array of high quality recreation opportunities in the region, while the high quality timber harvested from this Unit supports Bureau operations, management of this Unit for public recreation, and the local economy.

Four Ponds Unit Allocations

The following "allocations" define general management objectives and direction for specific areas within the Four Ponds Unit. See Appendix C for a description of designation criteria and management direction for the various allocation categories. The allocation map is located in Appendix F.

Special Protection Dominant

The Appalachian Trail corridor—100 feet on either side for a total of a 200 foot corridor—is Special Protection Historic/Cultural.

Wildlife Dominant

Riparian buffers of 330 feet around all water bodies and major streams are designated wildlife dominant, as are wetlands and two exemplary natural communities—a Northern Hardwoods Forest and a Subalpine Fir Forest which abut the AT and are mostly contained within the AT Special Protection corridor. However, where they are not within this corridor, they are wildlife dominant with a remote recreation secondary allocation.

A secondary remote recreation allocation is also designated for the riparian areas around the ponds.

Remote Recreation Dominant

The area around the "Four Ponds" (Sabbath Day, Long, Round and Moxie) is remote recreation dominant in areas where it is not in a more restrictive allocation. This remote recreation area extends east as far as the management road which serves as ITS 117.

Remote recreation also applies as dominant allocation for an additional 400 feet adjacent to the AT special protection allocation which covers the first 100 feet on either side of the trail, except where allocated Wildlife (for exemplary natural communities).

Visual Consideration

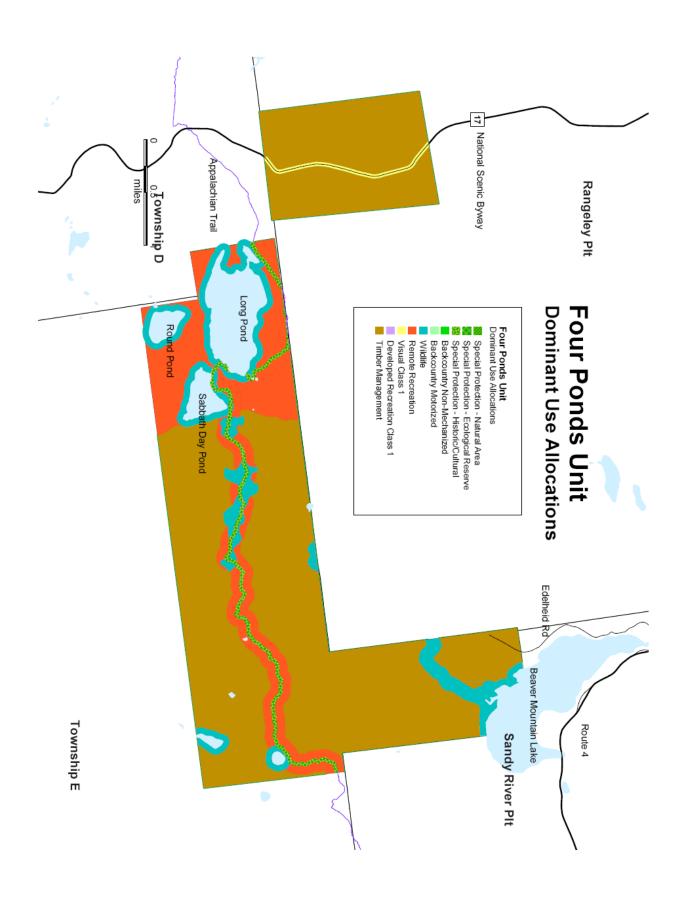
Each side of the AT corridor is subject to a Visual Class I allocation beyond the Special Protection dominant 100 foot buffer. Also, areas adjacent to public use roads and all shorelines of lakes are subject to a Visual Class I allocation.

Timber Dominant

All other acres not described above are Timber Dominant.

Allocation	Dominant	Secondary
	Acres*	Acres*
Special Protection	158	
Wildlife	521	
Remote Recreation	892	422
Timber Management	4197	1,413

^{*}Dominant acreages are representations based on GIS metrics and do not sum total unit acres due to measuring error and limits of GIS precision.



Four Ponds Unit Issues and Management Recommendations

While allocations define the general management direction, management recommendations define specific actions to be taken during the course of the 15 year Plan period in response to identified management issues.

Issue	Recommendations
Recreation Management	
Snowmobile AT crossing: A club snowmobile trail from Mooselookmeguntic Lake crosses the Appalachian Trail on private land, and travels into the Four Ponds Unit to reach the officially designated ITS 117 AT crossing on Bureau land. This crossing was created when the AT was relocated to go north of Long Pond. The National Park Service (NPS) has stated that this crossing is in violation of their trail crossing policy. A replacement trail is needed that allows snowmobilers to travel. The NPS could decide to allow this crossing if no alternate trail can be located.	Work with the snowmobile club, RLHT, and other willing landowners to relocate this trail so that it will be consistent with NPS Appalachian Trail policy. Authorize a new snowmobile trail on the Rangeley Plantation and Township E portions of the Unit, if deemed suitable by the ORV program and other parties, if necessary to comply with NPS Appalachian Trail policy. Maintain the original club trail as the preferred alternative if the NPS changes their policy to allow the snowmobile/ AT crossing.
Unauthorized hiking trail: An informal hiking trail on the Rangeley Plantation portion of the Four Ponds Unit has existed since the 1980s (or possible earlier). To the best of the Bureau's knowledge, this trail leading from Route 17 to Mooselook Lake was never formally authorized. It is unclear who, if anyone, is maintaining it and what purpose it serves.	Remove any signage placed on the trailhead (as well as any other indicators that this is a designated trail).
Maine Huts and Trails interest in a winter trail in the Unit: Maine Huts and Trails expressed interest in locating a winter trail in the Four Ponds Unit. The precise location is not known at this time, but it may involve crossing the Appalachian Trail in the Four Ponds Unit.	Work with Maine Huts and Trails, and Appalachian Trail partners (MATC and ATC) to explore the feasibility of a winter trail in the Four Ponds Unit. If a trail location is indentified, convene the Advisory Committee to review and give comment on the proposal. Consider holding a public meeting for input, particularly if a motorized crossing (for grooming machines) of the AT is proposed.
Boat Access on Beaver Mountain Lake: Beaver Mountain Lake is on the Bureau's	Retain the option to locate a boat access facility on Beaver Mountain Lake in the Four Ponds Unit if

Issue	Recommendations
Boating Facilities Division priority list for providing public access. The Four Ponds Unit contains shorefront on Beaver Mountain Lake, so the potential exists to locate a boat access facility on the Unit, if legal road access can be obtained and a suitable site can be located. The Four Ponds Unit may or may not be determined the most appropriate location for public boat access on Beaver Mountain Lake. Timber Management Timber management guidelines outlined in this Plan reflect current best practices geared to current conditions, which may	Recommendations legal access can be assured and a suitable site is located. Through the Bureau's Boating Facilities Division, cooperate with IF&W and other relevant parties to determine the timing, location, and design of the boat access facility. Timber management objectives in the Four Ponds Unit include growing high value timber products, chiefly sawlogs and veneer, while maintaining
change over time. These recommendations are provided to enhance the public's understanding of how the Bureau will manage timber resources on the Four Ponds Unit. These recommendations are not a "prescription" – only general guidelines.	visual integrity and enhancing the diversity of wildlife habitat and stability of the forest. Management will value species such as spruce, sugar maple, and yellow birch, while taking advantage of the fast growing and abundant but shorter lived fir. • Softwood Stands: Manage the softwood types to stay in this type, moving acres to a higher spruce component while taking advantage of fir's suitability on these sites to produce a more diverse and stable forest. • Mixed Wood Stands: Manage the mixed wood types to encourage reversion to softwoods where past harvesting had changed the type—particularly where softwoods have a strong spruce component. Moving mixed wood acres to a higher spruce component while taking advantage of fir's suitability on these sites can produce a more diverse and stable forest. Management on mixed wood types should favor spruce and the birches, and sugar maple (and red maple, to a lesser degree) on better sites. • Hardwood Stands: Manage hardwood acres for sugar maple and yellow birch along with any spruce, managing fir as an intermediate product. Full crowned beech should be retained wherever possible.
Transportation and Administrative Issues	
Management Access: Vehicular access for Bureau staff for timber management is	Seek opportunities to obtain vehicular rights of way for management purposes, particularly in

Issue	Recommendations
limited, and in Township E depends entirely on permission from adjacent landowners.	Township E.
Camp lessee access rights: For Four Ponds area lessees, permission has been obtained from the owner of the D Town Road for the use of ATVs to access the Four Ponds Unit. Once at the border of the Four Ponds Unit, Long Pond lessees have a common boat dock. Round Pond and Sabbath Day Pond lessees have foot access only. It is important to identify and clarify lessee access routes, to deter motorized AT crossings that violate NPS policy, to preserve the remote character of the Unit, and to be considerate of surrounding private landowners.	Clarify with lessees on Sabbath Day, Long, and Round Ponds the access routes and permissions they have on the Four Ponds Unit. This may be done through a meeting between the Bureau, lessees and the adjacent private landowners, or through written correspondence.
Unauthorized ATV use: There is some unauthorized ATV travel on the Unit, entering via the ITS snowmobile trail east of Sabbath Day Pond, and the powerline corridor. The snowmobile trail intersects with an authorized ATV trail about two miles south of the Unit, and the powerline crosses the snowmobile trail in the same vicinity. Signage and possibly other measures are needed to keep ATVers from straying off the designated trail.	Work cooperatively with adjacent landowners to identify areas where unauthorized trail use is occurring. Work with local ATV clubs to identify effective means of deterring unauthorized use of snowmobile trails and powerline corridors to gain entrance into the Unit. Consider signage, trail impediments, and enforcement options.

Richardson Unit



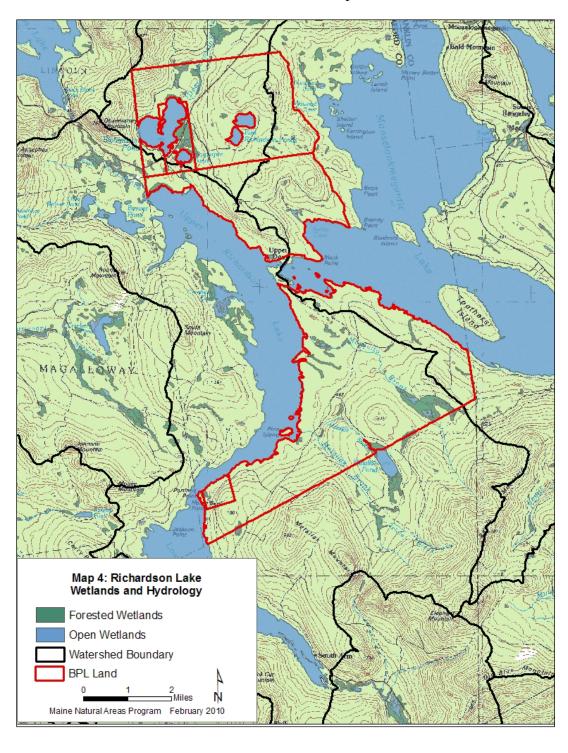
View of South Shore of Richardson Lake

Character of the Landbase

The Richardson Unit encompasses 18,484 acres between Mooselookmeguntic Lake and the Richardson Lakes in the heart of the Rangeley Lakes Region. The Unit is essentially an hour glass shape between the lakes, excluding lands around Upper Dam in the middle (owned by Union Water Power Company) and excluding the northwest shore of Mooselookmeguntic Lake (owned by Rangeley Lakes Heritage Trust). The majority of the eastern shoreline of Richardson Lakes and a portion of Mooselookmeguntic are protected by the Unit—thus helping to preserve, in concert with other conservation lands, the natural character of the shorelines of these lakes, known for their scenic beauty and outstanding fishing and other recreational opportunities. The Unit includes two boat ramps for access to these lakes and many remote, water access campsites dispersed along the shoreline and islands of the Unit. The Unit also provides road access to the Upper Dam tailrace —famous since the 19th Century for its fly-fishing. Wetlands, streams and ponds on the Unit also provide valuable fisheries and wildlife habitat. The Richardson Unit is a productive timber area, with gentle terrain and fertile soils producing high volumes of quality timber products and a reliable land base for Bureau timber management.

Acquisition History

The Richardson Unit is comprised of land that is part of the original public reserved lots in Adamstown and Richardsontown Townships, and major acquisitions from Brown Company, Pingree Heirs, and James River Corporation. The original public lots consisted of 960 acres each, and some was traded out for other acquisitions—640 acres remains of the Adamstown Twp original public lot, and 249 acres of the Richardsontown Twp lot. In 1978, the Bureau acquired 3,117 acres from Brown Company, in 1984, 17,010 acres was acquired from Pingree Heirs, and an additional 1,712 was added in 1986 from James River Corporation.



Natural Resources (Maine Natural Areas Program, 2010)

Geology and Soils

The Richardson Unit is flat and rolling (especially compared to the surrounding region) with elevations ranging from 1450 feet at lake level to 2100 feet. Nearly 75 percent of the Unit has a slope of 5 percent or less. Bedrock is primarily granitic and soil deposits are generally deep and coarse textured tills. Glacial stream deposits are present with the most significant being an esker near the Narrows. Poorly drained swamp deposits occur on the south portion of the Unit near Metallak Stream, Mosquito Brook and Sandy Cove.

Hydrology and Wetlands

The Rangeley Lakes have been impounded as storage reservoirs for downstream energy generation and log driving since the 1800s. The lake levels are drawn down in the fall and winter, creating extensive vegetated wetland flats and sandy beaches.

The lakes lie in the Upper Androscoggin River watershed. Mooselookmeguntic Lake drains through Upper Dam into Upper Richardson Lake, which then drains through Middle Dam on Lower Richardson Lake into the Rapid River. The Rapid River flows into Lake Umbagog, which forms the headwaters of the Androscoggin River. Several mid-size meandering streams drain the Unit, including Mosquito Brook, Metallak Stream, and Metallak Brook.

In LURC's Wildlands Lake Assessment (1987), Lower Richardson Lake is listed as 'Class 1A' or statewide significance, based on a number of high resource values. Data sporadically collected since 1981 indicates that the water quality of Upper Richardson Lake is above average and the water quality of Mooselookmeguntic is average, based on measures of water clarity, total phosphorus, and chlorophyll-A. Recent dissolved oxygen profiles show no oxygen depletion (i.e., no risk to cold water fisheries) in deep areas of either lake, and water quality appears to be stable (University of Maine PEARL database).

In addition to these large lakes, three large ponds are entirely contained within the Unit: the 465-acre West Richardson Pond, the East Richardson Ponds (54 and 78 acres), and the 53-acre Pepperpot Pond. No water quality data are available for these smaller lakes.

The Richardson Unit has 965 acres of wetlands, of which two-thirds are forested and one-third are open, according to the National Wetlands Inventory. At 5% of the land base, the proportion of wetlands here is lower than other parts of Maine but significantly higher than the rugged Mahoosuc Unit. Wetlands range in size from relatively small, isolated kettlehole basins to larger complexes of beaver meadows. The Kettlehole peatland near The Narrows Back berm basin along Upper Richardson Lake, the largest wetland on the Unit, is an approximately 250 acre complex of peatlands and beaver meadows along upper Mosquito Brook.



Kettlehole peatland near The Narrows- MNAP Photo

Ecological Processes

The open expanses of the Rangeley Lakes can deliver large gusts of channeled wind to the surrounding forests, resulting in sandy berms and overwash basins along the lakeshores. These overwash basins, though somewhat artificially enhanced by manipulated lake levels, support an uncommon and unique assemblage of plant species (including sedges, rushes, and swamp candles) that also occurs on natural lakeshores in northern and Downeast Maine.

In the interior forest, wind bursts and occasional ice damage create groups of toppled canopy trees that



Back berm basin along Upper Richardson Lake –MNAP Photo

add both vertical and horizontal structure to the forest. The large downed woody debris creates denning sites for small mammals and contributes nutrients to the forest floor. The resulting openings in the canopy also allow suppressed trees and seedlings to take advantage of the sunlight and add younger trees to the canopy.

Beavers are active along some of the numerous small streams that feed into Lower Richardson Lake, including Mosquito Brook and Metallak Stream. When active, beaver ponds flood adjoining lowland forest, enlarging wetlands and creating new areas for wetland species to colonize. By creating and abandoning impoundments along the stream course, beavers create a mosaic of habitats for other plant and wildlife species.

The spruce budworm is one of the most destructive native insects of softwood forests in the eastern United States. Given the preponderance of softwood on the Richardson Unit, the impacts of the most recent outbreak of spruce budworm in the 1980s were significant. Outbreaks coupled with periodic wind events resulted in heavy damage to fir dominated and mixed stands; stands dominated by mature spruce received less damage. As discussed further in Timber Resources section below, extensive salvage harvesting took place in the response to the budworm, with the heaviest harvesting south of Upper Dam.

Rare Plant and Animal Species

No rare plants or animals have been documented in the Richardson Lake Unit.

Natural Communities

The forests at Richardson Lake are predominantly mixed wood, with lesser amounts of softwood and comparatively little hardwood. Red spruce, balsam fir, and white pine are the dominant softwood species, and yellow birch, paper birch, aspen, red maple, and sugar maple are the

dominant hardwoods (see Timber Resources section below for more detail of overall forest conditions).

A relatively small portion of the Unit would qualify as late successional forest. A number of older forest stands were identified in the Publicover et al (1998) report; among the older stands encountered in 2009 field work include:

- A 40-acre White Pine Mixed Conifer Forest east of the Narrows and Portland Point. A limited harvest was conducted in this area in the 1990s to salvage wind damaged timber, but many large red spruce and white pine trees remain. This stand has an 'old growth component' (with an estimate of 10 to 15 trees greater than 16 inch dbh per acre). A steep slope of spruce and cedar just east of this stand may also support an old growth component (cored cedar trees were aged between 150 and 200 years old), but this stand is less than two acres.
- A 25 acre stand of Low Elevation Spruce Fir Forest near the mouth of Mosquito Brook has limited signs of past harvest and supports numerous old trees (core ages for spruces were 145 and 163, and numerous trees are in the 20-26 inch diameter range). This natural community grades from a well drained stand on a small knoll to poorly drained spruce flats. This stand has a strong presence of an old growth component, and may be classified as a small old-growth stand.



42" white pine east of the Narrows MNAP Photo

Note that while the two stands above exhibit latesuccessional characteristics, they are too small to meet the Maine Natural Areas Program criteria for 'exemplary natural communities'.

In addition to these old stands, a Red Pine – White Pine Forest occurs on Pine Island, a 20 acre island near the mouth of Metallak Brook. This is an uncommon forest type in Maine (ranked S3 meaning it is rare in Maine) and is typically more frequent in Downeast Maine. Most canopy trees are in the 16-24 inch diameter range, with some white pines approaching 32 inches. The stand is apparently even-aged, possibly originating after a harvest and burn about 150 years ago (based on tree cores and charcoal in the soil). There has also been some more recent selective cutting. The stand is approximately 57 percent white pine and 36 percent red pine, and there is little to no red pine regeneration, so in the absence of fire or other disturbance, red pine may eventually be lost from the stand.

Fisheries and Wildlife

The Richardson Lakes and Mooselookmeguntic Lake provide some of Maine's best fishing opportunities for brook trout and landlocked salmon, drawing thousands of open water anglers to the region each year. Brook trout are native to the lakes and their tributaries; salmon, and the rainbow smelts that provide their primary forage, were introduced in the late 1800s. Brook trout and salmon populations in Mooselookmeguntic Lake are supported entirely by natural reproduction, while those in the Richardson Lakes are augmented with hatchery stocks. The Richardson Lakes also support a small sport fishery for hatchery-reared lake trout (togue) that grow to attractive



Bull moose at the mouth of Metallak Brook

sizes. Other fish present in the two lakes include yellow perch, landlocked alewife, white and longnose sucker, slimy sculpin, brown bullhead, and about 12 minnow species.

Mill Brook, Metallak Brook, Mosquito Brook, and Upper Dam Pool - all tributaries to the Richardson Lakes – provide important spawning habitat for rainbow smelts, the primary forage for predatory fish in the Richardson Lakes. Recreational smelt harvest was recently banned on these streams in an effort to bolster declining smelt production and improve the quality of the lakes' landlocked salmon fishery.

West Richardson Pond and the East Richardson Ponds provide brook trout sport fisheries. Trout are stocked annually in all three ponds because spawning habitat is limited. A small population of wild salmon persists in West Richardson Pond by utilizing limited spawning and nursery habitat in Deer Mountain Stream and an unnamed brook draining to the pond's west basin. Pepperpot Pond supports a small brook trout population; its fishery is limited to the spring and early-summer periods because it is shallow and warms quickly. Most fish species present in the Richardson Lakes, including yellow perch, are also present in West Richardson and Pepperpot Ponds. Yellow perch are absent from the East Richardson Ponds due to impassable barriers on their outlet streams.

Loon data for Richardson and Mooselookmeguntic Lakes indicate high counts in recent years, peaking at 46 individuals on Richardson in 2001 and 39 individuals on Mooselookmeguntic in 2004 (PEARL database).

The Richardson Unit has one 480 acre mapped Deer Wintering Area located along the mouth of Mosquito Brook. One hundred sixty acres of another mapped DWA occurs south of Pepperpot Pond along Mill Brook, though relatively little winter deer use has been observed in this area. The Unit also has about 200 acres of mapped Inland Waterfowl and Wading Bird habitat; the largest of these areas (165 acres) is Pepperpot Pond and the adjacent wetlands.

A number of potential vernal pools were identified during field work in 1998, 2008, and 2009, but none of these areas have been verified during the amphibian breeding season.

Recreation and Visual Resources

The extensive shoreline of the Richardson Unit provides for preservation of the scenic character of the Richardson Lakes and Mooselookmeguntic as well as remote recreational opportunities. Major recreational uses are camping at sites along the shoreline of Upper Richardson Lake, fishing, boating, and hunting. Visitors also travel through the Richardson Unit to access the Upper Dam, a popular and historically significant fishing spot.

Non-motorized uses

Camping and picnicking are available along the shores of the lakes. There are fourteen

campsites (12 are on Richardson Lakes) and two picnic areas on the Unit, which are accessible by water. The Richardson Lake campsites are available for a fee, and must be reserved through the South Arm campground (which manages camping through a lease agreement with the Bureau). Additionally, three boat ramps on the Unit are available for launching kayaks and canoes. Two of them—the Mill Brook and South Arm boat ramps—are available for motor boats as well, and one ramp on West Richardson Pond is hand carry only. Additionally, there is a short trail that leads from the South Arm Road along Metallak Brook to the Lake, which can be used as a hand carry boat access site.



Campsite on Richardson Lake

Motorized uses

Access to Richardson Lakes for motorboats is provided on the Unit at the Mill Brook Boat Ramp. This ramp is ADA accessible. There is also a boat ramp on the south portion of the Richardson Unit—on Mooselookmeguntic Lake off the South Arm Road. ATV riding is available on shared use roads on the Unit posted as open to this use. A total of 25 miles are currently available—15 on the northern portion and 12 on the southern portion. ATV riders use these roads to access hunting and fishing areas. Snowmobiling is allowed on shared use roads that are not plowed. Snowmobile use is generally by campowners travelling to the major snowmobile system.

Hunting and Fishing

The Richardson Lakes and Mooselookmeguntic Lake provide some of Maine's best fishing opportunities for brook trout and landlocked salmon, drawing thousands of open water anglers to the region each year. The Richardson Unit provides access to these lakes by the two trailered boat ramps described above under "motorized uses" and by a hand carry boat ramp West Richardson Pond. Also, anglers travel through the Unit to access the Upper Dam pool, located below the dam between Mooselookmeguntic Lake and Upper Richardson Lake, to fish for trophy sized landlocked salmon and brook trout that are attracted to the tailrace flow below Upper Dam. Special IF&W regulations for this prized fishery include a late season fly fishing

opportunity through October, together with highly restrictive fishing regulations including fly-fishing only, minimum length of 18 inches for salmon and 12 inches for brook trout, and a daily bag limit of one fish. Upper Dam has been known widely as a fishing destination since the late 19th Century, when tourists arrived by railroad and then steam boat. The Upper Dam House and many nearby camps hosted visitors. The Upper Dam pool was made famous in part by Carrie Stevens who lived there and became a fly-tying legend, using one of her flies to catch a 7 pound brook trout. When word spread, more visitors flocked to Upper Dam pool to catch trophy brook trout.

Hunting opportunities are abundant on Richardson Unit for a variety of game species, especially grouse, bear and deer. The public use roads and management roads with 'shared use' status (including ATV access) make hunting opportunities more easily accessible through much of the Unit.

<u>Visual resources</u>

The Richardson Unit includes approximately 11 miles of shoreline on The Richardson Lakes and eight miles of shoreline on Mooselookmeguntic Lake. Bureau ownership and management practices help (along with shoreline under non-profit conservation ownership and conservation easement) protect the scenic beauty of these lakes.

Recreation and Visual Management Issues

- Some concerns have been raised by the public that camping information available for the Richardson Unit is confusing—it is difficult to know who to contact for reservations, because various sites are owned by different organizations—each with its own reservation system.
- There have been complaints to the Bureau regarding the reservation system used by the South Arm Campground. The campground, which manages reservations for their own private campground and another private landowner on the Richardson Lakes, uses a 'right of first refusal' model for their reservation system. Campers have the right to renew their campsite for the same date the next year. For example, the campers who have reserved the most desirable site for 4th of July weekend one year have a 'right of first refusal' on that same campsite for the following year. This system, though appropriate for a private campground, has been challenged by some members of the public as not appropriate on public lands. Campers who want a chance of reserving a desirable site on a summer holiday weekend are often blocked from doing so, because that site is reserved year after year by the same group.
- Access to Upper Dam is provided via the Bureau's management road. This road is controlled by a system of gates, and some feel it is unnecessarily restrictive (see discussion under Transportation and Administrative Issues).

Timber Resources

The Richardson Unit is a productive timber area, with gentle terrain and fertile soils producing high volumes of quality timber products. The Bureau has harvested more volume on this Unit than any other in the Western region, and stocking continues to be good.

Harvest History

These acres have an extensive harvest history. The previous landowners had been conducting spruce budworm salvage/presalvage harvests for several years prior to Bureau ownership in 1984. The Bureau continued these type of harvests in 1985-6, harvesting nearly 19,000 cords of mostly fir and spruce. From 1985 to 1993, the Bureau harvested a total of 49,000 cords, moving from southern to northern portions of the Unit over this nine year period. An average of 10 cords per acre were harvested and about 73% of the volume was spruce and fir.

Between 1995 and 2001, Bureau staff worked with a Rangeley logging contractor to use a small Swedish shortwood processor to thin dense stands of spruce-rich poletimber. About 1800 acres were treated in this way, averaging nearly 14 cords per acre of almost exclusively softwoods. Hardwoods were left in these stands to increase diversity. The University of Maine's Cooperative Forestry Research Unit installed a research plot in this tract in the year 2000 and has been tracking the plot annually as part of its long term Commercial Thinnings Research Network.

Between 1999 and 2008, harvesting in stands other than the above mentioned spruce poletimber resumed. Hardwood markets improved during this time, so about 52 percent of the harvest was hardwood. During this 10 year period a total of 30,500 cords was taken, at an average of 8.4 cords per acre.

Current Conditions

Soils on the Richardson Unit include many acres which are well-drained and fertile, some acres with wet areas and rock/moss ground cover, and everything in between.

Softwood type covers about 30 percent of the Unit's regulated acres, and contains the highest percentage of spruce of any major Bureau Unit at 63 percent. The remainder of softwood type volumes are: 12 percent pine, 7 percent fir, and 5 percent each of cedar, yellow birch and white birch. Softwood stands are most common on gently sloping land with somewhat limited fertility, and quality is very good (except for cedar and fir). Three age classes of spruce dominated softwood stands exist: young stands as a result of budworm salvage harvests, poletimber stands dating to the 1930s (possibly released by the 1938 hurricane), and older stands tending toward late-successional. There are several small zoned deer wintering areas and other acres where deer have historically yarded in the softwood type. Cover has been diminished due to budworm salvage harvesting.

Mixedwood type is found on 44 percent of the Unit's regulated acres—nearly all Spruce-Fir-Northern Hardwoods. Mixedwood type is largely a result of past favoring of softwoods in harvesting, however, soils in these areas are well-suited to grow both hard and softwoods.

Volume is around 18 cords per acre, which is lower than the average for the Richardson Unit, due to harvests occurring since 1970 creating younger stands. Volume of mixedwood type is composed of: 32 percent spruce, 19 percent yellow birch, 14 percent red maple, 11 percent fir, 8 percent white birch, 5 percent cedar and 4 percent pine. Quality is good for all but the cedar and some of the red maple.

Hardwood type covers 26 percent of the regulated acres, mostly composed of Northern Hardwoods, with a few intolerant hardwood stands. Hardwood type occurs on low hills of the Unit, and averages 21 cords an acre. Yellow birch is the most abundant species at 26 percent of the hardwood type volume. Sugar maple makes up 22 percent, spruce is next at 16 percent, red maple is 13 percent, beech is 8 percent, white birch is 7 percent and fir is 5 percent. Quality and growth is good, with the exception of some of the beech affected by the beech bark complex.

Transportation and Administrative Considerations

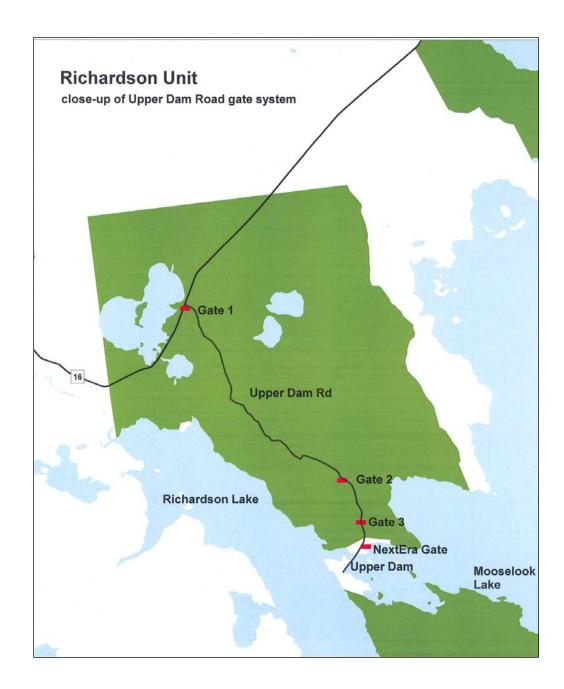
Public Use Roads

Public use roads in the Unit include the South Arm Road, which traverses the southern portion of the Unit. This road is used by the general public for hunting access and ATV riding. A small parking area is available near Metallak Brook, which accesses a short trail leading to the lake near Pine Island. This can be used as a hand carry boat access site.

State Route 16 runs through the northern end of the Richardson Unit. From Route 16, two public use roads are available that travel south. The Mill Brook Road leads to the Mill Brook Boat Ramp, an ADA accessible ramp on the Unit providing access to Upper Richardson Lake. The Upper Dam Road also leaves Route 16, traveling south through the Richardson Unit to Upper Dam—owned and operated by NextEra Energy.

Upper Dam Road has a three gate system to control access to Upper Dam pool during various times of the year. The gate system outlined below was designed to optimize fishing access at the dam during the prime fishing seasons in spring and late fall, with more limited access in the summer season due to concerns of safety and security at the dam.

- Gate 1—located at the beginning of the road near Route 16—is closed for the early spring to protect the road during mud season. It is opened as soon as road conditions allow for safe travel and road surface stability.
- Gate 2 is located partway between Route 16 and Upper Dam—approximately 1.3 miles from Upper Dam pool. It is open after mud season and stays open until June 30, to provide access closer to the dam for fishing during the prime fishing season. It is closed July 1 through Labor Day, to reduce summer crowding at the dam. After Labor Day, it is open for the fall fishing season. When Gate 2 is closed (July and August) visitors must park at Gate 2 and walk 1.3 miles to get to Upper Dam.
- Gate 3 is located near the property boundary between the Bureau's Richardson Unit and NextEra Energy's property. It is approximately 1700 feet from Upper Dam pool. This gate is open for late season fishing beginning September 1, and the gate remains open through the winter. There is a parking area and outhouse at this gate.



Transportation and Administrative Issues

• Members of the public have expressed dissatisfaction regarding the 3 gate system. One concern often raised is that the timing of the gate closures is confusing to the public. Additionally, in July and August when Gate 2 is closed, anglers who have limited physical ability have difficulty walking the 1.3 mile distance from Gate 2 to Upper Damp pool and back. Another issue is that in the September and October late fishing season, when all three gates are open, there is sometimes a congestion and safety issue when anglers drive as close as they can to the dam and block a fourth gate owned by NextEra.

The Bureau needs to address the issues surrounding the three gate system in order to reduce confusion and improve access for the public, while considering legitimate safety and security concerns at the dam.

Vision for the Richardson Unit

Management of the Richardson Unit protects the remote character and scenic shorelines and views of the Richardson and Mooselookmeguntic Lakes. The Unit provides public access for boating, hunting and fishing, ATV riding on shared use roads, and water access camping. Collaborations and partnerships with conservation organizations and neighboring landowners provide expanded recreational opportunities and management efficiencies. The forests are managed to produce high quality timber products while protecting or enhancing wildlife and fisheries resources.

Richardson Unit Allocations

The following "allocations" define general management objectives and direction for specific areas within the Richardson Unit. See Appendix C for a description of designation criteria and management direction for the various allocation categories. See Appendix F for a map of these allocations.

Wildlife Dominant

Riparian buffers of 330 feet around the abundant lake and pond shorelines and major streams are designated wildlife dominant. Deer wintering areas (one south of Pepperpot Pond and one surrounding Mosquito Brook) are also designated wildlife dominant. Wetlands, including those identified by MIF&W as Inland Wading Bird and Waterfowl Habitat, are included in this allocation. Remote recreation is a secondary allocation for the lake and pond shorelines.

Visual Consideration

Visual Class I status is given to public use roads—including South Arm Road, Upper Dam Road, and Mill Brook Road, along Route 16 as it passes through the Unit, as well as all lake shorelines and boat ramp areas. Visual Class II standards will be applied to any hillsides visible from the lakes.

Developed Recreation

Developed Recreation Class I is the dominant allocation around the Mooselookmeguntic and Mill Brook Boat Ramps.

Timber Management

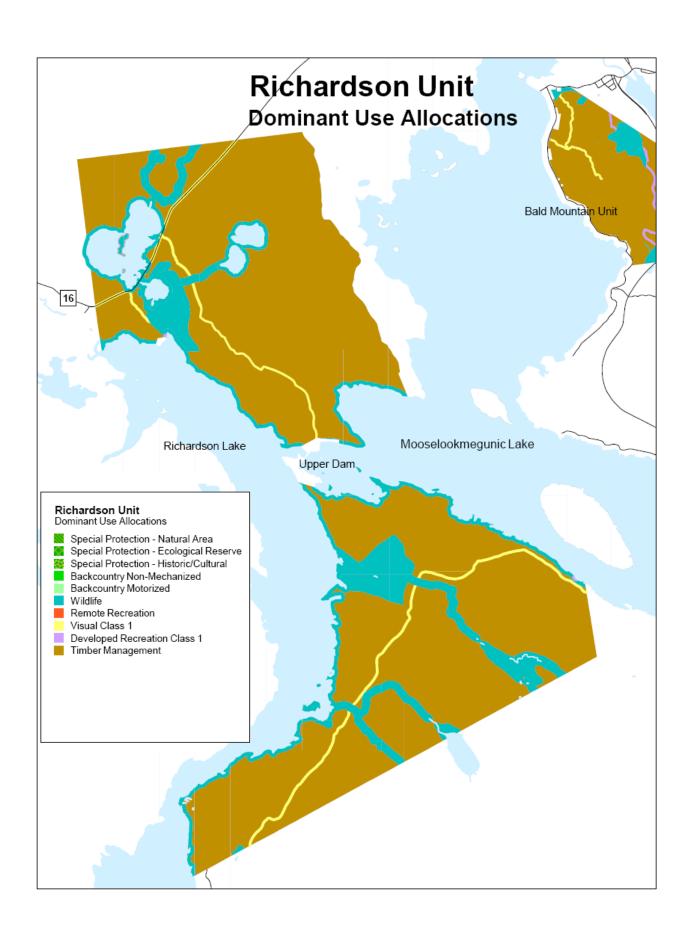
All other acres not specified above are timber dominant.

Richardson Unit Resource Allocations

Allocation	Dominant	Secondary
	Acres*	Acres*
Wildlife	2,830	
Remote Recreation		800
Developed Recreation Class I	**8	
Timber Management	15,533	2,830

^{*}Dominant acreages are representations based on GIS metrics

^{**}Approximate—actual acres will be determined in the field



Richardson Unit Issues and Management Recommendations

While allocations define the general management direction, management recommendations define specific actions to be taken during the course of the 15 year Plan period in response to identified management issues.

Issue	Recommendations
Recreation Resources	
Improve Information for Camping Reservations. Some concerns have been raised by the public that the camping reservation system on Richardson and Mooselookmeguntic Lakes is confusing—it is difficult to know how to get a reservation, due to the many different organizations that own or manage campsites on these lakes. Campsites on Bureau lands are managed by the South Arm Campround.	 Improve information and reduce confusion about camping reservations on Bureau Lands. As opportunities arise collaborate with other campsite owners on the Richardson Lakes and Mooselookmeguntic Lake in improving clarity of information. Specific recommendations: Publish a new "Map and Guide" for the Richardson Lakes and Mooselookmeguntic Lake in collaboration with other conservation and recreation providers on these lakes; identify which sites belong to which landowner, including the phone numbers for making reservations. Improve the Bureau website to provide clear information on camping at Bureau lands. Include links to other organizations' websites as appropriate. Consider additional signage at campsites, in keeping with the remote and scenic character of the lakes. As opportunities arise, participate in larger initiatives in the Rangeley Lakes region to increase the awareness and public information
Equal access to camping sites. The reservation system used by the South Arm campground for their private campground—offering campers the 'right of first refusal for their campsites for the following year—is not appropriate for public lands.	on camping opportunities. Work with South Arm campground to phase out the 'right of first refusal' system for reservations at the Richardson Unit. Establish a policy that no new rights will be established and old rights will be phased out.
Parking for Metallak Brook Trail: There is some interest in expansion of the small parking area near the foot trail which	Explore the potential for expanding this parking area to meet demand for hand carry boat launching.

T	D 1.4
Issue	Recommendations
leads from South Arm Road, along	
Metallak Brook, to South Richardson Lake.	
Timber Management	
Timber Management Timber management guidelines outlined in	Softwood Stands: On softwood types,
this Plan reflect current best practices geared to current conditions, which may	management will maintain the high spruce component while encouraging pine and removing
change over time. These recommendations are provided to enhance the public's	fir as an intermediate product. A small proportion of hardwoods will be retained for
understanding of how the Bureau will	diversity. Fertility limitations mean widespread
manage timber resources on the Richardson Unit. These recommendations are not a	conversion to hardwoods is not desirable, though
"prescription" – only general guidelines.	the birches may do fairly well. A second entry will be made into spruce poletimber stands—
prescription only general guidennes.	balancing spacing, potential windthrow, and
	release of the regeneration created by the 1996-
	2002 harvest. Areas of current deer wintering
	area zoning and where deer have yarded will be
	managed to retain good softwood cover wherever
	possible, and bring softwood regeneration to
	cover status through careful overstory removal.
	Mixed Wood Stands: On mixed wood types,
	growing high value hardwoods in mixture with
	spruce and pine is a desired objective in the older
	stands, with yellow birch the most favored
	species. In younger hardwood stands (which
	include aspen and pin cherry), reversion to
	softwood type is desirable, especially near deer wintering areas.
	wintering areas.
	Hardwood Stands: On hardwood types, yellow
	birch is the first priority species, followed by sugar maple, spruce, and any existing pine. The
	small proportion of healthy beech will be
	retained, and good quality red maple will be
	encouraged along with any ash. The softwood
	component of hardwood stands will be retained,
	or increased where spruce is common in the
	understory. Conversion to mixedwood or
	softwood may be appropriate on less fertile stand
Transportation and Administration	edges near softwood stands.
Gated Access to Upper Dam: The current	Revise the current gate system for controlling
three gate system on the Upper Dam	access to Richardson Lake and the Upper Dam
Road—leading to Upper Dam—is	tailrace via Upper Dam Road in order to better

Issue confusing to the public, limits access for anglers with limited physical abilities during the summer, and causes crowding and traffic flow problems at Upper Dam during fall fishing season.

Recommendations

serve the public. Develop a Plan that will eliminate the current confusion over which gates are open when, will improve access for people with limited physical abilities, and will address current and potential congestion and safety on the Upper Dam Road. Work with NextEra Energy on development of this plan to address legitimate safety and security concerns. This plan shall be adopted within five years of this management plan adoption, but after the completion of dam reconstruction.

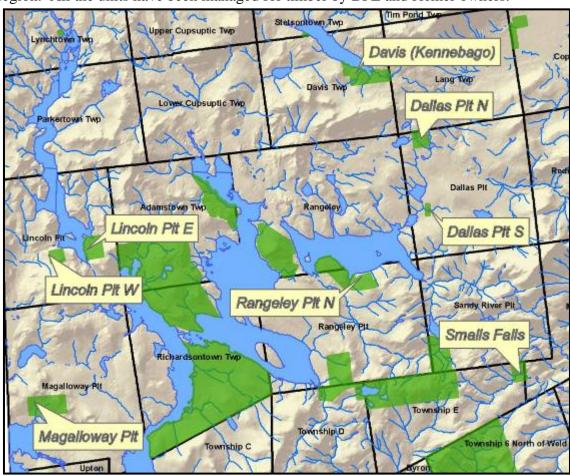
In developing this Plan, investigate the feasibility of the following option:

- Keep Gate 2 open year round
- Keep Gate 3 closed year round

This is the preferred option in terms of administrative ease, simplicity, and improved public access. Due to its simplicity, it would eliminate confusion for the public. At all times of year (except mud season) the public would be able to drive to Gate 3 and park, walking 1700 feet to the Upper Dam pool. During July and August, this option would improve access for the public (currently the public has to park at Gate 2 and walk 1.3 miles to Upper Dam during these months). At the same time traffic congestion at Gate 4 would be eliminated in September and October, because people would have to park at Gate 3, where a parking area is provided.

Various Small Lots in the Western Mountain Region Lakes Area

Various smaller scattered Bureau holdings in the Western Mountains Region are managed primarily for forest products and dispersed recreation, such as hunting and fishing. Aside from the lakeshores and Smalls Falls, the units receive comparatively little public use. Units included in this portion of the report are shown below. The public land units range in size from 66 to 1,764 acres and collectively support roughly equivalent areas of softwood, mixed wood, and hardwood. The smaller lots average 23 cords/acre, which is slightly larger than the BPL regional average stocking and significantly higher than the average stocking on private lands in the region. All the units have been managed for timber by BPL and former owners.



Davis (Kennebago) Lot

The 886 acre Davis Lot in Davis Township is also known as the Kennebego Lot because it lies along the south shoreline of Kennebego Lake. It is an original public lot which shares a common and undivided ownership with the Kennebego Lake Camps (KLC owns a one-third common and undivided interest in the entire lot).

Natural Resources (MNAP, 2010)

The 886-acre Davis Lot supports young to mid-aged forests on gentle slopes heading down to Kennebago Lake. Young hardwood and mixed wood stands dominate the slopes, while young softwood (primarily spruce-fir) forests occur along lowlands and along the two miles of lakeshore.

Kennebago Lake is a large (1,764 acre) oligotrophic water that provides excellent habitat for coldwater fishes. Native brook trout are very abundant and provide a high quality sport fishery. Captive brook trout derived from the Kennebago Lake drainage currently support a substantial part of Maine's hatchery program, reflecting the high quality of these particular fish. A small population of landlocked salmon is also present from introductions made many decades ago, and they provide an important ancillary fishery in Kennebago Lake and in the upper Kennebago River. Brown trout, a species not native to North America, persist as a relic population in Kennebago Lake from an introduction made prior to 1939.

Other species known to occur in Kennebago Lake include rainbow smelt (introduced) and two native minnows (blacknose dace and lake chub). White and longnose suckers, which are very common throughout most of Maine, are conspicuously absent from the upper Kennebago River drainage, including Kennebago Lake. The absence of suckers is an important factor contributing to high brook trout abundance in these waters.

The Unit also contains most of the shoreline of Flatiron Pond, a 30 acre shallow pond in the southwest corner of the Unit. Flatiron Pond supports a vibrant wild brook trout population that sustains itself by spawning on shoreline gravels. Other species include rainbow smelt, blacknose dace, and lake chub. The smelts arose from an unauthorized introduction made many years ago – they are strong predators on newly hatched brook trout fry and compete with older trout for food resources.

Nesting loons have used the Kennebago Lake in past years, with moderate numbers (10-20 adults) counted in annual surveys.

The east side of the Unit contains two of the Blanchard Ponds – small (<4 acre), shallow ponds that drain into Kennebago Lake through Blanchard Brook. Two 'moderate value' waterfowl and wading bird habitats have been mapped by IF&W in this area.

Extensive harvesting (clearcuts) occurred in the 1970s prior to the Bureau acquisition. Since that time, the Bureau has conducted no timber harvesting on this parcel. Most of the Unit supports young forest (sapling/pole stage stands), but some small more mature hardwoods occur upslope of Flatiron Pond.

Recreation Resources

Recreational resources on the Lot are primarily fishing in Kennebego Lake and Flatiron Pond. Additionally, a club snowmobile trail that begins in downtown Rangeley travels north on the Bud Russell Road, then veers east and leaves the lot north of Blanchard Ponds to join ITS 89.

Timber Resources

Harvest History

Much of the Lot was harvested during the 1970s, with large clearcuts in mature and budworm damaged spruce-fir, and lighter selection or shelterwood harvests in hardwoods and mixedwoods. Other than some right-of-way wood cut by an abutter to gain access through the easterly end of the Lot, no harvesting has occurred since.

Current Conditions

Topography is rolling with a general north to northeast aspect and no major hills. Soils are mainly moderately to well drained. Due to the heavy volumes removed in the 1970s, the Lot has under 20 cords per acre, though it is well stocked with younger trees. Many acres of the softwoods cut then have regenerated with enough white birch, aspen, and pincherry to be typed mixedwood at present, though fir and spruce are the leading species in those stands. At present, only 9 percent of the Lot is typed as hardwoods, mainly in a stand of northern hardwoods heavy to sugar maple and yellow birch near Flatiron Pond. Mixedwood stands cover 60 percent of regulated acres, with about half of this the sapling/small pole stands established by the 1970s clearcuts. These younger stands have fir as the leading species, followed by white birch, spruce, and aspen, with pincherry still common though it should begin to drop out soon. Older mixedwood stands are spruce-fir/northern hardwoods and generally well stocked three decades after being partially harvested. The 31% of regulated forest in softwoods include several dozen acres of young stands where the hardwood component is comparatively low. Other softwood types include perhaps 100 acres of poletimber well suited to thinning with cut-to-length processor, and older stands of spruce-fir or cedar/spruce-fir, usually with the fir mature to overmature.

Transportation and Administrative Concerns

Vehicular access to the Lot is from the Loon Lake Road, which begins in downtown Rangeley and travels north, and becomes the Bud Russell Road as it reaches the Lot. A set of camps—
Kennebago Lake Camps (KLC) occupies the shore of a cove at the south side of the lake. KLC shares a common/undivided ownership of the Lot in which one third of the acreage is owned common/undivided by KLC, with the other two thirds owned by the State. The camps themselves are on about



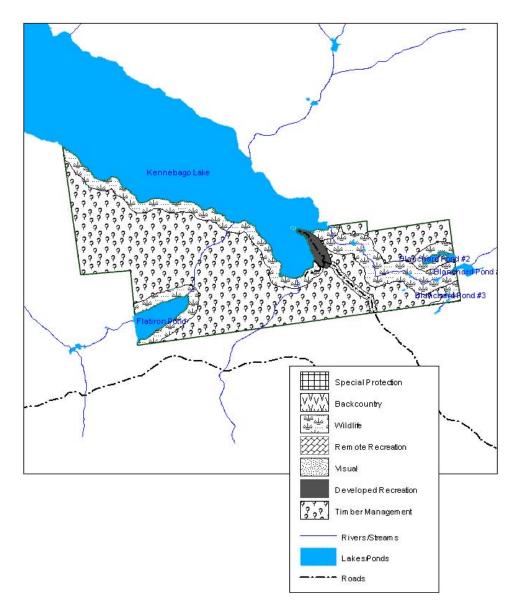
South shore of Kennebago Lake, with camp leases

30 acres leased (at 2/3 interest) from the Bureau. The entire Lot lies behind the Loon Lake gate, which is controlled by the private owners of the Loon Lake/Bud Russell Roads.

Management Issues

There is no vehicular access for the public to the Davis Lot. Access is desired for fishing in Kennebago Lake and Flatiron Pond.

Davis (Kennebago) Lot Allocations



Wildlife Dominant

Extensive acreage in the Lot is wildlife dominant due to riparian buffers on Kennebago Lake, Flatiron Pond, the Blanchard Ponds, and Blanchard Brook.

<u>Visual</u>

A buffer along the Bud Russell Road is Visual Class I, as well as along the lake shorelines.

Developed Recreation

The area between the Bud Russell Road and Kennebago Lake is Developed Recreation Class I, due to the numerous camps.

Timber Management

The remaining acres are Timber Dominant.

Davis Lot - Summary of the Allocations		
Dominant Allocation	Number of Acres*	
Wildlife	227	
Developed Recreation Class I	13**	
Timber Management	644	
*Dominant acreages are representations based on GIS		
**Approximate—actual acres will be determined in the field		

Davis Lot Management Issues and Recommendations	
Management Issue	Recommendation
Public Access: There is no vehicular access for the public to the Davis Lot. Access is desired for fishing in Kennebago Lake and Flatiron Pond.	Work with surrounding private landowners to provide public vehicular access to the Davis Lot. If this is successful, work with the Department of Inland Fisheries and Wildlife to determine appropriate boat access, parking and signage for Kennebago Lake and Flatiron Pond.
Future Timber Management:	 Because of the ownership split, coordinate any timber harvest with KLC, who will also receive one third of revenues. Management must also respect the visual impact from the lake, though relatively gradual slopes mean that only minor constraints are needed, and the character of the forest is suited to lighter harvests that will not be readily visible from the water. Extensive lake frontage and uplands somewhat visible from the lake must be a factored in planning timber harvests. The large area of even-aged stands established in the 1970s represent an age class and stand condition less common on Bureau lands. By the end of the Plan period, these should be approaching the time when a commercial thinning will be desirable.

Stetsontown Lot

The 41 acre Stetsontown Lot is an original public lot. Ten acres of the Lot is composed of Grants Camps, which has a commercial lease on this area. Four other camplot leases occur in the Lot. It is accessible by the Kennebago River Road, a private road traveling north from Route 16. The road is gated shortly after it leaves Route 16—this gate is staffed by the private landowner. The Bureau has arranged with the owner of the road and Grants Camps to allow the public access to three parking spaces and a hand carry boat ramp within the lease area. Members of the public check in at the gate, and inform the gatekeeper of their intention to visit the Public Lot and use one of the three spaces.

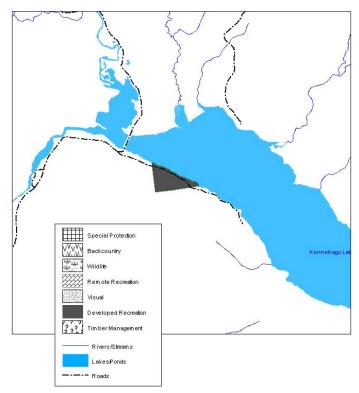
No natural resource inventory or timber inventory have been performed. No timber harvesting will be performed.

Stetsontown Lot Allocations

Developed Recreation

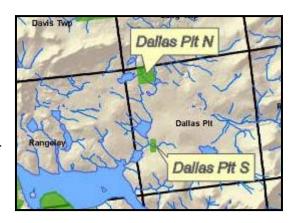
The entire Lot, due to the presence of many camplot leases, will be Developed Recreation Class I.

Summary of Allocations	
Dominant Allocation	Number of Acres*
Developed Recreation Class I	52
*Dominant acreages are representations based on GIS metrics and do not	
sum total unit acres due to measuring error and limits of GIS precision.	



Dallas Plantation Lots (North and South)

Two public lots are owned in Dallas Plantation—the 373 acre North Lot and the 66 acre South Lot. These are both original public lots. The North Lot lies to the east of Loon Lake, accessed from the Loon Lake Road, and the South Lot is adjacent to Route 16, a short distance northeast of downtown Rangeley.



Natural Resources (MNAP, 2010)

North Lot

The 380-acre Dallas Plantation North Lot is an original public lot that has been managed for forest products for many years, with the most recent harvests occurring in the mid and late 1980s. It is characterized by gentle slopes and mid-aged northern hardwood and mixed forests, with softwoods along a central meandering stream that drains from the Greeley Ponds to Loon Lake. The Lot, however, does not include frontage on any of these waterbodies. Three small emergent beaver meadows (each less than 2 acres) lie along this stream, and a large area of inland waterfowl and wading bird habitat lies just east of the Unit around the Greeley Ponds. Approximately 110 acres (the southeastern half of the Lot) of softwood and mixed forest have been mapped as a Deer Wintering Area.

South Lot

The 66-acre Dallas Plantation South Lot lies on lowland forest just a few miles outside of Rangeley. The Lot is forested with mid-aged mixed wood stands and includes a small stream that drains into Bull Pond. The Lot was most recently harvested by the Bureau in 1986.

Recreation and Visual Resources

A major snowmobile/ATV trail—ITS89—runs lengthwise through the South Lot. Dispersed hunting may also occur.

Timber Resources

Harvest History

North Lot—this was harvested twice during the 1980s, in 1980-81 and in 1987-89. Volume from the first harvest is unavailable, but was probably over 2,000 cords of mostly softwood (it occurred at the height of budworm damage). A clearcut of nearly 30 acres, alternate stripcuts on about 40 acres, and selection/patch selection harvests on perhaps another 100 acres would have produced heavy volumes. The late-1980s entry treated 135 acres, with some work in the residual strips (including some pre-harvest stem-injection herbicide on aspen and red maple to influence regeneration), and the remainder selection harvest. Total harvest volume was about 1,250 cords, 86% hardwoods.

South Lot—In 1986 the Bureau harvested about 500 cords, mostly budworm-damaged fir and overmature aspen.

Current Conditions

On the North Lot, soils and topography are quite varied for a tract of under 400 acres. There are open wetlands, abundant boulders, steep slopes, soils ranging from swamp to excessively drained (thin to ledge), along with riparian buffers and 112 acres of zoned deer wintering area. The 18-19 cords per acre are 39 percent spruce, 16 percent cedar, 12 percent white birch, 9 percent red maple, 8 percent fir, and 7 percent yellow birch.

The South Lot has moist to wet soils on gentle slopes, with most acres holding a mix of aspen/white birch and fir on moderately well to somewhat poorly drained soils. The remainder is poorly drained soil with softwoods, mostly fir and cedar. Volume averages 16-18 cords per acre. The Lot now holds a two-story stand with scattered fir, aspen, birch (and cedar in wet areas) over dense saplings, mostly fir and aspen.

Future Management

Manage the North Lot to retain diversity for wildlife and protect deer wintering area.

On the South Lot reversion to more site-suitable softwood type is an objective. Timber management will respect the well-used motorized trail and the roadside view.

Transportation and Administrative Concerns

The North Lot is accessible from the Loon Lake Road and the Bud Russell Road. However, the Lot is behind the Loon Lake gate, controlled by the private owner of the roads, which greatly limits public access but has little or no effect on timber management.

The South Lot is adjacent to Route 16 and is accessible from a management road (also serving as an ATV and snowmobile trail) traveling through the Lot south from 16.

Management Issues

The public has no vehicular access to the North Lot due to the Loon Lake gate.

Dallas Plantation Lots Allocations

Wildlife Dominant

The North Lot contains wildlife dominant areas that include deer wintering area, riparian buffers on streams and small ponds, and wetlands.

The South Lot has a minor riparian buffer on a stream running through the Lot.

Visual

The South Lot has a Visual Class I buffer along Route 16.

Timber Management

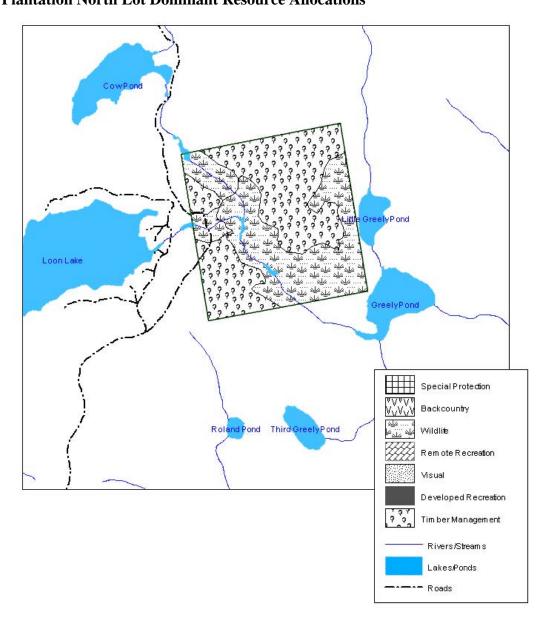
All other acres are timber dominant.

Summary of Allocations – North and South Lots	
Dominant Allocation	Number of Acres*
Wildlife	185
Visual Class I	3**
Timber Management	264

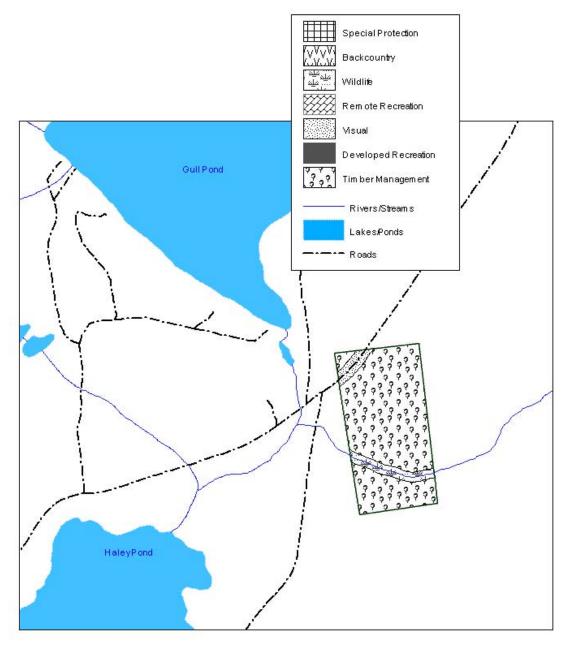
^{*}Dominant acreages are representations based on GIS metrics and do not sum total unit acres due to measuring error and limits of GIS precision.

**Approximate—actual acres will be determined in the field

Dallas Plantation North Lot Dominant Resource Allocations



Dallas Plantation South Lot Dominant Resource Allocations



Dallas Plantation Lots Management Issues and Recommendations	
Management Issue	Recommendation
<u>Public Access:</u> The public has no vehicular	Work with the private landowner of Loon Lake
access to the North Lot due to the Loon	Road to allow public access closer to the
Lake gate.	Davistown Lot, which, if successful, would also
	allow access to the Dallas Plantation North Lot.

Smalls Falls (Township E) Lot

The Township E Lot is also known as the "Smalls Falls Lot" because it surrounds Smalls Falls, which is a series of seven drops along the Sandy River, just above its intersection with the Chandler Mill Stream. The falls are owned and managed by the Maine Department of Transportation, which also own and manage a picnic and rest area off of Route 4 which is adjacent to the public lot, and provides access for travelers and picnickers to Smalls Falls. The Township E Lot is 370 acres and was acquired by the Bureau in 1999. The Lot is bisected by Route 4, but with most of the acreage on the southwest side of the road, surrounding Smalls Falls.



MNAP Photo of Smalls Falls

Natural Resources (MNAP, 2010)

Smalls Falls has been the subject of much geologic research and it has been revealed that most of the bedrock units span from 423 to 391 million years old. The metamorphosed sedimentary layering has been turned up on edge and runs in a northeast-southwest direction. The underlying rock formation is black schist with thin layers of light brown quartzite.

Forests on the Bureau Lot surrounding Smalls Falls are regenerating from a heavy harvest that occurred prior to Bureau acquisition. Small remnants of more mature forest stand in the northern part of the Lot. No rare species or significant wildlife habitat are known on the Lot.

Recreation and Visual Resources

Route 4, which bisects the Lot, is part of the Rangeley Lakes National Scenic Byway. As such, any management activities on the Lot will work to enhance and protect the view from this route. The DOT owned Smalls Falls area---a 54 foot series of waterfalls, colorful gorges and popular swimming holes, with a picnic and rest area—is a great recreation resource that the Bureau-owned Lot serves to enhance by protecting surrounding views.

There is regular interest in recreational gold-panning in the Chandler Mill Stream. The Bureau issues special use permits for this on request.

Timber Resources

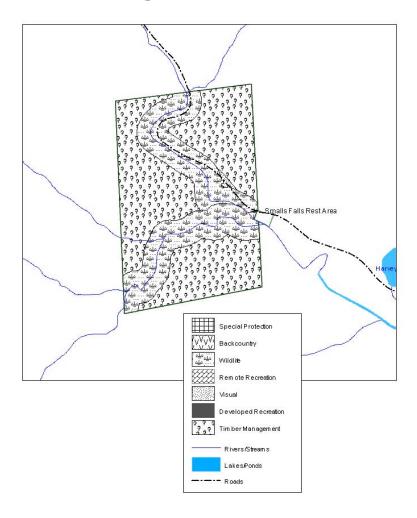
No comprehensive timber assessment has been performed. The Lot contains mostly young hardwoods, and it is likely that no timber management will be performed during the planning period.

Transportation and Administrative Considerations

Route 4 bisects and provides access to the Lot. The DOT has recently re-routed a portion of Route 4 that had been particularly curvy and dangerous for truck traffic. Route 4 has essentially been straightened in that section. Both the old route and the new route are on the Public Lot. Since the Township E Lot surrounds and enhances the DOT Smalls Falls area, coordination in management is needed.

There are special use permits allocated on request for recreational gold extraction on Chandler Mill Stream.

Smalls Falls (Township E) Lot Allocations



Wildlife Dominant

Riparian buffers along the Sandy River and Chandler Mill Stream are Wildlife Dominant. The Wildlife Dominant allocation also serves to enhance views surrounding the DOT Smalls Falls area.

<u>Vis</u>ual

A Visual Class I buffer surrounds the portion of Route 4 that is not allocated Wildlife.

Timber Management

The remaining acres will be Timber Dominant.

Summary of Allocations	
Dominant Allocation	Number of Acres*
Wildlife	135
Visual Class I	2**
Timber Management	242

^{*}Dominant acreages are representations based on GIS metrics

^{**}Approximate—actual acres will be determined in the field

Smalls Falls (Township E) Lot Issues and Recommendations

Management Issue	Recommendation
IF&W has expressed concerns that the	Work with IF&W to investigate potential fisheries
recreational gold dredging on Chandler	impacts of the recreational gold extraction on
Mill Stream may be impacting the	Chandler Mill Stream. If unacceptable impacts are
fisheries.	identified, eliminate this use.

Rangeley Plantation Lot

The 462 acre Rangeley Plantation Lot was acquired in two parcels—an 87 acre parcel in 1997 from the Trust for Public Land and a 352 acre parcel in 1998 from the Maine Conference of Seventh Day Adventists. It lies almost adjacent to Rangeley Lake State Park—it is separated from the Park by South Shore Drive. It covers a north facing hillside, and much of the Lot was once cleared or pastured farmland—stone walls, old farm equipment and remains of old structures are evidence to this past. There are no lakes, streams or wetlands on the property.

Recreational Resources

A club snowmobile trail travels through the Lot, connecting Rangeley Lake with ITS84.

Timber Resources

Harvest History

The larger (352 acre) parcel had been previously farmland—either entirely cleared, or used as partially cleared pastureland. It had been heavily harvested prior to state acquisition. The smaller parcel had been harvested about 20 years prior to state acquisition. The Bureau has not performed any timber management yet on this Lot.

Current Conditions

The Lot slopes gently to the north, and has deep soils which are moderately to well drained (with only small areas of wetter soils). The larger parcel contains stocking of less than 15 cords per acre, mostly hardwoods of modest quality and young fir. Some mature aspen are near the South Shore Road. The smaller parcel has closer to 25 cords per acre.

Transportation and Administrative Concerns

Access to the Rangeley Plantation Lot is from the South Shore Drive.

When privately owned, the Lot had been designated by the Maine Legislature as a game sanctuary. This designation prohibits hunting on the property.

Management Issues

Now that the Lot is in public ownership, the 'no hunting' prohibition runs counter to the Bureau's typical practice, which is to allowing hunting throughout Public Reserved Land (except near hiking trails, campsites and other recreational facilities).

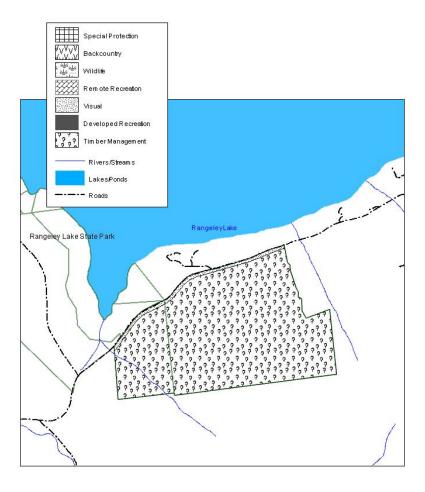
Rangeley Plantation Lot Allocations

<u>Visual</u>

A buffer along the South Shore Drive will be Visual Class I.

Timber Management

The remainder of the Lot is Timber Dominant.



Rangeley Plantation Lot Summary of Allocations	
Dominant Allocation	Number of Acres*
Visual Class I	14**
Timber Management	448

^{*}Dominant acreages are representations based on GIS metrics and do not sum total unit acres due to measuring error and limits of GIS precision.

**Approximate—actual acres will be determined in the field

Rangeley Plantation Lot Management Issues and Recommendations	
Issues	Recommendations
Game Preserve: Now that the Lot is in public ownership, the 'no hunting' prohibition runs counter to the Bureau's typical practice, which is to allowing hunting throughout Public Reserved Land (except near hiking trails, campsites and other recreational facilities).	Work with the legislature to remove the game sanctuary status on the Rangeley Plantation Lot, now that it is in public ownership. This will only be pursued on the public lot, not the surrounding private lands in game sanctuary status.
Future Timber Management	Because the volumes of timber are well below the Bureau's typical volumes, it will be some time before any significant timber harvesting will be performed. However, there are scattered mature aspen that may be harvested, as well as removing any tall aspen near South Shore Road that become a hazard.

Lincoln Plantation Lots (East and West)

Lincoln Plantation West and East Lots are located on the southern end of Aziscohos Lake. The 640 acre East Lot lies along the shoreline of the Lake on the Black Brook Cove, just north of Route 16. The West Lot is 279 acres and is south of Route 16 and Aziscohos Lake (it does not contain lake frontage).

Natural Resources (MNAP, 2010)

The West Lot occupies the north facing slope of a 2,000 foot forested summit—Lower Aziscohos Mountain. Most of the Lot is mid-aged northern hardwood forest, with younger spruce-fir occurring on the upper slope. This Lot was most recently harvested by BPL in 1992 and 1993.

The East Lot contains over a mile of frontage on Black Brook Cove at the south side of Aziscohos Lake. The Lot slopes up from the Lake at 1,514 feet to an elevation of perhaps 1,850 feet along the east line. Most of the shore frontage is occupied by leased camps. The interior of

the parcel is stocked with young to mid-aged stands of hardwood, mixed wood, and softwood. Partial harvesting occurred on the northern half of the lot in from 1999 to 2001. Aziscohos Lake is a 6,700-acre impoundment formed by a large dam completed in 1911 on the Magalloway River. The Lake provides excellent habitat for salmonid fishes, including native brook trout and introduced landlocked salmon. Both species are sustained entirely by natural reproduction and support popular, high quality sport fisheries. Rainbow smelts are present and provide important forage for the lake's predatory fish, and they support a heavily used recreational spring dipnet fishery on certain Aziscohos Lake tributaries. The lake also supports longnose and white suckers, slimy sculpin, brown bullhead, and nine native minnow species.

No rare features of Significant Wildlife Habitats are known from either Lot.

Recreation and Visual Resources

West Lot

There is an informal hiking trail to Lower Aziscohos Mountain that begins on the West Lot management roads and travels on to private land to reach the mountain. The trail is described in guidebooks as having excellent views of the Rangeley region.

East Lot

Though there is no boat access on the public lot, a trailered ramp partly funded by the Bureau's Boating Facilities Division is just south of the Lot. The ramp is administered by the Black Brook Cove Campground, and is available to the public.

Timber Resources

Harvest History

The West Lot was cut heavily during the 1950s by Brown Company, creating a new age class on most acres. Thus the stands here tend to be younger than is the usual on Bureau tracts in this area, heavy to poletimber and small sawtimber, and with fewer very large trees. The Bureau conducted a selection/improvement harvest in 1992, treating about half of the area. Eighty five percent of harvest volume was hardwood pulp, as the treatment was designed to remove low quality stems and focus growth on the best potential trees.

On the East Lot, harvesting in the 1950s established regeneration on much of the lot, including considerable aspen at lower elevation and along old winter roads. The major wind event of July 5, 1999 flattened about 50 acres on this lot, in several patches, while causing partial windthrow on another 50 or more. That event plus the amount of large mature fir triggered a prescription, followed by a substantial timber harvest which yielded almost 3,700 cords from 405 acres in 1999-2001. Sixty-one percent of the harvest volume was spruce and fir, mainly the latter.

Current Conditions

The West Lot has a generally northerly aspect, with gentle slopes on the north part becoming steeper to the south as elevation rises from about 1,500 feet to almost 2,100. Topography is challenging for timber harvest on the southeasterly quarter of the lot, with slopes, boulders and outcrops. Soils are generally deep and fertile except on that southeast quarter, the upper portions of which are thin to ledge. Most of the lot acreage is capable of producing good quality

hardwood and spruce-fir timber. Current stocking is probably over 30 cords per acre, 47% sugar maple, 17% spruce, 16% yellow birch, 10% red maple.

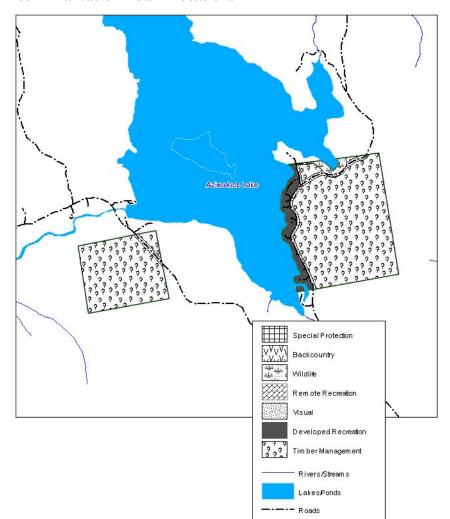
On the East Lot, most of the land suitable for timber management lies east of the Lincoln Pond Road. Much of the land is fairly steep, only the bouldery softwood stand in the east center of the lot presents much challenge to operations. Most soils are deep and fertile, the exception being that boulder area, and well able to grow good quality hardwood and softwood timber. Current stocking is about 27 cords per acre, consisting of: 43 percent spruce, 19 percent yellow birch, 16 percent sugar maple, 9 percent white birch, and 7 percent fir.

Transportation and Administrative Concerns

The West Lot is accessible from Route 16—in fact Route 16 travels through the north east corner of the Lot.

The East Lot is accessible from the Lincoln Pond Road, which travels north from Route 16, goes through the East Lot, and continues north along the east side of Aziscohos Lake and ends at Kennebago River. Lincoln Pond Road is open to the public, and also provides access to the several dozen leased camplots with lake frontage on the East Lot, some of which draw water seasonally from streams well to the east of the road.

Lincoln Plantation Lots Allocations



Wildlife Dominant

East Lot—the shoreline of Aziscohos Lake on the north end of the Lot is wildlife dominant.

Visual

West Lot—Route 16 where it runs through the Lot has a Visual Class I buffer.

Developed Recreation

East Lot—from the Lincoln Pond Road to the shoreline of Aziscohos Lake is Developed Recreation Class I due to the camplots.

<u>Timber Management</u>

All other acres are Timber Dominant.

Lincoln Plantation Lots: Summary of Allocations	
Dominant Allocation	Acres*
Wildlife	15
Visual Class I	34**
Developed Recreation Class I	53**
Timber Management	744

^{*}Dominant acreages are representations based on GIS metrics and do not sum total unit acres due to measuring error and limits of GIS precision.

**Approximate—actual acres will be determined in the field

Management Issues	Recommendations
Future Timber Management	West Lot management will continue to focus on hardwood sawlog production, with spruce important on higher elevations and in the northeast corner near the highway.
	On the East Lot, management for high quality hardwood and spruce will be the timber priority. Maintain visual integrity along the Lincoln Pond Road and along Route 16. Exercise care when harvesting near the frequent streams, especially those containing infeed pipes for camplot water supply.

Magalloway Plantation Lot

The 1,044-acre Magalloway Lot is an original public lot, covering rolling terrain south of Sturtevant Mountain and sloping down into Umbagog Lake. It is bordered on the south and west by land within the Lake Umbagog National Wildlife Refuge.

Natural Resources (MNAP, 2010)

The land is gently to moderately sloping with a southerly aspect. Except for small areas either wet or ledgey, soils are mainly deep and fertile. Forest cover consists of mature mixed and hardwood stands that were selectively harvested by the Bureau in 2008 and 2009.

Nearly all the parcel is categorized as hardwood (49%) or mixed wood (44%), with only 7% softwood. Forest stocking following the recent harvest exceeds 25 cords/acre, which is higher than the average stocking of Bureau lands in the region. The variable intensity of prior harvest activity across the site gives some stands the appearance of being minimally managed while others are more obviously responding to past removals. Some areas of the residual forest maintain late-successional values – particularly in the eastern half of the lot, where the frequency of large trees and late-successional lichens is high compared to adjacent forests.

The Unit includes part of a 25-acre 'high value' Waterfowl and Wading Bird Habitat mapped by I&FW. Considerable area in the southwest portion is part of a cooperative (unzoned) deer wintering area which extends onto NWR land, and winter deer use has been heavy, especially as the lands to the Lot's north and east have been heavily harvested in recent years.

Recreational Resources

Hunting is likely the only recreation use occurring on the Lot.

Timber Resources

Harvest History

Much of the Lot had a highgrade harvest in 1960-61 by the holder of timber and grass rights. The Bureau harvested in 1984-85 on the west half of the lot, concentrating on budworm-damaged fir and spruce, and on mature hardwoods. Issues with the west side access stopped this harvest before completion. New access has now been secured from the north, circling around the east side and entering from the south, allowing downhill skidding and hauling on most of the Lot. This access was used for the 2008-09 harvest, which treated 90% of regulated acres with individual tree and small group selection, producing just over 10,500 cords, 64% hardwoods.

Current Conditions

Softwoods cover just 9 percent of forest acres, mostly on wetter ground in the southwest corner. This area provides good winter cover for deer. Current stocking is over 30 cords per acre, about 38% spruce, 35% cedar, 10% each fir and yellow birch.

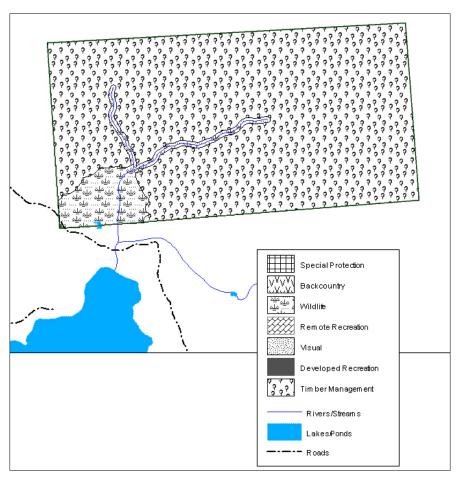
Mixedwood stands total 42% of forest area and are found on well drained mid-slopes throughout the lot. Post harvest volume is 25-27 cords per acre, 51% spruce and 24% yellow birch. Red maple, sugar maple, and fir together make up another 16% of the post harvest type.

Hardwood type occupies just under half the lot, and about half of this area holds stands which meet the Bureau standard for high value late successional forest. The species mix includes mainly trees which can readily be managed to retain this character. The post harvest volume of 21-23 cords per acre is about 36% sugar maple, 18% each yellow birch and spruce, and 9% each red maple and beech. Though less than 5% of the stand, white ash grows very well and should be encouraged.

Transportation and Administrative Concerns

The Lot is accessed from the Sunday Cove Road—from Route 16, head south on the Sturtevant Pond Road, which ends at the Sunday Cove Road.

Magalloway Plantation Lot Allocations



Wildlife Dominant

Riparian buffers, inland wading bird and waterfowl habitat, and deer wintering area are wildlife dominant.

<u>Timber Management</u> All other acres are Timber Dominant.

Magalloway Plantation Lot – Summary of Allocations	
Dominant Allocation	Acres*
Wildlife	93
Timber Management	1014
*D : 1 1 CIG : 11	

^{*}Dominant acreages are representations based on GIS metrics and do not sum total unit acres due to measuring error and limits of GIS precision.

Magalloway Plantation Management Issues and Recommendations	
Future Timber Management	Softwood types should be managed to retain deer winter cover, while producing spruce and fir timber.
	Mixedwood stands, where they abut deer cover should usually be managed to increase the softwood proportion for additional winter cover. There and elsewhere, the mixedwood stands can produce high quality spruce, yellow birch, and sugar maple. Much of this type is at or near late successional character, and management should maintain this status where feasible.
	Hardwood types should be managed to retain the late-successional character, consistant with tree conditions and timber goals, particularly on the east half of the Lot.

V. Monitoring and Evaluation

Monitoring and evaluation are needed to track progress in achieving the management goals and objectives for the Plan area and the effectiveness of particular approaches to resource management. Monitoring and evaluation will be conducted on wildlife, ecological, timber, and recreational management efforts throughout the Western Mountains Plan Region.

Implementation of Plan Recommendations

The Bureau will develop, within two years of Plan adoption, an action plan for implementing and monitoring the management recommendations in this Plan. This will include an assignment of priorities and timeframes for accomplishment that will be utilized to determine work priorities and budgets on an annual basis. The Bureau will document annually its progress in implementing the recommendations, plans for the coming year, and adjustments to the priorities and timeframes as needed.

Ecological Reserves

There are currently sixteen Ecological Reserves on Bureau lands throughout the state. Ecological Reserves are established "for the purpose of maintaining one or more natural community types or native ecosystem types in a natural condition . . . and managed: A) as a benchmark against which biological and environmental change can be measure, B) to protect sufficient habitat for those species whose habitat needs are unlikely to be met on lands managed for other purposes; or, C) as a site for ongoing scientific research, long-term environmental monitoring, and education." (Title 12, Section 1801). The Maine Natural Areas Program (MNAP) is conducting long-term ecological monitoring within these Reserves.

There is one Ecological Reserves in this Region: The Mahoosuc (Carlo-Speck) Ecological Reserve. The MNAP conducted a natural resource inventory on this Ecological Reserve in 2009 as part of the reserved lands management planning process. MNAP is also monitoring these lands as part of its long term monitoring of Ecological Reserves to monitor ecological change within Ecological Reserves and to compare Ecological Reserves to areas under different management regimes. Baseline data was collected using permanent plots at the Mahoosuc Ecological Reserve. These areas will be re-inventoried periodically, according to schedules developed by the Bureau and MNAP.

Recreation

Data on recreational use is helpful in allocating staff and monetary resources for management of the properties throughout the Plan area, and in determining the public's response to the opportunities being provided.

In addition to gathering data on use, the Bureau will monitor public use to determine:

(1) whether improvements to existing facilities or additional facilities might be needed and compatible with general objectives;

- (2) whether additional measures are needed to ensure that recreational users have a high quality experience (which could be affected by the numbers of users, and interactions among users with conflicting interests);
- (3) whether use is adversely affecting sensitive natural resources or the ecology of the area;
- (4) whether measures are needed to address unforeseen safety issues;
- (5) whether changing recreational uses and demands present the need or opportunity for adjustments to existing facilities and management; and
- (6) whether any changes are needed in the management of recreation in relation to other management objectives, including protection or enhancement of wildlife habitat and forest management.

Wildlife

The Bureau, through its Wildlife Biologist and Technician, routinely conducts a variety of species monitoring activities statewide. The following are monitoring activities that are ongoing or anticipated for the Western Mountains Region:

- (1) The Bureau will cooperate with IF&W in the monitoring of game species, including deer, moose, grouse, and black bear;
- (2) The Bureau will identify and map significant wildlife habitat such as vernal pools and den trees in the process of developing its detailed forest management prescriptions. The boundaries of any sensitive natural communities will also be delineated on the ground at this time. Any significant natural areas or wildlife habitat will then be subject to appropriate protections.

Timber Management

Local work plans, called prescriptions, are prepared by professional foresters in accordance with Bureau policies specified in its *Integrated Resource Policy*, with input from other staff. These documents are then peer-reviewed prior to approval. Preparation and layout of all timber sales involve field staff looking at every acre to be treated. Trees to be harvested are generally hand marked on a majority of these acres. Regional field staff provide regular on-site supervision of harvest activities, with senior staff visiting these sites on a less frequent basis. After the harvest is completed, roads, trails, and water crossings are discontinued as appropriate, although some management roads may remain open to vehicle travel. Changes in stand type resulting from the harvest are then recorded so that the Bureau's GIS system can be updated.

The Bureau is currently developing a post-harvest monitoring plan to assist forest managers in assessing harvest outcomes on all managed lands. The monitoring plan will also address water quality and Best Management Practices (BMPs) utilized during harvest activities.

Third party monitoring is done mainly through the forest certification programs of the Forest Stewardship Council (FSC) and the Sustainable Forestry Initiative (SFI). Each program conducts rigorous investigations of both planning and on-ground practices. An initial audit by both programs was completed in 2001, with certification awarded in 2002. A full re-audit of both programs was conducted in the fall of 2006 with certification granted in 2007. The Bureau is also subject to compliance audits during the 5-year certification period.

VI. Appendices

- A. Public Process: Advisory Committee Members; Public Comments and Bureau Responses
- B. Statutes and Agreements
- C. IRP Descriptions
- D. Glossary
- E. References
- F. Allocation Maps
- G. MNAP Natural Resources Inventory (under separate cover; available on request)
- H. Timber and Renewable Resource Documents (available on request)
 - o Compartment Examination Manual
 - o Prescription Manual and prescriptions for the Western Mountains Region lands
 - o Timber Sale Manual
 - o Forest Inventory data
 - Forest Certification Reports from Sustainable Forestry Initiative, Forest Stewardship Council (2002,2007 and 2009).
 - o Maine Bureau of Parks and Lands Forest Certification Manual
 - o Soil surveys
 - o Forest Laws of Maine
 - o Best Management Practices Manual

Appendix A: Public Review Process - Advisory Committee Members; Public Comments and Bureau Responses

The Advisory Committee Members:

Jeremy Sheaffer The Wilderness Society Ken Hotopp Mahoosuc Land Trust

Mike Ewing Maine Appalachian Trail Club
Paul Casey Umbagog National Wildlife Refuge
Mac Dudley Maine Snowmobile Association

Ernie DeLuca NextEra Energy

Cathy Mattson

Hawk Metheny Appalachian Trail Conservancy

Joseph May

Dave Herring Maine Huts and Trails

Christopher Nichols Seven Islands

Marc Edwards University of Maine Cooperative Extension

Dave Boucher Inland Fisheries and Wildlife

Gordon Gamble Bayroot/Wagner Forest Management
Don Kleiner Maine Professional Guides Association

Kevin Slater Mahoosuc Guide Service Shelby Rousseau Rangeley Lakes Heritage Trust

Dina Jackson Androscoggin Valley Council of Governments

Kent Nelson Maine Forest Service

Jeff Stern Androscoggin River Watershed Council

Dan Mitchell ATV Maine

the Western Mountains region.

Andrew Norkin Appalachian Mountain Club

Maine Department of Conservation Bureau of Parks and Lands WRITTEN PUBLIC COMMENTS

Summary of Written Comments on the First Draft Plan (written comment period from August 25 to September 28, 2010) and Final Draft Plan (written comment period November 20 to December 24, 2010).

Comments have been paraphrased, and similar comments have been consolidated		
Comment	Response	
General Management Plan Comments		
From: Kent Nelson, Maine Forest Service, Forest Protection Division		
Unauthorized / unattended campfires, increases	The Bureau appreciates the consideration of	
in recreational use and nearby camps and	MFS of reducing environmental impacts of fire	
limited access increase the threat of wildfires to	suppression in special protection and	

backcountry non-mechanized areas. The

The MFS will continue to maintain two remote landing zones for fire protection / emergency medical evacuation.

Each year, the MFS and local fire departments should review the locations of ecologically sensitive areas and include maps indicating "special protection" and "backcountry non-mechanized" areas in district fire plans. Emphasis should be placed on using wildfire suppression techniques that reduce environmental impacts.

The BPL should continue efforts to support fire prevention education, including in kiosks.

The BPL should continue to inform MFS of road closures, supply gate keys or combinations, and provide adequate turn around room when feasible.

The location and number of authorized permit sites should continue to be reviewed annually by both the BPL and the MFS.

 The MFS agrees with the need for a boat ramp on Beaver Mountain Lake and in the event of a wildfire, would benefit from the access to the water. Perhaps a dry hydrant should also be considered for this location. Bureau will continue to work with the MFS on strategies to minimize wildfire risks and facilitate fire suppression.

From: Penny Gray, Vice President, Harraseeket Inn and Lisa Lindsay, Wilton

- Large wind installations are being proposed on mountain tops and ridge lines throughout the western mountains. These turbines and their accompanying infrastructure threaten the region's scenic beauty, recreation opportunities and economy. The Bureau should take this into account when planning for the future of these lands.
- Wind development on private lands in the state is within the jurisdiction of the Maine Department of Environmental Protection and Maine Land Use Regulation Commission. No wind projects are proposed for Parks or Public Reserved Lands in the Western Mountains region, therefore, the management plan does not address this issue.

Comments on Mahoosuc Unit and Grafton Notch State Park

Comments on ORV use in the southern portion of Mahoosuc Unit

From: Dr. Thomas Dawson, Campowner

- The plan should allow ATV riders to use the
- The plan allows ATV riders as well as other

Bull Branch Road and the Sunday River Road (otherwise known as the Coburn Field Road) in the Mahoosuc Unit.

motorized vehicles to use the Bull Branch Road to the Wright Trail parking lot and the Sunday River road. The Sunday River Road is designated as a *management road with shared use status*—which means it is a road the Bureau maintains for timber management access, however, it is open to use by the public for use of passenger vehicles, ATVs, horses and bicycles.

The Bull Branch Road is a public use road, as it provides access for recreational destinations on the public lands—the Wright Trail and Frenchman's Hole. The Bull Branch Road—from Twin Bridges to the Wright Trail parking area—will be maintained as a public use road in this plan, open to passenger vehicles, ATVs and bicycles. Beyond the Wright Trail parking lot the road becomes a network of management roads closed to public vehicular use or ATV use.

From: John Chandler, Campowner

- Management roads within the timber management areas off the Sunday River Road in Riley Township should be open to light-weight ATVs. These areas are not very scenic, not used by hikers, and hunters need to be able to take ATVs in to retrieve game. Light weight ATVs do not cause the kind of damage to roads that Jeeps do. Public lands should be made more accessible, not less, for those who are older and less physically fit. In the Bull Brach timber management area, access roads should be kept open for hunters and fishermen, and at the very least for emergency vehicles.
- The Bureau Integrated Resource Policy (IRP), adopted in 2000, is a policy and planning document which guides management recommendations in this and other management plans. Guidance from the IRP on ATV use on public lands includes the following from pp. 62-63:
 - "A1. Recreational use of All-Terrain Vehicles (ATVs) shall be allowed on gravel roads designated for such use by the Bureau. All gravel roads shall be so designated, except those located on Public Reserved and Nonreserved Lands that are surrounded by privately-owned lands over which the transportation of ATVs is prohibited, those deemed unsuitable for ATV use by the Bureau due to environmental or safety concerns or incompatibility with other uses, and those located in areas allocated as Special Protection Natural or Historic/Cultural Areas and Backcountry Non-mechanized Areas. Gravel roads in areas allocated for Special Protection

Ecological Reserves and Remote Recreation shall be designated only when the road segment is open for use by all public vehicles or meets the three criteria listed under A.2.

A2. Off-road ATV use shall be allowed only on trails designated for such use by the Bureau. Designation of ATV trails shall be considered during the management planning process or upon request. Designated trails may be allowed in areas allocated for Special Protection Ecological Reserves or Remote Recreation Areas when all of the following criteria are met: no feasible alternative exists, no significant impact on protected resource values will occur, and the designated trail will provide a crucial link in a significant trail system."

• Consistent with A1 of the IRP, the Bureau has designated all gravel roads in the Mahoosuc Unit—the Sunday River Road and the Bull Branch Road to the Wright Trail parking lot—as shared use roads and thus open to ATVs (as well as passenger vehicles, horses and bicycles). Consistent with A2, the Bureau has chosen not to build ATV trails in the Mahoosuc Unit, because the vision and management direction for the Mahoosuc Unit has since the 1988 management plan, and continues to be to manage the recreation for back-country recreation.

From: Jeff Stern, Androscoggin River Watershed Council

- The Plan should address erosion caused by ORV use in the Mahoosuc Unit---particularly in the southern portion—in a number of ways. The recommendation in the final draft plan should be strengthened to say the Bureau "will" apply the methods listed to eliminate ORV use instead of "could". Retiring and blocking BPL timber management roads will be the most effective method. Establishing an IFW warden presence is not likely to occur because of IFW budget constraints.
- The final draft recommendation of reaching out to ORV clubs should be expanded to include assigning the proposed recreation coordinator the task of developing an ORV plan for roads
- The Bureau listed methods that could be considered in eliminating the ORV use off of the Sunday River Road. The management plan provides guidance to Bureau staff, providing clear management objectives, but providing a degree of flexibility for Bureau staff in implementing objectives. Effective methods for accomplishing the management goal of working to eliminate unauthorized ORV use in the Unit will be determined by staff and may include blocking and retiring roads, reaching out to clubs, enforcement or a combination of these methods.
- This management plan recommends allowing ORVs on the Bull Branch Road up to the

- that are acceptable or off-limits to them and ARWC would be willing to assist in this task.
- Additionally, BPL should hold erosion control seminars for ORV user groups in concert with the DEP Non-point Source Training and Resource Center, and ARWC is willing to help organize and publicize. The placing of mulch along bare areas of stream banks by some ORV users shows there is already some willingness and awareness to address this issue.
- Wright Trail parking lot, and on the Sunday River Road. It recommends allowing these uses to continue, but not promoting the Mahoosuc Unit as a motorized trail destination. Therefore, developing an ORV plan for the Unit will not be consistent with this management objective.
- The Bureau's Off Road Vehicle Program (ORV) staff members are trained and certified by the DEP Non-point Source Training and Resource Center in erosion and sedimentation control practices. The ORV program holds field seminars for ORV clubs on Best Management Practices (BMPs) for trail construction and maintenance. ARWC and any other interested parties are encouraged to contact the Bureau's ORV program about upcoming seminars.

From: Joint comments from: Kevin Slater and Polly Mahoney of Mahoosuc Guide Service, Caroline Blair-Smith of Outward Bound, Abi Morrison, Riley Landowner

- The ATV trails partly on state land are mapped but not well marked. They should be clearly designated and coordinated with state land managers for construction and maintenance.
- Any ATV trails in the Mahoosuc Unit other than on gravel shared-use roads as mentioned responses to Stern and Chandler above, are unauthorized trails. This management plan recommends allowing ORVs on the Bull Branch Road up to the Wright Trail parking lot, and on the Sunday River Road. It recommends allowing these uses to continue, but not promoting the Mahoosuc Unit as a motorized trail destination.

From: Joint comments from: Kevin Slater and Polly Mahoney of Mahoosuc Guide Service, Caroline Blair-Smith of Outward Bound, Abi Morrison, Riley Landowner

- A designated snowmobile trail corridor is needed through the Sunday River valley on state lands to the Route 2 corridor.
- The Bureau can accommodate snowmobile trails on areas of the Mahoosuc Unti that are allocated for Timber Management as the dominant use. Interested parties should work with the regional staff to find appropriate routes that do not conflict with other uses described in this Plan.

Comments on Provision of information for recreationists

From: Andy Bartleet, Outward Bound

- The Bureau should add a specific statement in the plan about improving the Bureau's website to provide recreationists information on trail conditions, campsites, logging operations, gate
- A statement has been added to the plan to emphasize the importance of adding greater information for recreation on the Bureau's website on Mahoosuc. The Bureau also

closings, rules and guidelines, and other information relevant to recreational planning. Greater resources should be allocated for updating and distributing information and education for users. Organized groups such as Outward Bound have to coordinate many group itineraries and so any information to prevent having to change plans during the trips is important.

encourages organized recreational groups to contact the Western Region Public Lands office in Farmington as needed to get information on topics such logging operations, gate closings, and other matters related to trip planning.

From: Appalachian Mountain Club

- The Bureau should coordinate with the Mahoosuc Initiative and local businesses and chambers of commerce in improving information for recreationists.
- The Bureau agrees that coordinating with the Mahoosuc Initiative members and local businesses and chambers of commerce could increase and improve information for recreationists. Language has been added to the Plan suggesting this be explored..

Comments on Nordic skiing

From: Joint comments from: Kevin Slater and Polly Mahoney of Mahoosuc Guide Service, Caroline Blair-Smith of Outward Bound, Abi Morrison, Riley Landowner, Comments from the Bethel Outing Club

- The Upper Sunday River valley is a unique resource for Nordic skiing due to its high snowfall (early and late in the season), its topography and logging road network. It is the eventual terminus of Maine Huts and Trails. The area has the potential of a ski network of statewide significance.
- The Management Plan language reflects the value of this area for Nordic skiing and has also incorporated in the management recommendations the intent to partner with local groups to designate routes for Nordic skiing.

From: Bethel Outing Club, Mahoosuc Land Trust, and Joint comments from: Brad Clarke of Bethel Outing Club, Kevin Slater and Polly Mahoney of Mahoosuc Guide Service, Landon Fake of Bethel Trails Committee, Caroline Blair-Smith of Outward Bound, Steve Keane of Telstar Nordic Team, Jeremy Nellis of Gould Academy Nordic program and Mac Davis of Maine Wilderness Guides Association

- The Bull Branch Road should be managed for Nordic skiing and non-motorized travel between December 1 and March 31, except when management activities require their use. There is conflict when wheeled vehicles access this road in winter.
- The Bureau supports this request. The Management Plan recommendations have been edited to specify that the Bull Branch Road will be managed for Nordic skiing and other non-motorized uses beginning December 1, or after the first significant snowfall, which ever is later.

From: Joint comments from: Brad Clarke of Bethel Outing Club, Kevin Slater and Polly Mahoney of Mahoosuc Guide Service, Landon Fake of Bethel Trails Committee, Caroline Blair-Smith of Outward Bound, Steve Keane of Telstar Nordic Team, Jeremy Nellis of Gould Academy Nordic program and Mac Davis of Maine Wilderness Guides Association

- Nordic ski trails in the Bull Branch Valley and over Miles Notch need to be groomed to be
- Currently, there is no specific proposal for locating a groomed Nordic ski trail system

usable by the majority of the public. The plan should have language to allow mechanized grooming in the Ecological Reserve and across the Backcountry Non-mechanized allocation in Miles Notch, dependent on routes and management that protects the ecological integrity of the area that these allocations were designed to protect. Or specify that the Special Use permitting process could allow for grooming, if this is the case.

other than the general location of the Bull Branch valley. The resource allocations for the plan in this area are a blend of ecological reserve, wildlife, backcountry nonmechanized, and timber management. The Bureau will be working with local Nordic ski interests to designate routes and allow for trail grooming. The Bureau and Nordic ski groups will have to consider many factors in locating a trail—such as up-coming timber operations and terrain. Under the resource allocation system, grooming for Nordic skiing would be easily allowed in the timber dominant allocation, and in the wildlife allocation on existing management roads. If, in the process of designating specific routes for ski grooming, it is determined that there is a desirable route that extends into the ecological reserve or backcountry non-mechanized allocations, the Bureau will need to consider whether this is consistent with current policy and statutory guidance. The Ecological Reserve statute and the Bureau's IRP are the guiding documents the Bureau will consult to consider new recreational uses in the Ecological Reserve, and IRP description of the Backcountry Nonmechanized allocation will be consulted for decisions on mechanized grooming in the Backcountry non-mechanized area. Both of these can be found in the Appendix.

From: Joint comments from: Brad Clarke of Bethel Outing Club, Kevin Slater and Polly Mahoney of Mahoosuc Guide Service, Landon Fake of Bethel Trails Committee, Caroline Blair-Smith of Outward Bound, Steve Keane of Telstar Nordic Team, Jeremy Nellis of Gould Academy Nordic program and Mac Davis of Maine Wilderness Guides Association

- The plan should specify a person or position with whom the local backcountry recreation groups should coordinate on Nordic trails. Discussions are occurring with Bill Haslam, but the plan should formalize this.
- Pete Smith, the Western Region Lands
 Manager, based in Farmington or his designee
 is the contact for recreation on Public Reserved
 Lands in the Western region (including the
 Mahoosuc Unit) pending the creation of a
 designated recreation coordinator.

Comments on snowplowing, gating and parking to improve recreational access

From: Bethel Outing Club, Mahoosuc Land Trust

- The plan should improve recreational access and use by increasing winter parking access to motorized and non-motorized trails from Grafton Notch State Park, add new year-round
- The Bureau appreciates these specific requests for access improvements. Some of these comments are addressed in plan recommendations (see Grafton Notch State

roadside parking below Screw Auger Falls, plow the mouth of the Quonset Hut Road and close the gate in summer, close the gate at the foot of the Cable Road in summer and expand the parking area. These recommendations will address safety issues associated with overflow parking as well.

Park and Mahoosuc Unit Issues and Recommendations.) The recommendation addressing the issue titled 'winter use needs' recommends gathering more information about winter use, communicating with DOT on plowing needs, and working with partners groups. The Bureau recognizes that various interests may have differing views about appropriate access, and defers decisions on exact access improvements pending additional research and collaboration with these interests. The recommendation addressing the issue titled 'Bureau staff limitations' speaks to exploring the feasibility of providing a recreation coordinator, who could work on issues related to recreation management.

Comments on the Recreation Coordinator

From: Appalachian Trail Conservancy

- The Recreation Coordinator should be a top priority in the plan. If the Bureau can't fully fund this position, they should coordinate with AMC or the Mahoosuc Initiative on a jointly funded position.
- Language has been added to the recreation coordinator recommendation to explore pursuing joint funding with the Mahoosuc Initiative for this position.

From: Joint comments from: Brad Clarke of Bethel Outing Club, Kevin Slater and Polly Mahoney of Mahoosuc Guide Service, Landon Fake of Bethel Trails Committee, Caroline Blair-Smith of Outward Bound, Steve Keane of Telstar Nordic Team, Jeremy Nellis of Gould Academy Nordic program and Mac Davis of Maine Wilderness Guides Association

- A Bureau staff person should be designated in the interim period until the recreation coordinator position is filled to work with the chamber of commerce and local recreation groups on: public information, visitor use information, plowing for winter recreation, developing Nordic and other recreational trails that connect to local towns.
- The recreation coordinator position recommendation should be revised to direct the Bureau to explore options for joint funding of the position with local recreation and tourism organizations—this approach will be more likely to lead to funding.
- The Bureau will designate a staff person to serve this role until resources are secured for a dedicated recreation coordinator. The Bureau will explore options for funding, including joint funding of the position with local recreation and tourism organizations, as suggested.

From: Gordon Gamble of Wagner Forest Management

- Coordination is merited, but should be done by the park manager, or other existing personnel or recreation organizations. A new position should
- Language in the plan under the 'Recreational Resource Issues' and 'Grafton Notch State Park and Mahoosuc Unit Issues and

not be created for this. Part of the problem is there are beginning to be too many trails. Recommendations' describes the current staff limitations and the challenges that would be involved with implementing recreation plan recommendations, including more coordination between managing partners, under the current staff levels. The plan recommendation calls for investigating creating a new permanent position that would serve the larger Western Maine region working on similar coordination and recreation management issues throughout the region, not just in Grafton and Mahoosuc. Collaborative funding may be pursued for this position.

Miscellaneous Comments on Recreation in Grafton and Mahoosuc

From: Bethel Outing Club

- A detailed recreation plan for the Upper Sunday River and Bull Branch valley should be developed using local input to allow development of permanent trails. This area is potentially of statewide recreation significance and careful planning can prevent negative impacts to recreation during harvest operations.
- The public process for this management plan was an opportunity to get input from the public for planning and management for recreation. Management recommendations from this plan guide the Bureau toward performing more detailed recreational planning in many areas, including working with local groups in designating routes for Nordic skiing in the Bull Branch valley and allowing for grooming. Additionally, the Bureau will review the status of the plan recommendations and any new emerging issues with the advisory committee every five years after plan adoption. This will be another opportunity for assess progress in the Bureau's recreation planning.

From: Appalachian Mountain Club

- The Bureau should work with the Mahoosuc Initiative to examine winter uses for better facilitation of winter recreation.
- The plan recommends working with local groups in exploring winter recreation needs. The Mahoosuc Initiative—which includes Mahoosuc Land Trust, Androscoggin River Watershed Council, Northern White Mountain Chamber of Commerce, Appalachian Mountain Club, Appalachian Trail Conservancy, the Tri-county Community Action program and the Wilderness Society—is a large and diverse group. The Bureau would welcome a more formal relationship with the Mahoosuc Initiative to improve communication. This might, include having the Mahoosuc Initiative designating which member or members would be appropriate to

represent the Initiative in communicating with the Bureau on winter recreational needs, coordination and information sharing.

From: Joint comments from: Brad Clarke of Bethel Outing Club, Kevin Slater and Polly Mahoney of Mahoosuc Guide Service, Landon Fake of Bethel Trails Committee, Caroline Blair-Smith of Outward Bound, Steve Keane of Telstar Nordic Team, Jeremy Nellis of Gould Academy Nordic program and Mac Davis of Maine Wilderness Guides Association

- The Bureau should actively discourage use of popular bootleg trails. This can be done with signage and gating. The trail to Miles Notch from the Quonset Hut road could be discouraged with a gate—it is heavily used, poorly sited and badly eroding.
- The Plan has been amended to recommend that the Bureau explore ways to limit access to areas with erosion problems.

From: Appalachian Trail Conservancy

- If the Bureau cannot find funding to hire an additional summer staff person or intern, they should consider assisting with funding for the two seasonal staff that the AMC provides in Mahoosuc (one is a Speck Pond Caretaker, the other is a Mahoosuc Rover, who maintains the Full Goose and Carlo Col campsites and trails south into New Hampshire).
- The plan recommends increasing and improving information for backpackers and hikers in Grafton Notch State Park and the Mahoosuc Unit. Possible methods include exploring designating a summer staff person, ridge runner or intern to rove the trails and spend time in the Park AT parking lot, giving information to hikers on trail conditions, campsites etc. The Bureau would be glad to collaborate with partners in the Grafton Mahoosuc Trails Coalition including AMC in pursuing funding for this position. The Speck Pond caretaker and Mahoosuc Rover provide excellent information and service for hikers and backpackers in the southern portion of the Bureau's ownership and in the New Hampshire portion of the Mahoosuc Appalachian Trail.

However, there is additional need for a summer position to spend time in the Grafton Notch State Park AT parking lot and along trails throughout the Mahoosuc Unit, including the northern portion of the Bureau's Mahoosuc Unit AT and the Grafton Loop Trail.

From: Appalachian Mountain Club

- AMC is very interested in stronger partnerships in looking at potential management models for trails (such as alpine boardwalks on the Grafton Loop Trail).
- The Bureau looks forward to working with AMC and other partners in the upcoming Grafton Mahoosuc Trail Coalition to explore various trail management techniques to work toward an exemplary standard of balancing

recreation and environmental protection in Grafton and Mahoosuc. Comments on the Grafton and Mahoosuc Trail Coalition From: Appalachian Trail Conservancy • We request to be on the Coalition. We work • The Bureau would appreciate the addition of with many of the groups on the coalition, and the ATC to the Grafton and Mahoosuc Trail have much experience working with partners Coalition. The Coalition will be focused on along the Appalachian Trail, and also provide existing trails and developing and AT clubs funding for trail maintenance. implementing trail management plans and coordinating in the grant application process. Improving public information and sharing visitor use information are also possible topics. The ATC's on-going work with the Bureau, MATC and AMC, experience working with partners along the entire AT, and assistance in

From: Appalachian Mountain Club

• AMC supports the Coalition, but believes it should include the Mahoosuc Initiative.

• The Grafton Mahoosuc Trail Coalition will have a representative from Bureau Parks, Bureau Lands, AMC, MATC, ATC and MLT. Three of these members—AMC, ATC and MLT—are also members of the Mahoosuc Initiative. In the interest in keeping the Coalition a workable size, the Bureau would ask the three members who also are part of the Mahoosuc Initiative to consider also representing the MI interests, if they are any different from their own.

providing funding to AT clubs for trail maintenance, would all make the ATC an appropriate member of the coalition. The Plan has been revised to include the ATC as part of

the proposed Coalition.

Comments on Mahoosuc resource allocations

From: Mahoosuc Land Trust, The Wilderness Society, Appalachian Mountain Club, Bethel Outing Club

• We support the new Backcountry Nonmotorized designation on the ridgeline from Old Speck to Slide Mountain.

• The Bureau appreciates the support of these organizations for this allocation, but would like to note that the allocation is actually Backcountry *Non-mechanized*.

From: Mahoosuc Land Trust, The Wilderness Society, Appalachian Mountain Club, Bethel Outing Club

 We support the addition of a Backcountry Nonmotorized designation including the Bull Branch watershed upstream of the Wright Trail parking lot all the way east to Riley Hill and The dominant allocations for the Bull Branch watershed area are a combination of Special Protection Ecological Reserve, Backcountry Non-mechanized, Wildlife and Timber private lands. There is an opportunity here to restore a complete montane watershed to a wild, natural state. Hunting, fishing, mountain biking and machine-groomed Nordic skiing should be allowed uses (however, AMC requested backcountry *un-groomed* skiing on existing roads should be allowed).

Management. The Bureau, through the management planning process has determined these allocations to be most appropriate dominant uses in their respective locations, considering the ecological, wildlife, recreational and timber values of the landscape. Secondary allocations include: Backcountry Non-mechanized in the Ecological Reserve, Visual Class I along the Bull Branch up to the point of confluence of Speck Pond Brook Stream and along the Sunday River, and Visual Class II on Timber Dominant allocations. Hunting, fishing and un-groomed skiing are allowed uses in all of the Bull Branch allocations. Mountain biking and machine grooming are not authorized uses under Ecological Reserve and the Backcountry Non-mechanized allocations. However, exceptions can be made under certain circumstances. The ITS 82 snowmobile trail that crosses the Backcountry Non-mechanized allocation north of Sunday River Whitecap was allowed to continue because it is an existing use, so a Developed Recreation was created for this existing use.

This management plan recommends working with Nordic ski interests that have expressed interest in developing the valley for groomed Nordic skiing. No specific routes have been identified yet, although the management road system in the timber dominant area has been mentioned as well as a possible connection over Miles Notch at the east end of the Backcountry Non-mechanized allocation. Factors such as terrain and Bureau timber management needs must be considered before routes can be designated. If, in the process of designating specific routes for ski grooming, it is determined that there is a desirable and feasible route that extends into the Ecological Reserve or Backcountry Non-mechanized allocations, the Bureau will need to consider whether this use is allowed under the current statutes and Bureau policy. (see Appendices B and C)

From: Abi Morrison, Riley landowner

- Consider putting the Upper Bull Branch valley in a wilderness type of protection. The forest products value of this area is low due to: heavy cutting prior to state acquisition, slow regeneration of high value wood, and the rugged terrain. The recreational value is much higher, due to the growing popularity of non-motorized recreation such as mountain biking, snowshoeing, backcountry skiing, hunting and fishing. The popularity of the valley is increasing with the advertising of the Frenchman's Hole swimming area.
- Please see the response above, and the dominant allocation and recreation allocation maps for an explanation of allocations and recreational uses in the Bull Branch valley. The forest products value is discussed in the plan's 'Timber Resources' section. To briefly paraphrase, some of the harvests by land owners prior to state acquisition were quite heavy. However, quality and growth of hardwood type, which makes up 84 percent of the regulated acres in the Mahoosuc Unit (acres subject to timber harvesting) is as good as anywhere on Bureau lands, though quality is lower on some of the steeper land higher up on the mountains. The Bureau manages timber resources where allocated (in the Bull Branch and elsewhere) to provide a diverse forested environment and generate high quality—high value products to support Bureau operations and the local economy.

From: Mahoosuc Land Trust, The Wilderness Society, Appalachian Mountain Club, Bethel Outing Club

- We request the designation of Backcountry Non-motorized on the watershed of Wight Brook, excepting the un-named east tributary and associated snowmobile trail, and all lands above 2500 feet on East and West Baldpate. Timber management is not compatible with recreation here. (AMC requested all lands above 2700 feet and extensive steep slopes on the south side of the ridge be allocated non-timber zones).
- The allocations around the Baldpate Mountains and the Wight Brook area have been amended in the final plan as follows:
- Special Protection-Natural Area on the Baldpates containing the Heath Alpine Ridge and Subalpine Slope Bog communities, and surrounding exemplary Sub-Alpine Fir Forest natural communities ranked S3. Backcountry Non-mechanized is a secondary allocation.
- Special Protection-Historic Cultural for 100 feet on each side of the Appalachian Trail and side trails (the Grafton Loop Trail).
- Backcountry Non-mechanized for the 400 foot buffer extending from the 100 foot Special Protection zone designated on either side of the Appalachian Trail from the point entering the Unit east of Table Rock to an area defined around Baldpate Mountain by the 2,700 foot elevation contour, except where defined as Special Protection.

- Backcountry Non-mechanized for a buffer area around the Special Protection areas on the west and east peaks of Baldpate Mountain and the Sub-alpine Fir Forest special protection area west of Baldpate, extending down to an elevation of 2700 feet.
- Wildlife Dominant for the Wight Brook for 330 feet on each side.
- Remote recreation for a 400 foot buffer beyond the 100 foot special protection area on each side of the AT (except where designated Special Protection, or Backcountry Non-Mechanized) and Grafton Loop Trail (except where designated Special Protection, or Backcountry Non-Mechanized or Wildlife Dominant). This area is also subject to Visual Class I (where not already contained within a larger Special Protection or Backcountry Non-mechanized Dominant Allocation).
- Timber Dominant for the remaining areas.

The area around the Baldpates and the Wight Brook is rich in a variety of resources—from ecological resources in the sensitive alpine communities to the Backcountry recreational values of the Appalachian Trail and surrounding wild, scenic environment, to the valuable timber resources of an area that grows high quality hardwood timber. The dominant and secondary allocations in the area are designed to achieve an exemplary balance of recreational uses and management while protecting natural resource that are most sensitive to recreation and management activities.

From: Gordon Gamble of Wagner Forest Management

- All inoperable areas should not be designated as backcountry, as has been recommended by some advisory committee members, because operability is a moving target as technologies and markets evolve, and timber allocation does not preclude backcountry recreation.
- In the process of designating the resource allocations and management activities for each acre of public lands, the Bureau considers multiple uses, and the features and resources unique to different Public Reserved Lands and within different portion of each Land Unit. In areas designated as Backcountry Recreation,

the scenic qualities, remoteness, and opportunities for primitive recreation were considered as important resources, as well as considering the timber resources and inoperability of some of these areas. 14,617 acres of the Mahoosuc Unit are timber dominant, with timber management a secondary allocation in wildlife and remote recreation allocations. This gives the Bureau adequate opportunity for timber management and is an appropriate balance of multiple uses on public reserved lands.

From: Mahoosuc Land Trust, The Wilderness Society

- Provide better protection of riparian zones with a 200 foot wide "no-cut' Visual Class I zone for second order and larger streams. Extend these zones upstream to meet Special Protection or Backcountry zones. The current wildlife allocation does not have standards to prioritize conservation of these streams, and the Bureau's Visual no-cut zone along trails would allow fishermen, hunters and hikers to enjoy the appearance of an un-managed wild stream.
- The portion of Sunday River within the Unit, the Bull Branch Stream up to the point of confluence of Speck Pond Brook Stream, and the Cataracts Trail (along the Frye Brook) are given Visual Class I as a secondary allocation, due to the recreational value of these streams. Visual Class I does not prohibit timber harvesting. The secondary allocation of Visual Class I is a variable width buffer along recreational features (such as shorelines and trails) and public use roads, in which any timber management is directed to retain the appearance of an un-managed forest.

In the Bureau's wildlife dominant allocation, which is applied as the dominant allocation 330 feet on shorelines of lakes, ponds and other waterbodies including either side of major streams (and in the case of the Mahoosuc Unit, due to steep terrain, along some streams that otherwise would be considered minor), and 75 feet on either side of minor streams.. Bureau timber management both commercial and non-commercial—is designed to achieve habitat management goals. The Bureau foresters consult with a wildlife biologist from Maine Department of Inland Fisheries and Wildlife who is assigned fulltime to the Bureau. The Wildlife Biologist also maintains a document called "Wildlife Guidelines for the Public Reserved Lands of Maine" which describes the goals in riparian areas as promoting or maintaining vegetative

diversity, continuity of wildlife travel cover throughout the watershed and adjoining ecosystems, and protecting the aquatic environment from degradation.

From: Appalachian Mountain Club

- Designate riparian zones as wildlife along all mapped streams (not just along larger streams as noted on the Dominant Allocations maps). A 100 foot zone is acceptable on smaller streams.
- It is the Bureau's practice to designate all major stream and river systems with a 330 foot wildlife allocation on either side, and a 75 foot wildlife allocation on either side of minor streams (though the 75 foot allocation is often not mapped but determined in the forestry prescription process). As noted above, some otherwise minor streams have been assigned a 330 foot wildlife allocation due to the steep terrain. Major and minor streams are determined from existing map coverages for the purposes of this plan, and in the field when the Bureau foresters and wildlife biologist do forestry prescriptions for the landbase. Information on major streams, and in some cases minor streams, is given to the management plan coordinator for the resource allocation process. In the Mahoosuc Unit, not all acres have been through the forestry prescription process—many new parcels have entered the Bureau's ownership fairly recently and therefore, some information is lacking on riparian areas. As noted in the plan text on the wildlife allocations, as newer parcels are subject to forestry prescriptions, new wildlife allocations will be designated when major and minor streams are determined in this process.

From: Abi Morrison, Riley landowner

- If wilderness designation cannot be given to the Upper Bull Branch valley, the buffer zone along the Bull Branch stream and its tributaries should be at least 200 feet.
- A 330 foot wildlife allocation has been assigned to either side of Bull Branch and its tributaries. Please also see responses to Mahoosuc Land Trust and The Wilderness Society and the Appalachain Mountain Club above.

From: Joint comments from: Brad Clarke of Bethel Outing Club, Kevin Slater and Polly Mahoney of Mahoosuc Guide Service, Landon Fake of Bethel Trails Committee, Caroline Blair-Smith of Outward Bound, Steve Keane of Telstar Nordic Team, Jeremy Nellis of Gould Academy Nordic program and Mac Davis of Maine Wilderness Guides Association

- A 300 foot no-cut buffer should be applied on either side of the Bull Branch, Frye Brook, and
- See above responses. Please see response to Mahoosuc Land Trust and The Wilderness

Wight Brook. This is because of their recreational use, especially for fishing and swimming and their scenic qualities. A Backcountry Non-mechanized or Visual Class I might be more appropriate.

Society and the Appalachain Mountain Club above.

From: Gordon Gamble of Wagner Forest Management

- Bureau riparian management exceeds standards and should not become more restrictive in the Bull Branch area.
- The Bureau appreciates this confidence in its riparian management.

From: Appalachian Mountain Club

- Expand the Special Protection—Historic Cultural allocation along the AT to be 500 feet on either side of the Appalachian Trail. This will be consistent with the National Park Service, which has a 'no-cut' buffer of 500 feet on either side of the AT.
- The majority of the AT in the Mahoosuc Unit is surrounded by Special Protection or Backcountry Non-mechanized allocations, which have no timber harvesting. The only exception is in Andover West Surplus, where the AT is buffered for 100 feet on either side by Special Protection—Historic Cultural (a nocut designation), and for the next 400 feet on either side as Remote Recreation dominant with Visual Class I as a variable width secondary allocation, in which the appearance of an essentially un-disturbed forest will be maintained. These allocations provide protections that make the AT hiker/backpacker's experience in Bureau lands very consistent with NPS lands.

From: Christopher Nichols of Seven Islands Land Company

- The 100 foot 'no cut' zone on either side of the Appalachian Trail should be eliminated. A Visual Class I allocation can extend 500 feet on either side of the AT instead. Forestry and hiking are compatible, and a Visual Class I allocation can fit the various needs and overall objectives of managed lands and the AT.
- Many trails in Bureau public lands management allow timber management subject to Visual Class I standards adjacent to the trail. However, in considering the resource allocations along the Appalachian Trail and official side trails, the Bureau is also guided by policies and agreements between the National Park Service, Appalachian Trail Conservancy, Maine Appalachian Trail Club and others in managing the AT corridor. Such agreements and policies aim to provide a consistency of management along the AT corridor across different ownerships. The Bureau's allocations along the AT on the Mahoosuc Unit are mostly determined by criteria for allocating Ecological Reserves, Special Protection Natural Areas, and Backcountry Non-Mechanized Areas. Most of the AT on the Mahoosuc Unit lies

within these larger allocations. Portions of the AT and Grafton Loop Trail (an official AT side trail) that lie in Grafton Township and Andover West Surplus have allocations that are corridor-based, Because of the historiccultural nature of the AT and associated side trails, there is a 100 foot Special Protection Zone designated for these trails. In Andover West Surplus this 100 zone is expanded by a 400-foot Remote Recreation Zone (which allows timber management subject to a Visual Class I allocation. In Grafton Township the outer 400 foot corridor is allocated backcountry non-mechanized due to its connectivity with a backcountry nonmechanized area allocated for the Baldpate area. This is consistent with how the AT is managed on state lands in other areas, including the Bigelow Preserve, and is consistent with our longstanding agreement with the National Park Service.

From: Gordon Gamble of Wagner Forest Management

- A 'no-cut' strip of 100 feet on either side of the AT and side trails is excessive. Light harvesting should be considered in this area—the aesthetics can still be protected. The current allocation is unnecessarily restricting your management.
- See answer to Christopher Nichols above.

From: Gordon Gamble of Wagner Forest Management

- We are glad to see the area behind Screw Auger Falls allocated to timber management. The Backcountry designation around Slide Mountain is reasonable. I do not support any more Backcountry designation in this area, as Nordic skiing and snowshoeing can co-exist with timber management.
- The Bureau recognizes and agrees that recreation and timber management are compatible. Backcountry (no-cut) areas are reserved for exceptionally scenic and remote areas. The Bureau's final allocations reflect this.

From: Appalachian Trail Conservancy

- We support the Special Protection allocations for the Ecological Reserve and the Natural Area around Baldpate. These allocations will give these areas recognition and help leverage funding for trail maintenance and resource protection. We also support the Visual Class I allocation around the Appalachian Trail and side trails, and the recommendation of
- The Bureau appreciates the ATC's support in these management plan recommendations.

'balancing recreation and environmental protection'.

Comments on Timber Management in the Mahoosuc Unit

From: John Chandler, Campower

- In the 1950s, 60s and 70s, timber management on areas south of Mt. Carlo and Goose Eye Mountain authorized by the Bureau caused many millions of cubic feet of soil erosion. Roads and skidder trails continue to erode today. High rainfall levels and steep terrain add to the erosion potential. There should be no new major roads constructed unless they are properly planned and drainage is installed for at least a 100 year storm and permanent maintenance is provided. The 'chop and drop' restoration experiment in the Goose Eye area done by DEP, LURC and the National Foresthas been successful in stopping erosion and filling in lost soil in a haul road there. This technique—which is manpower intensive, but volunteers could be used—should be done in areas of special concern. It should be used in the higher elevation areas of the recent Bureau 'patch cuts" where it is difficult to bring in equipment.
- Oak is a very important tree species for wildlife—especially deer, bear, partridge and turkey. The lower south east slopes of Goose Eye Mountain have much oak, and this should be noted in the plan. Forestry practices of the oak should be done in conjunction with IF&W in that area, to provide food for those species, especially for deer in winter.

• As described in the plan's 'Acquisition History' and 'Timber Resources' sections, The Bureau of Parks and Lands (formerly the Bureau of Public Lands) timber management in Mahoosuc Unit began in 1984. The Bureau did not begin acquire lands for the Mahoosuc Unit until the 'original public lot' of 960 acres in Riley Township was traded in 1977 and approximately 21,000 acres were acquired from other landowners.

Currently, the Bureau adheres to Best Management Practices (BMPs) published by the Maine Forest Service in their "Best Management Practices for Forestry: Protecting Maine's Water Quality" handbook. These principles are used in construction of new roads or maintenance of existing roads. Where waterbars are needed on trails or roads, the Bureau uses the technique—by machine or by hand—that is most appropriate for the area.

• Language has been added to the plan's Timber Resources section noting the presence and importance of oak in the Mahoosuc Unit. The Bureau has a full-time wildlife biologist from the Maine Department of Inland Fisheries and Wildlife assigned to work with the Bureau on incorporating wildlife management into forestry practices. The wildlife biologists works closely with Bureau foresters on management of oak and beech to meet wildlife needs, among other wildlife management goals.

From: Kevin Slater and Polly Mahoney of Mahoosuc Guide Service, Caroline Blair-Smith of Outward Bound, Abi Morrison, Riley Landowner,

 Past Bureau harvests in the Bull Branch Valley have not been models of sustainable forest harvesting that co-exists with recreation. The Bureau needs to build credibility in this area which has a lot of recreational users. The Bureau has become increasingly sensitized to recreation interests since the earliest harvests on the Mahoosuc Unit in the early 1980's. In part this is due to increasing recreation use pressures on Bureau lands, particularly as timber harvests have increased on surrounding lands.

A recognition that this area has value for recreation, ecological significance, and timber has been formally in place since 1988 when the management plan for this unit designated the Gooseye drainage portion of the Bull Branch Valley as backcountry, and in 2001, this and more of the Bull Branch Valley was designated as Ecological Reserve. Additional parcels have been added to the Unit, and with those, more recreational opportunities and interest. Prior to this management plan, in the Bull Branch valley, the Bureau has been managing for recreation in the following places: in the Ecological Reserve on the Wright Trail, at the Frenchman's Hole swimming area and associated facilities, and along the public use road—the Bull Branch road up to the Wright Trail parking area.

This Plan marks the first opportunity to officially allocate the 2007 Grafton Legacy parcel; no Bureau timber harvesting has been performed yet on this new ly acquired piece. Much of the remainder of the Bull Branch valley has been in timber dominant allocation for some time. This Plan adds a Visual Class I protection zone to the 330 –foot wildlife protection zone allocated adjacent to Bull Branch, in recognition of recreation values along the stream. Where timber management is the dominant use, recreational uses are allowed, but these areas are not managed for recreational uses. However, the Bureau considers its management has and will be compatible with recreation interests.

Comments on Richardson Unit

Comments on the Upper Dam Road gate system

From: Rangeley Lakes Heritage Trust

- RLHT proposes a new Bureau gate system, which would remove Gate 2, and keep Gate 3 locked at all times. This proposal would eliminate confusion about which gates are open when. It will gain the best access for recreationists. It provides more security for camp owners in the fall, when currently Gate 3
- The Bureau believes this proposed gate system would be preferred in terms of administrative ease, simplicity and improved public access.
 As this management plan recommends, the Bureau will be developing a plan, to be implemented within five years, but not until after the completion of the dam re-

is open. It eliminates congestion at Gate 4—a NextEra/UWP gate—in the fall. There are some drawbacks to this system—it will not be as quiet for camp owners in July and August, and bird hunters may have to walk farther with the closure of Gate 3 in the fall. However, overall this proposal is simple, effective and serves everyone.

construction, to better serve the public. In developing this plan, the Bureau will investigate the feasibility of keeping gate 2 open and leaving gate 3 closed year round.

From: Rangeley Region Guides and Sportsmen's Association

- We support the Rangeley Lakes Heritage Trust proposal for the Upper Dam Road Gate system. The state should not continue the current restrictive policy which allows access during a critical time of year to only those who can walk a mile and a third in mountainous terrain.
- See response to Rangeley Lakes Heritage Trust, above.

From: NextEra Energy Resources, Union Water Power Company

- Proposed changes to the current Bureau gate system are inconsistent with the Upper Androscoggin River Storage Projects Settlement Agreement dated 08/28/1998. The State of Maine Department of Conservation was one of the parties to the Settlement agreement. The Settlement Agreement calls for maintaining the character of the area and maintaining existing public access and recreational opportunities. The Settlement Agreement calls for creating conservation areas now held by Rangeley Lakes Heritage Trust, and language also includes maintaining but not improving existing access. The Recreation Management Plan called for by the Settlement Agreement is to discourage uses or increases in levels of use that would disrupt the character of the area, and states that existing access routes will not be improved except to accommodate a dam re-build or major repair project and the licensee will return any of their roads to their existing condition.
- The Upper Androscoggin River Storage Projects Settlement Agreement dated 08/28/1998, which the Maine Department of Conservation was a party to along with Union Water Power, Rangeley Lakes Heritage Trust, Maine Department of Inland Fisheries and Wildlife, and several other parties, is a document that affects the future management of the Dam /Project Owner—Union Water Power Company, a subsidiary of NextEra Energy. The Settlement Agreement, and Recreation Management Plan describe policies and management goals that the Project Owner must implement on Project lands. The Settlement Agreement does not apply to adjacent non-project lands. In fact the Settlement is clear that it relates solely to the balance of values at the Project: "The Parties further agree that this balance in this Settlement Agreement is specific to these Projects. No Party shall be deemed, by virtue of participation in this Settlement Agreement, to have established precedent, or admitted or consented to any approach, methodology, or principle except as expressly provided herein.

The Settlement Agreement does not describe or codify the gate arrangement of the Bureau which in this context is an abutting landowner, and owner of most of the Upper Dam Road

that leads to the Dam. The current gate arrangement was negotiated between Union Water Power and the Bureau of Public Lands in the time period of the late 1980s and early 1990s, and is described in letters between these two parties, but has never been documented as formal Bureau policy.

Furthermore, the Bureau's proposal is not, in the Bureau's opinion, inconsistent with maintaining the character of the area where, as stated in the Settlement Agreement, (page 2), "access is, for the most part, by boat, logging road, or trail." This proposal does not change that. In this management plan, the Bureau is not recommending improvements or expansions to the Upper Dam Road or any other road on State land or land of the Project Owners. The Bureau is recommending revising the current gate arrangement on the public reserved lands, which has proven to be confusing to the public and a barrier to people with limited physical abilities.

As this management plan recommendation states, the Bureau will be working with NextEra Energy on development of this new gate arrangement to address safety and security concerns. The Bureau has added to this management plan that implementation of this new gate arrangement will not occur prior to the completion of dam re-construction.

From: NextEra Energy Resources, Union Water Power Company, Carmen Durso and Rosanne Zuffante, campowners, Carol and Doug Whittier, campowners, Paul Bean, campowner

- Changing the current Bureau gate system would violate an agreement worked out between the Bureau of Public Lands and Union Water Power, which involved input from many people, and is a reasonable compromise that considered public access, dam safety, private property rights and the fishery. This gate system was in place before the Settlement Agreement and is described in a letter from the Department of Conservation from 04/01/1994.
- The current gate arrangement was negotiated between Union Water Power and the Bureau of Public Lands (now the Bureau of Parks and Lands) in the time period of the late 1980s and early 1990s, and is described in correspondence between these two parties. However, this is not documented as formal Bureau policy, and no commitment was made by the Bureau, formally or informally, that this gate arrangement would be continued in perpetuity. The Settlement Agreement describes obligations and recreation

management that must be performed by the Project Owners, and is not binding on abutting land owners, public or private. The SA does not codify the gate arrangement previously negotiated between the Project Owner and the Bureau.

From: Carol and Doug Whittier, campowners, Union Water Power Company, Nick Mills, campowner, Sterling and Barbara Buzzell, campowner, Cynthia Fisher, campowner, William Burmeister, campowner, Eric Fisher, campowner, H. Richard Allen, Jr, campowner

- The current Bureau gate system should not be changed because the increase in visitors could cause the campowners to be at increased risk for theft, vandalism, loss of property value, and loss of privacy. Also, increased visitors will increase problems such as litter and unsupervised dogs.
- This management plan proposes revising the current gate system on Bureau lands and investigating the feasibility of keeping gate 2 open year-round and leaving gate 3 closed year-round. This option would cause the public to need to park at gate 3 year-round, which is approximately one-third of a mile from the Upper Dam pool. It is not expected to cause a great increase in traffic compared to what occurs under the current system, which currently causes the public to have to walk over a mile in July and August, but allows them to drive to the NextEra gate—very close to the Upper Dam pool—in September and October. The Bureau does not plan on promoting the Upper Dam pool as a recreational destination, as it is not on public land. The types of recreational uses that the Project Owners are guided to manage for by the Recreational Facilities and Management Plan will not change as a result of changes in the Bureau gate system. Therefore, no significant increase in visitors is expected to result.

From: Dave Boucher, Maine Department of Inland Fisheries and Wildlife

- If the gate 2 were eliminated on Bureau land, the Upper Dam pool fishery would not be compromised by increased use in July and August, because there are already highly restrictive fishing rules in place.
- The Bureau thanks MDIF&W for their comments on this matter.

From: H. Richard Allen Jr, campowner, Carol and Doug Whittier, campowners, Nick Mills, campowner, Sterling and Barbara Buzzell, campowners, Carmen Durso and Rosanne Zuffante, campowners, Peter Mills, campowner, David Allen

- Increased access to Upper Dam pool as a result of changing the Bureau gate system would increase the fishing pressure and potentially reduce the quality of the fisheries.
- The Bureau has received comments from MDIF&W that the current restrictive fishing rules at Upper Dam pool adequately protect the fisheries regardless of any changes in the Bureau gate system.

From: Peter Mills, camp owner, Nick Mills, camp owner

- If a single permanently closed gate is preferred, it should be placed further from the dam than gate 3 or gate 2, preferably at the S-curve where the Upper Dam Road once terminated.
- The S-curve referenced in these comments is identified as being even further from Upper Dam pool than the current gate 2. The Bureau's recommendation in revising the current gate system is to develop a plan that will eliminate current confusion over which gates are open when, and will improve access for people with limited physical abilities among other goals. The proposal of a single gate that is even further from Upper Dam pool than gate 2 would eliminate confusion, but make access for the public even more difficult than the current system, by forcing them to walk more than 1.3 miles at all times of year.

From: Maynard Webster

- All gates should be eliminated on Bureau land, except for the seasonal gate on Route 16. The people of Maine should not be deprived of their right to drive the full length of the road to the property boundary. It is unfair to allow a privileged few a key to the gate and deny the people of Maine vehicle access.
- The management plan's preferred option is to keep gate 3 closed year-round. Gate 3 is on public land, but is approximately 1,000 feet from the boundary of the NextEra ownership near Upper Dam (Rangeley Lakes Heritage Trust owns land very close to this boundary as well). Therefore, this option allows the public to drive almost to the edge of the public land boundary. A benefit of closing Gate 3 year-round is that there is currently a small parking area and outhouse.

From: Carol and Doug Whittier, camp owners, Sterling and Barbara Buzzell, camp owner, Cynthia Fisher, campowner, Eric Fisher, campowner, H. Richard Allen, Jr, campowner

- The increased access that would result from the proposed changes to the current Bureau gate system would increase risk to the public of exposure of injury at the dam. Safety around the dam is an important consideration and this is considered a high hazard facility by the Federal Energy Regulatory Commission.
- The Recreation Facilities and Management Plan for the Upper Dam Storage Project in section 3.5 states that the Project Owner—NextEra Energy--must "provide free public access across Project Owners property to the water and undeveloped project lands". Section 4.0 states that "effective management will provide the means to accommodate recreational needs while regulating water levels/flows, addressing environmental issues, eliminating safety concerns, and minimizing

conflict". The Bureau has committed in this management plan to work with NextEra Energy to address legitimate safety and security concerns when developing a plan to revise the current gate system on the public land. However, the responsibility to eliminate safety concerns for the public at the dam is the responsibility of NextEra Energy.

From: Ken Freye, Cynthia Fisher, campowner, Carol and Doug Whittier, campowners, Peter Mills, campowner, Nick Mills, campowner, John Evans, campowner

- Changes to the current Bureau gate system would increase access and degrade the remote character of Upper Dam. This area is renowned for its historic qualities and remote and pristine character.
- The Bureau recognizes that Upper Dam is an area of historical significance that is valued by many for its remote and scenic character. The Bureau wishes to work with NextEra Energy, Rangeley Lakes Heritage Trust, and Union Water Power to balance the important goals of preservation of this historic and remote character of this place, and the provision of public access to Upper Dam that are described in the Settlement Agreement and Recreation Facilities and Management Plan. The State of Maine owns the Upper Dam Road leading up to the property owned and managed by NextEra Energy. The Bureau will work with NextEra on revision of the gate system to achieve the best balance of achieving appropriate public access and protecting the remote and historical qualities of Upper Dam.

From: Dave Boucher, Maine Department of Inland Fisheries and Wildlife

- We recommend expanded parking at the existing Metallak Brook trailhead to accommodate day users (anglers and recreational boaters) and signage should be added.
- This has been added to the management plan as a recommendation.

From: Jeffrey Ray

- It is not acceptable that camping opportunities are locked in year after year by non-residents on Richardson Lake. I would suggest the same type of arrangement as with state parks or Baxter Park.
- The Bureau's management recommendation is to work with South Arm Campground to phase out the 'right of first refusal' system for reservations at the Richardson Unit

Comments on Four Ponds Unit

From: Maine Huts and Trails

- Maine Huts and Trails is working with landowners and local groups in the high peaks area between Kingfield and Carrabassatt Valley
- The Bureau added a recommendation to the management plan that if Maine Huts and Trails identifies the Four Ponds Unit for a potential

and Rangeley/Route 4 to indentify an appropriate location for the expansion of the Huts and Trails system. They would like to work with the Bureau to find an appropriate location for their trails with in public lands, particularly in the Four Ponds Unit.

trail, the Bureau will explore this proposal. The Bureau will work with Maine Huts and Trails and its Appalachian Trail partners on reviewing and locating the trail. Due to the lateness of this proposal in the management plan process, the Bureau is recommending hold a meeting of the advisory committee of this management plan to discuss this trail once an appropriate location is identified, and may consider holding a public meeting, particularly if a new motorized crossing (for grooming machines) of the Appalachian Trail is proposed.

From: Dave Boucher, Maine Department of Inland Fisheries and Wildlife

- On improved public access to Beaver Mountain Lake: we believe your recommendation is appropriate, and we would appreciate a site visit with Pete and Joe to determine that a launch site can or cannot be accommodated on the public lot.
- IF&W is encouraged to contact the Bureau Western Region Lands Manager and Boating Facilities Division Director toward this goal.

From: Dave Boucher, Maine Department of Inland Fisheries and Wildlife

- Informational signage on fisheries should be placed at trailheads on the remote ponds in the Four Ponds Unit (similar to signs at most boat launches in the Rangeley region).
- IF&W is encouraged to work with the Western Region Lands office toward appropriate fisheries signage in this and other public lands. This comment is more operational in nature, and is not addressed in the management plan text.

From: Gordon Gamble, Wagner Forest Management

- The protection of the AT with a 'no-cut' strip of 200 feet is excessive. The 400 foot strip on either side of that seems too restrictive.
- The Bureau's allocations in the Four Ponds Unit are very consistent with allocations on other Bureau lands and is also consistent with the Bureau's agreement with the National Park Service to manage the trail substantially in accordance with NPS standards. In this management, the AT receives a 100 foot on either side 'no-cut' buffer (Special Protection, Historic Cultural) and for 400 feet on either side of the 100 foot buffer, a Remote Recreation allocation with a Visual Class I variable width buffer as a secondary allocation. The Remote Recreation/Visual Class I allocations allow timber harvesting which will retain the appearance of an unmanaged forest from the AT.

Comments on Davis Lot

From: Dave Boucher, Maine Department of Inland Fisheries and Wildlife

- On the road issue, the IFW's specific goal for Flatiron Pond is to relocate the gate near the east entrance to the Flatiron Road to the existing trailhead near the south shoreline of Flatiron Pond, with signage directing anglers to the pond. This assumes an arrangement can be made with the landowner to open the first gate on the Bud Russell Road.
- If the Bureau is able to arrange with the private landowner of the Bud Russell Road gate to open the gates to the public, it will consult with IF&W about appropriate signage and gating around Flatiron Pond.

From: Maynard Webster

- The Bureau should work diligently on securing access to Big Kennebago Lake and Flatiron Pond and should consider constructing a new road to bypass the blocked road if access over the current road cannot be achieved.
- This management plan recommends working with surrounding private landowners to provide public access to the Davis Lot. The Bureau does not own or control the land or roads surrounding the Public Lot—roads leading to the public lot are owned privately. Therefore, building a road to bypass the gates is not possible on Bureau ownership is not possible.

Comments on Smalls Falls (Township E) Lot

From: Dave Boucher, Maine Department of Inland Fisheries and Wildlife

- IF&W is concerned that recreational, motorized gold dredging currently allowed on Chandler Mill Stream could be damaging to the sensitive fisheries. We recommend IF&W and the Bureau review impacts of this use and seek to eliminate it if negative impacts are identified.
- The management plan has identified this issue and recommends working with IF&W toward reviewing the potential impact and eliminating this use if unacceptable impacts are found.

Comments on Rangeley Plantation Lot

From: Joanne Dunlap

- Rangeley Plantation Lot The game sanctuary status should not be removed on the Rangeley Plantation Lot or on the neighboring game sanctuary lands.
- The Bureau should make more effort to contact abutters beyond public announcements and "Interested Person" letters.
- Game sanctuaries were originally established by the legislature in the 1920s and 30s. Over the years, some of this land has been acquired by the Bureau. As Public Reserved Land, game sanctuary hunting prohibitions create a conflict with the Bureau's practice of allowing hunting on Public Reserved Lands (except near hiking trails, campsites and other recreational facilities). The Plan's recommendation to work with the legislature to remove the game sanctuary status is consistent with our policy for all game sanctuary land under Bureau management. This recommendation is limited to the Rangeley Plantation Lot and has no bearing on other nearby sanctuary lands. Implementation of this recommendation

p-	Ţ
	requires a further legislative process.
	The Bureau makes efforts to directly contact
	all abutters by mail using information available
	from Maine Revenue Service, the Land Use
	Regulation Commission, or the town offices of
	organized towns. We also use email
	communication when possible and make effort
	to distribute information about the planning
	process widely via public notices, local media
	and other avenues. A summary of our
	communication efforts is available in the
	preface to these comments.

Appendix B: Guiding Statutes and Agreements

12 §1847. MANAGEMENT OF PUBLIC RESERVED LANDS

- 1. Purpose. The Legislature declares that it is in the public interest and for the general benefit of the people of this State that title, possession and the responsibility for the management of the public reserved lands be vested and established in the bureau acting on behalf of the people of the State, that the public reserved lands be managed under the principles of multiple use to produce a sustained yield of products and services by the use of prudent business practices and the principles of sound planning and that the public reserved lands be managed to demonstrate exemplary land management practices, including silvicultural, wildlife and recreation management practices, as a demonstration of state policies governing management of forested and related types of lands. [1997, c. 678, §13 (NEW) .]
- 2. Management plans. The director shall prepare, revise from time to time and maintain a comprehensive management plan for the management of the public reserved lands in accordance with the guidelines in this subchapter. The plan must provide for a flexible and practical approach to the coordinated management of the public reserved lands. In preparing, revising and maintaining such a management plan the director, to the extent practicable, shall compile and maintain an adequate inventory of the public reserved lands, including not only the timber on those lands but also the other multiple use values for which the public reserved lands are managed. In addition, the director shall consider all criteria listed in section 1858 for the location of public reserved lands in developing the management plan. The director is entitled to the full cooperation of the Bureau of Geology and Natural Areas, the Department of Inland Fisheries and Wildlife, the Maine Land Use Regulation Commission and the State Planning Office in compiling and maintaining the inventory of the public reserved lands. The director shall consult with those agencies as well as other appropriate state agencies in the preparation and maintenance of the comprehensive management plan for the public reserved lands. The plan must provide for the demonstration of appropriate management practices that will enhance the timber, wildlife, recreation, economic and other values of the lands. All management of the public reserved lands, to the extent practicable, must be in accordance with this management plan when prepared.

Within the context of the comprehensive management plan, the commissioner, after adequate opportunity for public review and comment, shall adopt a specific action plan for each unit of the public reserved lands system. Each action plan must include consideration of the related systems of silviculture and regeneration of forest resources and must provide for outdoor recreation including remote, undeveloped areas, timber, watershed protection, wildlife and fish. The commissioner shall provide adequate opportunity for public review and comment on any substantial revision of an action plan. Management of the public reserved lands before the action plans are completed must be in accordance with all other provisions of this section. [1999, c. 556, §19 (AMD) .]

- 3. Actions. The director may take actions on the public reserved lands consistent with the management plans for those lands and upon any terms and conditions and for any consideration the director considers reasonable.

 [1997, c. 678, §13 (NEW) .]
- **4. Land open to hunting.** The bureau and the Department of Inland Fisheries and Wildlife shall communicate and coordinate land management activities in a manner that ensures that the total number of acres of land open to hunting on public reserved lands and lands owned and managed by the Department of Inland Fisheries and Wildlife does not fall below the acreage open to hunting on January 1, 2008. These acres are subject to local ordinances and state laws and rules pertaining to hunting.

```
[ 2007, c. 564, §1 (NEW) .]
```

```
SECTION HISTORY 1997, c. 678, §13 (NEW). 1999, c. 556, §19 (AMD). 2007, c. 564, §1 (AMD).
```

All copyrights and other rights to statutory text are reserved by the State of Maine. The text included in this publication reflects changes made through the Second Regular Session of the 124th Legislature, is current through April 12, 2010, and is subject to change without notice. It is a version that has not been officially certified by the Secretary of State. Refer to the Maine Revised Statutes Annotated and supplements for certified text.

12 §1805. DESIGNATION OF ECOLOGICAL RESERVE (selected sections)

158

The director may designate ecological reserves on parcels of land under the jurisdiction of the bureau that were included in the inventory of potential ecological reserves published in the July 1998 report of the Maine Forest Biodiversity Project, "An Ecological Reserves System Inventory: Potential Ecological Reserves on Maine's Existing Public and Private Conservation Lands." The director may designate additional ecological reserves only in conjunction with the adoption of a management plan for a particular parcel of land and the process for adoption of that management plan must provide for public review and comment on the plan. When a proposed management plan includes designation of an ecological reserve, the director shall notify the joint standing committee of the Legislature having jurisdiction over matters pertaining to public lands of the proposal. [1999, c. 592, §3 (NEW).]

- 1. Allowed uses. Allowed uses within an ecological reserve must be compatible with the purpose of the ecological reserve and may not cause significant impact on natural community composition or ecosystem processes. Allowed uses include nonmanipulative scientific research, public education and nonmotorized recreation activities such as hiking, cross-country skiing, primitive camping, hunting, fishing and trapping. For the purposes of this subsection, "primitive camping" means camping in a location without facilities or where facilities are limited to a privy, fire ring, tent pad, 3-sided shelter and picnic table. The removal of trees and construction of facilities associated with these allowed uses are allowed. The director may allow other uses when their impact remains low and does not compromise the purpose of the ecological reserve. Recreational use of surface waters is under the jurisdiction of the Department of Inland Fisheries and Wildlife. [1999, C. 592, §3 (NEW) .]
- 2. Trails and roads for motorized vehicle use. The director shall allow the continuing use of an existing snowmobile trail, all-terrain vehicle trail or a road if the director determines the trail or road is well designed and built and situated in a safe location and its use has minimal adverse impact on the ecological value of an ecological reserve and it cannot be reasonably relocated outside the ecological reserve.

A new snowmobile or all-terrain vehicle trail or a new road is allowed only if the director determines all of the following criteria are met:

- A. No safe, cost-effective alternative exists; [1999, c. 592, §3 (NEW).]
- B. The impact on protected natural resource values is minimal; and [1999, c. 592, §3 (NEW).]
- C. The trail or road will provide a crucial link in a significant trail or road system. [1999, c. 592, §3 (NEW).]

```
[ 1999, c. 592, §3 (NEW) .]
```

3. Incompatible uses. Uses that are incompatible with the purpose of an ecological reserve are not allowed. Incompatible uses include timber harvesting, salvage harvesting, commercial mining and commercial sand and gravel excavation. For the purposes of this subsection, "salvage harvesting" means the removal of dead or damaged trees to recover economic value that would otherwise be lost.

```
[ 1999, c. 592, §3 (NEW) .]
```

All copyrights and other rights to statutory text are reserved by the State of Maine. The text included in this publication reflects changes made through the Second Regular Session of the 124th Legislature, is current through April 12, 2010, and is subject to change without notice. It is a version that has not been officially certified by the Secretary of State. Refer to the Maine Revised Statutes Annotated and supplements for certified text.

159

Memorandum of Agreement Between Maine Department of Conservation, Bureau of Parks and Lands And the Maine Department of Inland Fisheries and Wildlife, Bureau of Resource Management

Towns of Gilead and Bethel Androscoggin River Access

I. PURPOSES:

- A. This agreement is entered into by and between the Maine Department of Inland Fisheries and Wildlife (MDIFW) and the Maine Department of Conservation (DOC) to provide a management structure for two properties on the Androscoggin River in Bethel and Gilead, Oxford County, Maine (location maps attached). The properties are owned in fee by DOC and will be managed for public recreational access by MDIFW.
- B. Both parcels are located on the north shore of the Androscoggin River. The Gilead parcel contains 25.52 acres, has 776 feet of river frontage and is bisected by the North Road with 742 feet of road frontage. The Bethel parcel contains 17.48 acres, has 679 feet of river frontage, and has 702 feet of frontage on the North Road and 315 feet of frontage on the Gibson Road.
- C. The properties were acquired, in part with funds from the Land for Maine's Future program, to provide public recreational access to this river segment for fishing and hand carried watercraft launching and retrieving.

II. MDIFW WILL:

- Be responsible for overall site management and resource protection of the properties.
- Provide appropriate signage indicating the availability of the properties for public use and acknowledging the role of DOC and LMF in the acquisition.
- Provide enhanced accessibility from the North Road and develop adequate parking for the intended low impact use of the properties.
- Remove litter as needed. Monitor the use of the sites periodically and provide an annual report to DOC on public use and management issues, in particular the need for sanitary waste facilities.
- 5. If necessary, provide stream bank enhancements to insure bank stability.
- Consult with DOC prior to site improvements that involve the removal of trees or other vegetation, or the giving of notice or application for any site improvement.

III. BP&L

 The Bureau of Parks and Lands reserves all rights and revenues relating to timber management.

STATE OF MAINE, DEPARTMENT OF CONSERVATION
By fullred Halley
Date Oct 17,300
Willard R. Harris, Director
Maine Department of Conservation
Bureau of Parks and Lands
STATE OF MAINE, DEPARTMENT OF INLAND FISHERIES AND WILDLIFE
By Gen Boland Date Oct 25 2010
John Boland, Acting Director
Maine Department of Inland Fisheries and Wildlife
Bureau of Resource Management

Attach. Location Maps

Appendix C: A Summary of BPL's Resource Allocation System

Designation Criteria for Special Protection Areas

- 1. <u>Natural Areas</u>, or areas left in an undisturbed state as determined by deed, statute, or management plan; and areas containing rare and endangered species of wildlife and/or plants and their habitat, geological formations, or other notable natural features;
- **2.** <u>Ecological Reserves</u>, established by Title 12, Section 1801: "an area owned or leased by the State and under the jurisdiction of the Bureau, designated by the Director, for the purpose of maintaining one or more natural community types or native ecosystem types in a natural condition and range of variation and contributing to the protection of Maine's biological diversity, and managed: A) as a benchmark against which biological and environmental change can be measured, B) to protect sufficient habitat for those species whose habitat needs are unlikely to be met on lands managed for other purposes; or C) as a site for ongoing scientific research, long-term environmental monitoring, and education." Most ecological reserves will encompass more than 1,000 contiguous acres.
- **3.** <u>Historic/Cultural Areas</u> (above or below ground) containing valuable or important prehistoric, historic, and cultural features.

Management Direction

In general, uses allowed in special protection areas are carefully managed and limited to protect the significant resources and values that qualify for this allocation. Because of their sensitivity, these areas can seldom accommodate active manipulation or intensive use of the resource. Recreation as a secondary use is allowed with emphasis on non-motorized, dispersed activities. Other direction provided in the IRP includes:

- <u>Vegetative Management</u> on Ecological Reserves, including salvage harvesting, is also considered incompatible. Commercial timber harvesting is not allowed on either Ecological Reserves or Special Protection natural areas.
- <u>Wildlife management</u> within these areas must not manipulate vegetation or waters to create or enhance wildlife habitat.
- <u>Management or public use roads</u> are allowed under special circumstances, if the impact on the protected resources is minimal.
- <u>Trails for non-motorized activities</u> must be well designed and constructed, be situated in safe locations, and have minimal adverse impact on the values for which the area is being protected. *Trail facilities and primitive campsites* must be rustic in design and accessible only by foot from trailheads located adjacent to public use roads, or by water.
- <u>Carry-in boat access sites</u> are allowed on water bodies where boating activity does not negatively impact the purposes for which the Special Protection Area was established.
- <u>Hunting, fishing, and trapping</u> are allowed where they do not conflict with the management of historic or cultural areas or the safety of other users.

<u>Research</u>, interpretive trails, habitat management for endangered or threatened species, are allowed in Special Protection natural areas unless limited by other management guidelines

Designation Criteria for Backcountry Recreation Areas

Relatively large areas (usually 1,000 acres or more) are allocated for Backcountry recreational use where a special combination of features are present, including:

- Superior scenic quality
- Remoteness
- Wild and pristine character
- Capacity to impart a sense of solitude

Backcountry Areas are comprised of two types:

<u>Non-mechanized Backcountry Areas</u> – roadless areas with outstanding opportunities for solitude and a primitive and unconfined type of dispersed recreation where trails for non-mechanized travel are provided and no timber harvesting occurs.

<u>Motorized Backcountry Areas</u> – multi-use areas with significant opportunities for dispersed recreation where trails for motorized activities and timber harvesting are allowed.

Management Direction

<u>Trail facilities and campsites</u> in all Backcountry Areas will be rustic in design and accessible from trailheads located outside the area, adjacent to management roads, or by water. All trails must be well designed and constructed, situated in safe locations, and have minimal adverse impact on the Backcountry values.

<u>Management roads and service roads</u> will be allowed as a secondary use in those Backcountry Areas where timber harvesting is allowed.

<u>Timber management</u> in Motorized Backcountry Areas will be an allowed secondary use, and will be designed to enhance vegetative and wildlife diversity. Salvage harvesting is allowed in Motorized Backcountry Areas only.

<u>Wildlife management</u> in Non-mechanized Backcountry Areas will be non-extractive in nature.

Designation Criteria for Wildlife Dominant Areas

- **1.** <u>Essential habitats</u> are those regulated by law and currently consist of bald eagle, piping plover, and least tern nest sites (usually be categorized as Special Protection as well as Wildlife Dominant Areas).
- **2.** <u>Significant habitats</u>, defined by Maine's Natural Resource Protection Act, include habitat for endangered and threatened species; deer wintering areas; seabird nesting islands; vernal

pools; waterfowl and wading bird habitats; shorebird nesting, feeding, and staging areas; and Atlantic salmon habitat.

3. <u>Specialized habitat areas and features</u> include rare natural communities; riparian areas; aquatic areas; wetlands; wildlife trees such as mast producing hardwood stands (oak and beech), snags and dead trees, den trees (live trees with cavities), large woody debris on the ground, apple trees, and raptor nest trees; seeps; old fields/grasslands; alpine areas; folist sites (a thick organic layer on sloping ground); and forest openings.

Management Direction

Recreation and timber management are secondary uses in most Wildlife Dominant Areas. Recreational use of Wildlife Dominant Areas typically includes hiking, camping, fishing, hunting, trapping, and sightseeing. Motorized trails for snowmobiling and ATV riding are allowed to cross these areas if they do not conflict with the primary wildlife use of the area and there is no other safe, cost-effective alternative (such as routing a trail around the wildlife area). Direction provided in the IRP includes:

<u>Habitat management for wildlife</u>, including commercial and noncommercial harvesting of trees, will be designed to maximize plant and animal diversity and to provide habitat conditions to enhance population levels where desirable.

<u>Endangered or threatened plants and animals</u> – The Bureau will cooperate with the US Fish and Wildlife Service, National Marine Fisheries Service, Maine Department if Inland Fisheries and Wildlife, and Maine Natural Areas Program in the delineation of critical habitat and development of protection or recovery plans by these agencies on Bureau lands.

<u>Timber management</u> as a secondary use in riparian buffers will employ the selection system, retaining all den trees and snags consistent with operational safety. In other wildlifedominant areas it will be managed to enhance wildlife values.

Designation Criteria for Remote Recreation Areas

- 1. Allocated to protect natural/scenic values as well as recreation values. Often have significant opportunities for low-intensity, dispersed, non-motorized recreation.
- 2. Usually are relatively long corridors rather than broad, expansive areas.
- 3. May be a secondary allocation for Wildlife Dominant areas and Special Protection Ecological Reserve areas.
- 4. Examples include trail corridors, shorelines, and remote ponds.

Management Direction

Remote Recreation areas are allocated to protect natural/scenic values as well as recreation values. The primary objective of this category is to provide non-motorized recreational opportunities; therefore, motorized recreation trails are allowed only under specific limited conditions, described below. Timber management is allowed as a secondary use. Direction provided in the IRP includes:

<u>Trail facilities and remote campsites</u> will be rustic in design and accessible by foot from trailheads, management and/or public roads, or by water.

<u>Existing snowmobile and all-terrain vehicle activity</u> may be continued on well-designed and constructed trails in locations that are safe, where the activity has minimal adverse impact on protected natural resource or remote recreation values, and where the trails cannot be reasonably relocated outside of the area.

<u>New snowmobile or all-terrain vehicle trails</u> are allowed <u>only if all three</u> of the following criteria are met:

- (1) no safe, cost effective alternative exists;
- (2) the impact on protected natural resource values or remote recreation values is minimal; and
- (3) the designated trail will provide a crucial link in a significant trail system;

<u>Access to Remote Recreation areas</u> is primarily walk-in, or boat, but may include vehicle access over timber management roads while these roads are being maintained for timber management.

Designation Criteria for Visual Areas

Many Bureau-managed properties have natural settings in which visual attributes enhance the enjoyment of recreational users. Timber harvests which create large openings, stumps and slash, gravel pits, and new road construction, when viewed from roads or trails, may detract significantly from the visual enjoyment of the area. To protect the land's aesthetic character, the Bureau uses a two-tier classification system to guide management planning, based on the sensitivity of the visual resource to be protected.

<u>Visual Class I</u> Areas where the foreground views of natural features may directly affect enjoyment of the viewer. Applied throughout the system to shorelines of great ponds and other major watercourses, designated trails, and designated public use roads.

<u>Visual Class II</u> Include views of forest canopies from ridge lines, the forest interior as it fades from the foreground of the observer, background hillsides viewed from water or public use roads, or interior views beyond the Visual Class I area likely to be seen from a trail or road.

Visual Class I Management Direction:

Timber harvesting is permitted under stringent limitations directed at retaining the appearance of an essentially undisturbed forest.

Openings will be contoured to the lay of the land and limited to a size that will maintain a natural forested appearance.

Within trail corridors or along public use roads it may be necessary to cut trees at ground level or cover stumps.

Branches, tops, and other slash will be pulled well back from any trails. Scenic vistas may be provided.

Visual Class II Management Direction:

Managed to avoid any obvious alterations to the landscape. Openings will be of a size and orientation as to not draw undue attention.

Designation Criteria for Developed Recreation Areas

<u>Developed Class I</u> areas are low to medium density developed recreation areas, while <u>Developed Class II</u> areas have medium to high density facilities and use such as campgrounds with modern sanitary facilities. There are no developed class II areas in the Aroostook Hills public reserved lands (they are more typical of State Parks).

Class I Developed Recreation Areas

Typically include more intensely developed recreation facilities than found in Remote Recreation Areas such as: drive-to primitive campsites with minimal supporting facilities; gravel boat access facilities and parking areas; shared use roads and/or trails designated for motorized activities; and trailhead parking areas. These areas do not usually have full-time management staff.

Management Direction

Developed Recreation areas allow a broad range of recreational activities, with timber management and wildlife management allowed as secondary uses. Direction provided in the IRP includes:

<u>Timber management</u>, allowed as compatible secondary use, is conducted in a way that is sensitive to visual, wildlife and user safety considerations. Single-age forest management is not allowed in these areas. Salvage and emergency harvests may occur where these do not significantly impact natural, historic, or cultural resources and features, or conflict with traditional recreational uses of the area.

<u>Wildlife management</u> may be a compatible secondary use. To the extent that such management occurs, it will be sensitive to visual, and user safety considerations.

<u>Visual consideration areas</u> are often designated in a buffer area surrounding the Developed Recreation area.

Designation Criteria for Timber Management Areas

- 1. Area meets Bureau guidelines as suitable for timber management, and is not prohibited by deed or statute.
- 2. Area is not dominated by another resource category. Where other uses are dominant, timber management may be a secondary use if conducted in a way that does not conflict with the dominant use.

Management Direction

The Bureau's timber management practices are governed by a combination of statute and Bureau policy, including but not limited to policies spelled out in the IRP. These general policies include:

- <u>Overall Objectives:</u> The Bureau's overall timber management objectives are to demonstrate exemplary management on a large ownership, sustaining a forest rich in late successional character and producing high value products (chiefly sawlogs and veneer) that contribute to the local economy and support management of Public Reserved lands, while maintaining or enhancing non-timber values (secondary uses), including wildlife habitat and recreation.
- <u>Forest Certification</u>: Timber management practices (whether as a dominant or secondary use) meet the sustainable forestry certification requirements of the Sustainable Forestry Initiative, and the Forest Stewardship Council.
- <u>Roads</u>: Public use, management, and service roads are allowed. However, the Bureau seeks to minimize the number of roads that are needed for reasonable public vehicular access or timber harvesting.
- <u>Recreational Use</u>: Most recreational uses are allowed but may be subject to temporary disruptions during management or harvesting operations. The Bureau has latitude within this allocation category to manage its timber lands with considerable deference to recreational opportunities. It may, through its decisions related to roads, provide varying recreational experiences. Opportunities for hiking, snowshoeing, back-country skiing, horseback riding, bicycling, vehicle touring and sightseeing, snowmobiling, and ATV riding all are possible within a timber management area, but may or may not be supported or feasible, depending on decisions related to creation of new trails, or management of existing roads and their accessibility to the public.

In addition, the IRP provides the following specific direction for timber management:

- <u>Site Suitability:</u> The Bureau will manage to achieve a composition of timber types that best utilize each site.
- <u>Diversity</u>: For both silvicultural and ecological purposes, the Bureau will maintain or enhance conditions of diversity on both a stand and wide-area (landscape) basis. The Bureau will manage for the full range of successional stages as well as forest types and tree species. The objective will be to provide good growing conditions, retain or enhance structural complexity, maintain connectivity of wildlife habitats, and create a vigorous forest more resistant to damage from insects and disease.
- <u>Silvicultural Systems</u>: A stand will be considered single-aged when its tree ages are all relatively close together or it has a single canopy layer. Stands containing two or more age classes and multiple canopy layers will be considered multi-aged. The Bureau will manage both single- and multi-aged stands consistent with the objectives stated above for diversity; and on most acres will maintain a component of tall trees at all times. Silvicultural strategy will favor the least disturbing method appropriate, and will usually work through multi-aged management.
- <u>Location and Maintenance of Log Landings:</u> Log landings will be set back from all roads designated as public use roads. Off-road yarding may be preferable along all gravel roads, but the visual intrusion of roadside yarding must be balanced with the increased

soil disturbance and loss of timber producing acres resulting from off-road spurs and access spurs. All yard locations and sizes will be approved by Bureau staff prior to construction, with the intention of keeping the area dedicated to log landings as small as feasible. At the conclusion of operations, all log landings where there has been major soil disturbance will be seeded to herbaceous growth to stabilize soil, provide wildlife benefits, and retain sites for future management need.

Appendix D. Glossary

- "Age Class": the biological age of a stand of timber; in single-aged stands, age classes are generally separated by 10-year intervals.
- "ATV Trails": designated trails of varying length with a variety of trail surfaces and grades, designed primarily for the use of all-terrain vehicles.
- "All-Terrain Vehicles": motor driven, off-road recreational vehicles capable of cross-country travel on land, snow, ice, marsh, swampland, or other natural terrain. For the purposes of this document an all-terrain vehicle includes a multi-track, multi-wheel or low pressure tire vehicle; a motorcycle or related 2-wheel vehicle; and 3- or 4-wheel or belt-driven vehicles. It does not include an automobile or motor truck; a snowmobile; an airmobile; a construction or logging vehicle used in performance of its common functions; a farm vehicle used for farming purposes; or a vehicle used exclusively for emergency, military, law enforcement, or fire control purposes (Title 12, Chapter 715, Section 7851.2).
- "Bicycling/ Recreation Biking Trails": designated trails of short to moderate length located on hard-packed or paved trail surfaces with slight to moderate grades, designed primarily for the use of groups or individuals seeking a more leisurely experience.
- "Boat Access Improved": vehicle-accessible hard-surfaced launch sites with gravel or hard-surface parking areas. May also contain one or more picnic tables, an outhouse, and floats or docks.
- **"Boat Access Unimproved":** vehicle-accessible launch sites with dirt or gravel ramps to the water and parking areas, and where no other facilities are normally provided.
- "Campgrounds": areas designed for transient occupancy by camping in tents, camp trailers, travel trailers, motor homes, or similar facilities or vehicles designed for temporary shelter. Developed campgrounds usually provide toilet buildings, drinking water, picnic tables, and fireplaces, and may provide disposal areas for RVs, showers, boat access to water, walking trails, and swimming opportunities.
- **"Carry-In Boat Access":** dirt or gravel launch sites accessible by foot over a short to moderate length trail, that generally accommodates the use of only small watercraft. Includes a trailhead with parking and a designated trail to the access site.
- "Clear-cut": an single-age harvesting method in which all trees or all merchantable trees are removed from a site in a single operation.
- "Commercial Forest Land": the portion of the landbase that is both available and capable of producing at least 20 cubic feet of wood or fiber per acre per year.

- "Commercial Harvest": any harvest from which forest products are sold. By contrast, in a precommercial harvest, no products are sold, and it is designed principally to improve stand quality and conditions.
- "Community": an assemblage of interacting plants and animals and their common environment, recurring across the landscape, in which the effects of recent human intervention are minimal ("Natural Landscapes Of Maine: A Classification Of Ecosystems and Natural Communities" Maine Natural Heritage Program. April, 1991).
- "Cross-Country Ski Trails": designated winter-use trails primarily available for the activity of cross-country skiing. Trails may be short to long for day or overnight use.
- **"Ecosystem Type":** a group of communities and their environment, occurring together over a particular portion of the landscape, and held together by some common physical or biotic feature. ("Natural Landscapes Of Maine: A Classification Of Ecosystems and Natural Communities." Maine Natural Heritage Program, April, 1991).
- **"Folist Site":** areas where thick mats of organic matter overlay bedrock, commonly found at high elevations.
- **"Forest Certification"**: A process in which a third party "independent" entity audits the policies and practices of a forest management organization against a set of standards or principles related to sustainable management. It may be limited to either land/forest management or product chain-of-custody, or may include both.
- "Forest Condition (or condition of the forest)": the state of the forest, including the age, size, height, species, and spatial arrangement of plants, and the functioning as an ecosystem of the combined plant and animal life of the forest.
- "Forest Stewardship Council (FSC) Certification": A third-party sustainable forestry certification program that was developed by the Forest Stewardship Council, an independent, non-profit, non-governmental organization founded in 1993. The FSC is comprised of representatives from environmental and conservation groups, the timber industry, the forestry profession, indigenous peoples' organizations, community forestry groups, and forest product certification organizations from 25 countries. For information about FSC standards see http://www.fscus.org/standards_criteria/ and www.fsc.org.
- **"Forest Type":** a descriptive title for an area of forest growth based on similarities of species and size characteristics.
- "Group Camping Areas": vehicle or foot-accessible areas designated for overnight camping by large groups. These may include one or more outhouses, several fire rings or fire grills, a minimum of one water source, and several picnic tables.

- "Horseback Ride/Pack Stock Trails": generally moderate to long-distance trails designated for use by horses, other ride, or pack stock.
- **"Invasive Species":** generally nonnative species which invade native ecosystems and successfully compete with and displace native species due to the absence of natural controls. Examples are purple loosestrife and the zebra mussel.
- **"Late successional"**: The condition in the natural progression of forest ecosystems where long-lived tree species dominate, large stems or trunks are common, and the rate of ecosystem change becomes much more gradual. Late successional forest are also mature forests that, because of their age and stand characteristics, harbor certain habitat not found elsewhere in the landscape.
- "Log Landings": areas, generally close to haul roads, where forest products may be hauled to and stored prior to being trucked to markets.
- "Management Roads": roads designed for timber management and/or administrative use that may be used by the public as long as they remain in service. Management roads may be closed in areas containing special resources, where there are issues of public safety or environmental protection.
- **"Mature Tree":** a tree which has reached the age at which its height growth has significantly slowed or ceased, though its diameter growth may still be substantial. When its annual growth no longer exceeds its internal decay and/or crown loss (net growth is negative), the tree is overmature.
- **"Motorized":** a mode of travel across the landbase which utilizes internal combustion or electric powered conveyances; which in itself constitutes a recreational activity, or facilitates participation in a recreational activity.
- **"Mountain Bike Trails":** designated trails generally located on rough trail surfaces with moderate to steep grades, designed primarily for the use of mountain bicycles with all-terrain tires by individuals seeking a challenging experience.
- "Multi-aged Management": management which is designed to retain two or more age classes and canopy layers at all times. Its harvest methods imitate natural disturbance regimes which cause partial stand replacement (shelterwood with reserves) or small gap disturbances (selection).
- "Natural Resource Values": described in Maine's Natural Resource Protection Act to include coastal sand dunes, coastal wetlands, significant wildlife habitat, fragile mountain areas, freshwater wetlands, great ponds and rivers, streams, and brooks. For the purposes of this plan they also include unique or unusual plant communities.
- "Non-motorized": a mode of travel across the landbase which does not utilize internal combustion, or electric powered conveyances; which in itself constitutes a recreational activity, or facilitates participation in a recreational activity.

- "Non-native (Exotic)": a species that enters or is deliberately introduced into an ecosystem beyond its historic range, except through natural expansion, including organisms transferred from other countries into the state, unnaturally occurring hybrids, cultivars, genetically altered or engineered species or strains, or species or subspecies with nonnative genetic lineage.
- "Old Growth Stand": a stand in which the majority of the main crown canopy consists of long-lived or late successional species usually 150 to 200 years old or older, often with characteristics such as large snags, large downed woody material, and multiple age classes, and in which evidence of human-caused disturbance is absent or old and faint.
- "Old Growth Tree": for the purposes of this document, a tree which is in the latter stages of maturity or is over-mature.
- "Pesticide": a chemical agent or substance employed to kill or suppress pests (such as insects, weeds, fungi, rodents, nematodes, or other organism) or intended for use as a plant regulator, defoliant, or desiccant. (from LURC Regulations, Ch. 10)
- **"Primitive Campsites":** campsites that are rustic in nature, have one outhouse, and may include tent pads, Adirondack-type shelters, and rustic picnic tables. Campsites may be accessed by vehicle, foot, or water.
- "Public Road or Roadway": any roadway which is owned, leased. or otherwise operated by a government body or public entity. (from LURC Regulations, Ch. 10)
- **"Public Use Roads":** all-weather gravel or paved roads designed for two-way travel to facilitate both public and administrative access to recreation facilities. Includes parking facilities provided for the public. Management will include roadside aesthetic values normally associated with travel influenced zones.
- "Recreation Values": the values associated with participation in outdoor recreation activities.
- **"Regeneration":** both the process of establishing new growth and the new growth itself, occurring naturally through seeding or sprouting, and artificially by planting seeds or seedlings.
- "Remote Ponds": As defined by the Maine Land Use Regulation Commission: ponds having no existing road access by two-wheel drive motor vehicles during summer months within ½ mile of the normal high water mark of the body of water with no more than one noncommercial remote camp and its accessory structures within ½ mile of the normal high water mark of the body of water, that support cold water game fisheries.
- "Riparian": an area of land or water that includes stream channels, lakes, floodplains and wetlands, and their adjacent upland ecosystems.
- **"Salvage":** a harvest operation designed to remove dead and dying timber in order to remove whatever value the stand may have before it becomes unmerchantable.

- **"Selection":** related to multi-aged management, the cutting of individual or small groups of trees; generally limited in area to patches of one acre or less.
- "Service Roads": summer or winter roads located to provide access to Bureau-owned lodging, maintenance structures, and utilities. Some service roads will be gated or plugged to prevent public access for safety, security, and other management objectives.
- **"Silviculture":** the branch of forestry which deals with the application of forest management principles to achieve specific objectives with respect to the production of forest products and services.
- **"Single-aged Management":** management which is designed to manage single age, single canopy layer stands. Its harvest methods imitate natural disturbance regimes which result in full stand replacement. A simple two-step (seed cut/removal cut) shelterwood is an example of a single-aged system.
- **"Snowmobile Trails":** designated winter-use trails of varying length located on a groomed trail surfaces with flat to moderate grades, designed primarily for the use of snowmobiles.
- **"Stand":** a group of trees, the characteristics of which are sufficiently alike to allow uniform classification.
- "Succession/ successional": progressive changes in species composition and forest community structure caused by natural processes over time.
- "Sustainable Forestry/ Harvest": that level of timber harvesting, expressed as treated acres and/or volume removals, which can be conducted on a perpetual basis while providing for nonforest values. Ideally this harvest level would be "even-flow," that is, the same quantity each year. In practice, the current condition of the different properties under Bureau timber management, and the ever-changing situation in markets, will dictate a somewhat cyclical harvest which will approach even-flow only over time periods of a decade or more.
- "Sustainable Forestry Initiative (SFI)": A third party sustainable forestry certification program that was developed in 1994 by the American Forest and Paper Association, which defines its program as "a comprehensive system of principles, objectives and performance measures that integrates the perpetual growing and harvesting of trees with the protection of wildlife, plants, soil and water quality." To review SFI standards see http://www.afandpa.org/Content/NavigationMenu/Environment_and_Recycling/SFI/The_SFI_Standard/The_SFI_Standard.htm.

Appendix E. References

Appalachian Mountain Club (AMC). 2010. "Appalachian Mountain Club." Online resources accessed at: http://www.outdoors.org. Accessed on 08/23/2010.

Mahoosuc Initiative, 2007. "Seeing the Mahoosucs Whole: Highlights from the Mahoosuc Region Resources Report." Report prepared by the Mahoosuc Initiative.

Maine Appalachian Trail Club (MATC). 2010. "Maine Appalachian Trail Club: Managing and Maintaining 267 Miles of the Appalachian Trail in Maine." Online resources accessed at: http://www.matc.org. Accessed on 08/23/2010.

Northern Forest Canoe Trail, Inc (NFCT). 2010. "Northern Forest Canoe Trail." Online resource accessed at: http://www.northernforestcanoetrail.org/. Accessed on 08/23/2010.

Polak, M., List, J. and K. Seigel. 2007. "Mahoosuc Region Resources Report." Presented by: Mahoosuc Land Trust, Androscoggin River Watershed Council, Tri-County Community Action Program. Online resource accessed on 08/18/2009 from: http://www.mahoosucinfo.org/.

Rangeley Lakes Heritage Trust (RLHT). 2009. Online resource accessed on 08/20/2009 from: http://rlht.org.

USDA Forest Service. 2009. "White Mountain National Forest." Online resource accessed on 08/20/2009 from: http://www.fs.fed.us/r9/forests/white_mountain/.

US Fish & Wildlife Service. 2008. "Lake Umbagog National Wildlife Refuge Final Comprehensive Conservation Plan and Environmental Impact Statement Summary." Online resource accessed on 12/28/2009 from: http://www.fws.gov/northeast/planning/Umbagog/finalCCP.html.

US Fish & Wildlife Service. 2009. Umbagog National Wildlife Refuge. Home Page. Online Resource access on 12/28/2009 from: http://www.fws.gov/northeast/lakeumbagog/.

Appendix F. Summary of Western Mountains Region Resource Allocations

	Total Acres Deeded	Special Protection Acres ²	Backcountry Non-Mech Acres ²	Remote Recreation Acres ²	Wildlife Acres ²	Develop Rec Class I Acres ²	Timber Mgt- Dom Acres ²	Timber Mgt- Sec Acres ²
Mahoosuc Unit	31,764	11,832	2,379	598	1,668	74	14,617	2,266
Bald Mountain Unit	1,873	-	-	-	265	50	1,535	265
Four Ponds Unit	6,018	158	-	892	521	1	4,197	1,413
Richardson Unit	18,484	1	-	-	2,830	8	15,533	2,830
Dallas Plantation Lots (N and S)	439	-	-	-	185	-	264	185
Davis Lot ¹	960	-	-	-	227	13	644	227
Lincoln Plantation Lots (W and E)	919	-	-	-	15	53	778	15
Magalloway Plantation Lot	1,044	-	-	-	93	-	1014	93
Rangeley Plantation Lot	469	-	-	-	-	-	462	1
Stetsontown Lot	41	-	-	-	-	41	-	-
Township E (Smalls Falls) Lot	370	-	-	-	135	-	242	135
Total Public Reserved Lands: Acres (%) ³	62,381	11,990 19.5	2,379 3.9	1,490 2.4	5,939 9.7	239 0.4	39,286 64.1	7,429 12.1

¹ Common and Undivided

² GIS Acres; does not total deeded acres due to inherent scale errors

Percent calculated based on GIS acres. Dominant allocations total 100%.