Moosehead Region Management Plan



View across Little Moose Unit toward Moosehead Lake from Big Moose Mtn. trail.

Maine Department of Agriculture, Conservation and Forestry Bureau of Parks and Lands



February 2017

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 and amended March 7, 2007), this Management Plan for the Moosehead Region is hereby adopted.

RECOMMENDED: Douglas Dinico DATE: 2-6-17

Douglas Denico Director Maine Forest Service

APPROVED:

alter DATE: 28

Walter E. Whitcomb Commissioner Department of Agriculture, Conservation, and Forestry

ADOPTED DATE: $\frac{2/8}{17}$ REVISION DATE: $\frac{2/8}{32}$

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Acknowledgements

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

Kathy Eickenberg – Chief of Planning Jim Vogel – Management Plan Coordinator Peter Smith – Regional Manager, Public Reserved Lands - Western Region Marc Albert – Forester Rex Turner – Outdoor Recreation Planner Tom Charles – Chief of Silviculture Joe Wiley – IF&W Wildlife Biologist assigned to the Bureau of Parks and Lands Scott Ramsay – Supervisor, Off-Road Vehicle Program of the Bureau of Parks and Lands Brian Bronson – ORV Program ATV Coordinator Joe Higgins – ORV Program Snowmobile Coordinator Gena Denis – Geographic Information System Coordinator

The Bureau also acknowledges the helpful participation of the Moosehead Region Management Plan Advisory Committee, and the members of the public who participated in public meetings held during preparation of this Plan and submitted comments on the Plan (see Appendix A for more details on the public consultation process).

I. Introduction

About this Document

This document constitutes a fifteen-year Management Plan (the Plan) for 31,187 acres of Public Reserved land in the Moosehead Region, managed by the Maine Bureau of Parks and Lands (the Bureau). This is the first regional management plan addressing this assemblage of Public Reserved Lands management units and lots, along with two undeveloped State Park lands. It will replace the 1997 Management Plan for Day's Academy and Sugar Island Public Reserved Lands and Kineo and Farm Island undeveloped state park lands, and the 1988 Management Plan for the Little Squaw (now Little Moose) Public Reserved Lands. It will also cover additional reserved lands on the east shoreline of Moosehead Lake and several smaller Public Reserved land units to the east and west of the lake.

The Plan includes background information about the planning process and the regional context of the Plan. The core of the Plan is a description of the character and resources of the units, a Vision for the future of each major unit, and management allocations and recommendations.

One objective of the regional plan is to provide a balanced spectrum of opportunities across the Region, and in keeping with the opportunities and resources available in the broader surrounding Moosehead Lake Region. In developing the management recommendations for the reserved lands and undeveloped park lands, the Bureau has been mindful of this broader perspective.

The Moosehead Region Management Plan is a commitment to the public that the Public Reserved lands and undeveloped State Park lands in the Region will be managed in accordance with the Bureau's mission and goals, and within prescribed mandates. Revisions to the Plan commitments will occur only after providing opportunities for public comment. The Management Plan will also serve as guidance to the Bureau staff. It will provide clear management objectives, while providing a degree of flexibility in achieving these objectives. It will not, however, be a plan of operations.

An important aspect of the management of public lands is monitoring commitments made in the plans, and evaluating the outcomes of management activities relative to overall objectives. This management plan describes monitoring and evaluation procedures for recreational use, wildlife management, and timber management.

Under current policy, the Bureau's management plans cover a period of 15 years after the date of adoption. A review of current issues and progress on implementing this Plan's recommendations will be undertaken in 2021, as part of the first mandated 5-year review and update of the regional plan.

What is the Moosehead Region?

The Moosehead Region encompasses one of the exceptional public lands units in the State, Little Moose, on the west shore of Moosehead Lake close to the town of Greenville, another large but more remote unit on the east shore of the lake, Days Academy, and the largest island in the lake, Sugar Island. Together, these three units account for more than 83 percent of the Public

Reserved Lands in the region. Public fee and easement lands along the east shore of the lake and several smaller public lots and stream corridor lands within 10-12 miles east and west of the lake complete the portfolio of Public Reserved Lands in the region. Lastly, the Bureau's parks division operates the popular Lily Bay State Park on the south shore of Moosehead Lake and manages two properties, the Mount Kineo peninsula and adjacent Farm Island, in the central part of the lake. The Moosehead Region is a largely natural landscape that in large part is also a working landscape (particularly away from the immediate shoreline zone of the lake), where commercial forestry is the predominant land use. Much of the commercial forestland in the region is managed under conservation easements held by the Bureau and other entities.

Moosehead Lake, covering 117 square miles, is at the heart of the Moosehead Region and is the largest water body in Maine – more than two and a half times the size of Sebago Lake, the state's second largest lake. It is nearly 30 miles in length, with over 245 miles of diverse shoreline including several large, undeveloped islands and numerous sand, gravel, and cobble beaches scattered along the shore. The maximum depth of the water is 245 feet with an average depth of 55 feet. The lake is largely surrounded by mountainous terrain providing scenic views from most of the lake and shore. Days Academy, Sugar Island, Farm Island, Kineo and the east shore public lands provide dozens of miles of shoreline for the public to enjoy. Sweeping views of the lake and more distant mountain peaks and ridges are among the exceptional features of the mountain trails on the Little Moose and Days Academy Units.

The Lands of the Moosehead Region

The Moosehead Region lands comprise a total of about 33,200 acres of which over 31,000 acres are designated as Public Reserved Lands. The tables below summarize the acreage contained in each property addressed in the Plan. A map of the Public Reserved and undeveloped State Park lands of the Moosehead Region is provided on page 5.

Name and Location	Fee Acres
Little Moose Public Lands Unit (Moosehead Junction and Big Moose Twp., Piscataquis	13,951
County)	
Days Academy Public Lands Unit (Days Academy Grant Twp., Piscataquis County)	7,460
Sugar Island (Islands of Moosehead Lake Twp., Piscataquis County)	4,491
Moosehead Lake East Shore Lands (Spencer Bay and Lily Bay Twp., Piscataquis	1,660
County)	
Beaver Cove Lot (Beaver Cove Twp., Piscataquis County)	782
Bowdoin College Grant East Lot (Bowdoin College Grant East Twp., Piscataquis	935
County)	
Shawtown Lot (Shawtown Twp., Piscataquis County)	248
Frenchtown Lot (Frenchtown Twp., Piscataquis County)	30
West Outlet Lot (Taunton & Raynham Academy, Misery Gore, and Sapling Twp., Somerset	842
<i>County</i>)	
Rockwood Strip Lots (Rockwood Strip T1 R1 NBKP Twp., Somerset County)	297
Sandwich Academy Grant Lot (Sandwich Academy Grant Twp., Somerset County)	491
Total	31,187

The Public Reserved Lands of the Moosehead Region

The Undeveloped State I alk Lands of the Wooseneau Region				
Name and Location	Fee Acres			
Farm Island (Kineo Twp., Piscataquis County)	980			
Kineo (Kineo Twp., Piscataquis County)	800			
Total	1,780			

The Undeveloped State Park Lands of the Moosehead Region

In addition, the Bureau also has responsibility for monitoring compliance with a six conservation easements that fall entirely or in part within the Moosehead Region. In total, these easements cover nearly 68,000 acres, over 60,000 of which are within the region. Most of these are adjacent to or surround Public Reserved Lands units addressed in this Plan, and are described in more detail in the Planning Context section (Section III).

Easement Name	Townships	Acres	Notes
Days Academy Grant	Days Academy Grant	550	Moosehead Lake
			shoreline zone
First Roach Pond	Frenchtown Twp.	525	Pond shoreline zone
Indian Pond*	Big Moose Twp.	555	Pond shoreline zone
	Sapling Twp.		
Katahdin Iron Works	Bowdoin College Grant Twp.	37,011	Appalachian Mountain
	T7 R9 NWP		Club lands
Moosehead East Outlet	Big Moose Twp.	355	Stream shoreline zone
	Sapling Twp.		
The Roaches**	Bowdoin College Twp.	21,643	Appalachian Mountain
	Shawtown Twp.		Club lands

Conservation Easements in the Moosehead Region

* 721 additional easement acres are in Chase Stream, Indian Stream and Squaretown Townships on lower Indian Pond (Upper Kennebec Region)

** 6,633 additional easement acres are in T1 R12 WELS to north (Central Penobscot Region)

It should be noted that the Bureau's Seboomook Unit Management Plan (2007) addresses Public Reserved Lands and on and near the north end of Moosehead Lake not addressed by this Plan. In combination, the two management plans cover the entirety of Moosehead Lake and vicinity.

Acquisition History

The majority of the 13,951-acre Little Moose Unit was acquired from Great Northern Nekoosa Corporation in 1975 and from Scott Paper Company in 1984. An additional 1,430 acres were acquired from S.D. Warren Company in 1990. Approximately 1,017 acres were an original public lot.

The 7,460 acres in the Days Academy Unit was conveyed in 1990 to the state as part of a land trade with S.D. Warren Company (along with the Little Moose lands mentioned above). S.D. Warren also granted a conservation easement to the State of Maine on nine miles of Moosehead Lake shoreline in Days Academy Grant Twp., extending south from the State property and reaching 500 feet inland. The conservation easement extinguished development rights but allows the Bureau to locate and maintain up to nine new water access campsites and to continue

to manage existing campsites for public use. Nearly 4,500 acres comprising most of Sugar Island was conveyed to the State of Maine by Scott Paper Company in 1985.

This regional plan will also address the approximately 1,660 acres of reserved lands along the east shoreline of Moosehead Lake in Spencer Bay and Lily Bay Townships and encompassing several small near-shore islands, purchased from Plum Creek in 1999.

Four smaller lots situated 8 to 12 miles to the east of Moosehead Lake – the Frenchtown, Shawtown, Beaver Cove and Bowdoin College Grant East Lots – are also addressed by this Plan. All are Original Public Lots or portions of such lots remaining in State ownership after various land sales and trades.

Turning to the west of Moosehead Lake, lands addressed by this Plan include the West Outlet Lot, which includes an Original Public Lot with frontage on the west shore of the lake and the south side of the West Outlet stream (one of the two headwaters of the Kennebec River). The lot also includes several miles of nearly contiguous state ownership in a 250-foot strip along both shores of the outlet stream, acquired from Plum Creek in 1999. The Rockwood Strip Lots are about 2 miles west of Moosehead Lake and just north of the Moose River; these lots consist of an Original Reservation parcel and a second parcel one-third mile to the east acquired by the Bureau in 1974 through an interagency transfer. Lastly, the Sandwich Academy Lot is an Original Public Lot about 10 miles west of Moosehead Lake, traversed by State Route 6/15.

Regarding the undeveloped State Park properties, Farm Island was a gift to the State acquired in 1971, while Kineo was purchased by the State in 1990.



MAP FIGURE 1: Moosehead Region Public Reserved lands and other conservation lands.

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. 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) (see Appendix B), and must be prepared in accordance with the guidelines set forth in the IRP revised and adopted in December 2000 by the Bureau. The IRP provides further policy guidance for development of resource management plans, and applies to Parks as well as Public Reserved Lands. 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. Revenues received from timber harvesting are retained by the Bureau to manage Public Reserved Lands.

The portion of the IRP addressing management of fisheries and wildlife resources makes reference to the Bureau's *Wildlife Guidelines*. The <u>guidelines</u> provide specific management objectives and strategies for wetland, riparian and upland ecosystems on the public reserved lands, including areas designated for timber harvesting. Additional guidance is provided for management of special habitat features such as mast trees, snags, and forest openings/old fields, and for species of special concern, such as bald eagle, osprey and great blue heron. The overall fisheries and wildlife resources policy of the Bureau is to strive to maintain a landscape characterized by a rich variety of native species and the functioning ecosystems on which they depend.

As was the case for the 1997 plan cited above, the undeveloped park properties are included in this management planning process because of their close proximity to the Public Reserved Lands, and because they offer similar recreation and wildlife management opportunities. Lily Bay State Park was not included in this planning process because management of its limited land base is focused on more intensively developed recreation amenities (e.g., family campgrounds with water spigots and hot showers, paved boat launches, paved roads) than found on the Public Reserved Lands or the undeveloped State Park Lands. The State Park would be included, as has been the case in other BPL Plans, if there were a more direct nexus to the Reserved Lands, such as opportunities for trail connectivity.

In this particular planning effort, it must be borne in mind that the legislative mandates governing Public Reserved Lands and State Parks require that the two categories of properties be managed to meet somewhat different objectives: the Public Reserved Lands are to be managed for multiple uses including dispersed, low-intensity recreation, protection of special resources, the production of valuable timber products, and to maintain and enhance wildlife resources; while park lands are to be managed to provide a range of recreation opportunities (e.g. from dispersed pursuits such as hiking to intensively developed and supervised swim beaches and campgrounds), and to protect the natural character and important natural and cultural features of these lands.

This plan, as applied to the Public Reserved Land properties, meets the requirements for multiple use management plans set forth in Title 12 M.R.S.A. § 1847 (2), and is consistent with the Integrated Resource Policy. This plan, as applied to Kineo and Farm Island, is in accord with the Bureau's longstanding policy to manage State Park properties to provide public recreation opportunities and to protect natural resources. Forested areas within State Parks are managed to preserve their natural, recreational, and scenic qualities. The management of timber on a sustained yield basis to generate revenue, however, is not mandated on State Park lands as it is on the Public Reserved Lands. The management of State Park lands is primarily supported by monies from the State General Fund, (where user fees are assigned) and to a lesser extent by dedicated revenues, such as the money from the sale of Loon License Plates and from the Maine Outdoor Heritage Fund.

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 the various perspectives and needs while protecting and conserving the resources of the Public Reserved Lands. In total four public meetings were held in the development of this Final Draft Plan, as described below.

<u>Resource Assessments</u>: The first phase of the planning process includes a thorough study of the resources and opportunities available on the Public Reserved and undeveloped State Park lands. Beginning in the winter of 2014-2015, Bureau staff undertook a review of the natural and geological, historic and cultural, fisheries and wildlife, recreation, and timber and renewable resources. In anticipation of this Plan, natural resource surveys were conducted during 2014 by the Maine Natural Areas Program, which focused updating the data on higher elevation lands and wetlands that have been managed under the past plans as special resources. Sugar Island was also included in these new surveys. Resource professionals from within the agency 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 the major units to view first-hand and characterize the land-based resources and recreational features. In February 2015, the Plan Coordinator and the Director of the ORV division visited the Little Moose and Days Academy Units by snowmobile, traveling the trails across the Units and the major ITS and connecting trails across the lands between these units. Subsequent staff visits in the winter, spring and summer of 2015 focused on areas of potential trail and other recreational development at Little

Moose, and also included visits to Days Academy and many of the Moosehead East Shoreline campsites.

<u>Advisory Committee</u>: Members of the Moosehead Region Advisory Committee (reconvened with several new members) were informed in January 2015 of the start of the Plan process and invited to a public scoping meeting that would formally kick off the Plan's development.

<u>Issue Identification/Public Scoping Session</u>: The first step in the planning process is a public scoping meeting. The purpose of the scoping meeting is to help ensure broad-based public input regarding management direction and other issues needing to be addressed by the Plan. A public scoping meeting was held in Greenville on February 11, 2015. Attendees were invited to submit written comments during the one month period following the meeting.

<u>First Advisory Committee Meeting</u>: The initial Advisory Committee meeting was held on May 21, 2015 in Greenville. The purpose of the meeting was to gain a fuller understanding of the issues and opportunities to be addressed in the Plan, including guidance on developing an overall Vision for each of the major properties covered by the Plan. In addition, the group explored concerns of user groups and management challenges that may be associated with certain issues and opportunities. The meeting was guided by the list of Moosehead Region Issues, Needs and Opportunities developed during scoping and subsequent BPL staff discussions, and which was distributed to the AC in advance. Subsequent to the meeting, several AC members and members of the public submitted written comments on management issues and their vision for the region and specific management units.

<u>Second Advisory Committee Meeting</u>: In the summer of 2015 the Bureau compiled the resources and management issues identified as described above, and drafted vision statements, proposed resource allocations and management recommendations into a Draft Plan. An Advisory Committee meeting to review the Draft Plan was held March 17, 2016. Comments on the Draft Plan from the Advisory Committee and the public are included in the Appendices of this report and were reflected in the Final Draft Plan.

<u>Public Meeting on the Final Draft Plan</u>: The Final Draft Plan was presented and discussed at a public meeting on April 27, 2016.

<u>Commissioner's Review of the Final Proposed Plan, and Plan Adoption</u>: Comments received on the Final Draft Plan were considered in preparing the Final Management Plan. Upon recommendation from the Bureau of Parks and Lands, the Plan was then reviewed and approved of the Commissioner of the Department of Agriculture, Conservation and Forestry.

<u>5-Year Plan Review and Updates</u>: The Bureau's management plans are normally adopted for a 15-year period. The Bureau is required to report to the Moosehead Region Advisory Committee at five-year intervals on accomplishments and changing conditions that may warrant amendments to the plan. The first mandated 5-Year Review of the regional plan is scheduled for 2021. Advisory Committee members will review the Bureau's report on actions taken to implement management recommendations in the Plan and will be asked to identify any new issues or circumstances they feel warrant Committee input or action. If neither the Bureau nor

the Advisory Committee identifies any new issues or circumstances that warrant Committee input or action, the 5-year review process is completed.

If any of the Advisory Committee members identifies new issues or circumstances that, in their opinion, may require an amendment to the plan, or that should be discussed with the Committee prior to the Bureau taking action without amending the plan, then the Bureau will seek Committee comment through correspondence or a meeting. Depending on Committee input, a decision will be made to formally amend the plan or to take action without amending the plan. If a decision is made to formally amend the plan, the Bureau will hold a public meeting to gather public input on the proposed amendment(s), document public comments and Bureau responses, and adopt the plan amendment. If a decision is made to take action without amending the plan, the Bureau will document the Committee discussion and the specific actions that can be taken without a plan amendment.

Summary of the Resource Allocation System

The Bureau's Resource Allocation System is a land management-planning tool first developed in the 1980's, and formalized in the IRP. The current version of the IRP was adopted December 18, 2000, following a public review and refinement process. 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 and where dispersed recreation facilities or activities are most appropriate, to those that are less sensitive and where more intensive recreation facilities or activities may be appropriate. The resource attributes are aggregated into seven categories or "allocations".

The hierarchy of the allocation system 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, from most sensitive to least, include:

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

Forest Certification

In 1999 the Bureau made the decision to demonstrate exemplary forest management 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. The Bureau's second full recertification audit for FSC took place in December of 2011, again in challenging weather conditions. The BPL forests have again been certified as being well managed, with only a small number of corrective action requests (now known as minor non-conformances).

III. Planning Context

The purpose of this Plan is to identify management allocations and recommendations for the 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. The following narrative provides examples of the major conservation and recreation resources, but this is not comprehensive—the full spectrum of resources in this region is rich and diverse and will not be fully described here.

Conservation Lands and Public Recreation Resources in the Moosehead Region

The centerpiece of the Moosehead Lake Region is Moosehead Lake itself, which has been an attraction for visitors seeking natural scenery and outdoor recreation for over 150 years. (Appendix D provides a brief historical overview of the Moosehead Lake area.) Today, the lake is graced with a variety of private, commercial and public recreation lands and amenities supporting a diverse range of water and land-based activities. The south end of Moosehead Lake at Greenville is about a 1.5 hour drive from Bangor, 2 hour drive from Augusta, and 3 hour drive from Portland, placing it within a reasonable day-trip travel distance to a majority of the state's population. The broader region includes a substantial amount of conservation lands within a matrix of commercial forest lands, with a number of camps, lodges and resorts.

Recreation Resources at Moosehead Lake and Vicinity

Despite its size, only two state highways provide access to Moosehead Lake: Route 6/15 from Greenville to Rockwood on the west shore of the lower basin and a road from Greenville to Lily Bay on the east shore of the lower basin. All other road access to the lake is over private roads originally constructed for timber management. As a result, the west and south sides of the lower basin of the lake are the most accessible to the public and are the locale of most recreation development as well as year-round and summer homes. The town of Greenville provides lodging, campgrounds, restaurants, outfitters, gift shops, and other outlets to supply visitors' needs. Additional lodging, food and beverage outlets and visitor services are scattered along the main highways or nearby.

Hiking

One of the most popular hiking trails on the Public Reserved Lands is the Big Moose Mountain trail at the Little Moose Unit. The unit provides several additional miles of hiking trails across Little Moose Mountain, and the recently built Eagle Rock Trail begins on the Unit near the north boundary before crossing Weyerhaeuser (formerly Plum Creek)¹ lands. Mount Kineo has frequently used hiking trails leading to its summit, one of the most prominent features of Moosehead Lake, and also a shoreline trail encircling the peninsula. Most hikers access the peninsula via a commercial shuttle from Rockwood. Little Kineo on Days Academy also has a trail leading to its summit, but is less frequently used. Shaw Mountain at Days Academy has a rough trail leading to the summit from the close shoreline road.

¹ In February 2016, Plum Creek Company merged with Weyerhaeuser Company; the Weyerhaeuser name will be used in the remainder of this document with the exception of references to pre-merger ownership, plans, and actions.

Just outside the Plan area is the Bureau's Big Spencer Mountain Ecological Reserve, with a steep and strenuous two-mile trail to the flat top of 3,230 foot Big Spencer Mountain, which is prominent on the northeastern horizon from Moosehead Lake and the Greenville area. A few miles to the east of Moosehead Lake is the Number Four Mountain trail, recently built by an Appalachian Mountain Club (AMC) crew under BPL direction on a Weyerhaeuser trail easement. Like Big Spencer Mountain, 2,890-foot Number Four Mountain was the site of a fire lookout tower for many years; the 1.75 mile trail terminates at the abandoned tower on the mountain's summit ridge. Work has begun on extending the trail to Baker Mountain and, eventually, to AMCs trail network.

The Number Four Mountain trail is one of several new hiking trails in the Moosehead Region that have been built in the past few years or are under consideration as a result of the Moosehead Lake Region Concept Plan (discussed in more detail later in this section).

AMC has developed a network of over 70 miles of hiking/skiing trails on their extensive Maine Woods properties on the east side of the Moosehead Region. Trails link the two lodges AMC currently operates on those properties and provide several out-and-back and loop hikes with a range of distances and difficulty, some providing views from ledges and summits. (Additional details on recreational opportunities provided by AMC are presented later in this section.)

The AMC trails connect to the Appalachian Trail (A.T.), which crosses the Moosehead Region about 10 to 15 miles south and east of Moosehead Lake. A major road crossing and trailhead is at Monson, about 12 miles south of Greenville on Greeneville Road (Route 6/15). Most of the trail is on federally-owned trail corridor lands; however, at Barren Mountain in Elliotsville Twp., about three miles of the trail crosses a BPL parcel. A challenging but scenic 7.5 mile day hike to 2,670 foot Barren Mountain, partially following the A.T., is in the same vicinity.

About 10 miles further north on the A.T. is the Gulf Hagas area, a three-mile vertically walled gorge through which the West Branch Pleasant River drops 500 feet. The Gulf Hagas Rim Trail encircles the gorge providing views of its numerous waterfalls. Just below Gulf Hagas the trail passes through The Hermitage preserve, one of the few remaining stands of virgin old growth white pine forest in New England. Both Gulf Hagas and The Hermitage have been designated as National Natural Landmarks. The area can be reached by vehicle via the private Katahdin Iron Works Road, part of the North Maine Woods/KI Jo-Mary system; a fee is charged to use the road. The Katahdin Iron Works historic site is also nearby.

Camping

On Moosehead Lake, Days Academy, Sugar Island, East Shore Lands, Kineo, and Farm Island are all used by campers from spring through fall, with boat-in primitive campsites on all of these properties. Some drive-to sites are available at Days Academy and the East Shore Lands. Located within the area of the shoreline conservation easement, the large former log yard at Cowan Cove near Days Academy has historically been used as a boat launching area and for camping with peak use occurring over Memorial Day, Fourth of July, and Labor Day weekends. In 2005, campground improvements were constructed at Cowan Cove as well as at Spencer Bay (on BPL East Shore fee lands), under the provisions of the Moosehead hydropower project Federal Energy Regulatory Commission (FERC) license (additional details on this license are provided below). All are primitive campsites, with no potable water and vault or pit toilets.

Away from the lake, several hike-in primitive campsites are available on the shoreline of ponds at Little Moose. Several additional primitive campsites accessible by road or trail and maintained by the Bureau under the Moosehead FERC license are along the westerly shore of the East Outlet on the conservation easement lands.

Across Route 6/15 from the Little Moose Unit, alongside Moose Creek, the Maine Forest Service formerly operated a small primitive campground open to both RVs and tent camping; no hookups or running water are provided.²

Lily Bay State Park, 8.5 miles north of Greenville, provides a total of 90 single party campsites and one group campsite, with several shoreline sites. Campers are supplied with water spigots, vault toilets, and a shower building. A number of commercial campgrounds are available in both Greenville and Rockwood and other locations around Moosehead Lake.

Fishing

Moosehead Lake supports outstanding fishing resources and is considered one of the most economically important lakes in the state. The principal species are landlocked salmon, brook trout, and lake trout (togue), with salmon being the only species stocked. Ice fishing is estimated to comprise about 40 percent of the total angler days. Since 2008, the Maine Department of Inland Fisheries & Wildlife (MDIF&W) has sponsored a popular ice fishing derby on the lake; derbies are also held during the summer.

The many lakes, ponds and rivers in the Moosehead region provide diverse destinations for both cold-water and warm-water fishing. Some waters are easily accessed by car while others require some hiking, increasing the opportunity to fish in relative solitude. Among the popular species are smallmouth bass, white perch, brook trout, landlocked salmon, and togue (lake trout). A number of ponds in the region, several of which are on the Public Reserved Lands, are classified by MDIF&W as "A List" or "B List" brook trout waters. (A List or "Heritage" waters have never been stocked; B List or "wild trout" waters have not been stocked in at least 25 years and now have self-sustaining trout populations.) Special regulations to protect the self-sustaining populations of brook trout have been enacted for these waters (F. Bonney, 2009). A few ponds in the region are managed for trophy brook trout, with a one-fish limit and 18-inch minimum size or catch and release restriction. Many other ponds and streams in the region are stocked by MDIF&W.

The fast flowing East Outlet is a top destination for fly fishermen, particularly during the spring and fall runs of landlocked salmon. The 3.5 miles of water from Moosehead Lake to Indian Pond is fished by wading anglers, when flows permit, and from drift boats. Local guides offer drift boat outings on the East Outlet, which is designated fly fishing only. The Roach River, flowing 6.5 miles between First Roach Pond and Moosehead Lake, is also a top stream for wild

² The Maine Forest Service has for a number of years sought to minimize its responsibilities for recreation facilities in favor of other priorities and so has terminated their lease for this campground, which is on property owned by Weyerhaeuser. The future status of the campground is under discussion.

salmon and brook trout during the fall. MDIF&W owns a 500 foot strip adjacent to both sides of the stream, and maintains access trails. The river is designated for catch and release fly fishing only, the only stream in Maine so designated.

Boating

Boat traffic is relatively light on Moosehead Lake, in part due to the large area of water available. Although fishing is the primary recreational activity on Moosehead Lake, pleasure boating continues to comprise a substantial portion of boat traffic. Boats also serve as the primary means of transportation to reach remote sections of the lake shore that are otherwise served only by timber management roads. The principal public boat ramps are located in Greenville, Rockwood, and Lily Bay, and additional access points can be found at the numerous marinas, sporting camps, and campgrounds around the lake.

The Bureau has developed a boat access site with a hard-surfaced ramp in Rockwood, which is convenient for launching a boat to reach Cowan Cove and the campsites along the shore of Days Academy, Kineo, and Farm Island. As well as being the primary means of access to the Mount Kineo hiking trail system, the ramp provides winter parking for snowmobiling and ice fishing. At the south end of the lake, the Bureau assisted the Town of Greenville with the development of a ramp suitable for launching large boats at the West Cove. The Bureau also provides over 180 navigation hazard and safety zone markers on the lake to aid boaters. These markers are not installed within 200 feet of the shoreline at full pool, therefore boaters are required to be vigilant for rocks and other near-shore obstructions, particularly once the annual drawdown of the lake has begun in late summer. The lake may be drawn down a maximum of 5.5 feet under the current FERC license.

Canoeing and kayaking appear to be growing in popularity at Moosehead, driven in part by the wide availability of touring kayaks (unlike whitewater kayaks, designed for flatwater paddling). There are numerous islands, coves and peninsulas on the lake to explore and, although cold water and strong winds can make paddling on the open lake hazardous, a number of the shoreline boat-in campsites are within reach of paddlers. A segment of the Northern Forest Canoe Trail (NFCT), which stretches from the Adirondacks of New York to the Canadian border at Fort Kent, Maine, crosses the upper lake from the outlet of the Moose River near Rockwood to the Northeast Carry portage trail. BPL campsites at the north end of the Kineo peninsula and east side of Farm Island are on the NFCT.

Many smaller lakes, ponds and rivers in the vicinity of Moosehead Lake provide excellent canoeing and kayaking. Among the favorites are the Wilson Ponds, Prong Pond, First Roach Pond, Mountain View Pond, Sawyer Pond, and Indian Pond. All of these offer public launching sites. The West Outlet of the Kennebec River provides relatively placid waters for a scenic day trip from the put-in at Route 6/15 down to Indian Pond with good opportunities for fishing and wildlife viewing. Local outfitters offer rental equipment and some offer shuttle services.

Snowmobiling

In winter, snowmobiling is a major activity pursued in conjunction with ice fishing and pleasure excursions on Moosehead Lake, and provides access into remote areas of the north woods. As shown on the map below, Route 86 of the Interconnected Trail System (ITS) linking Millinocket

and Jackman skirts the southern lake from Kokadjo to Greenville to Rockwood, crossing the southern part of the Little Moose Unit. ITS 85 also crosses the Little Moose Unit, extending south on the old railroad bed road to Guilford, Sangerville, and Dover-Foxcroft. (ITS 85 and 86 share the same route north of Greenville.) ITS 110 is a connector trail linking ITS 85/86 with ITS 82 to the south, near Milo. In 2012, Plum Creek granted 81 miles of snowmobile trail easement in Piscataquis and Somerset Counties, on which major portions of ITS 85/86, 88, and 110 in the Moosehead Region run.

The locally groomed Moosehead Loop provides a route around the north end of the lake connecting Rockwood, Seboomook, and Kokadjo. Route 66, also locally maintained, provides an alternative route across the lake from Kineo to Rockwood creating shorter lake loops and a shortcut from Millinocket and Kokadjo to Jackman. This trail crosses Bureau property at the Rockwood boat access site and along the southern boundary of the Days Academy Unit. There is occasional snowmobile traffic on the Bridle Trail on Kineo, which allows riders who are comfortable using a steep ungroomed trail to enjoy the views from the top of the mountain.



ATV Riding

The Moosehead ATV Riders is a local club that offers a well-marked trail system on the west side of Moosehead Lake, largely co-located with the regional snowmobile trail system. The Little Moose Unit provides a 12-mile loop trail on the public road system, which connects to a major trail to the west of the Unit. ATV riders can (like snowmobilers) follow the railroad bed road south from Greenville Junction across the Little Moose Unit to Shirley, and on to Guilford and Sangerville. A network of club-maintained trails is also available in the Kokadjo area, with trails linking to Greenville to the south and extending eastward to the Bureau's Nahmakanta Public Lands Unit. The Town of Greenville has designated ATV routes on downtown roadways to permit riders to safely pass through and to access the town's services. The map below depicts the major ATV routes in the region surrounding Moosehead Lake.



Hunting

Ample hunting opportunities exist in the Moosehead Lake region for deer, black bear, moose, ruffed grouse, snowshoe hare and coyote. The region produces some of the largest deer taken in the eastern U.S. In addition to the State lands addressed in this plan, much of the commercial forestland in the region is open to hunting. A number of guides offer deer, moose, bear and upland game bird hunts.

Other Recreation Opportunities in the Moosehead Region

Lily Bay State Park (a gift from Scott Paper Company) provides additional, more developed recreation opportunities on Moosehead Lake (see Map Figure 1). As mentioned above, the 925 acre park has two campgrounds and a shower building; additional amenities include a group campsite, picnic area, playground, and swim beach. The park also has two hard-surfaced boat ramps providing docks for campers at the park and access for boaters who want to camp on nearby Sugar Island or at other sites around the lake. A two-mile walking trail follows the shoreline and connects the two campgrounds and the swim beach. The park also offers groomed cross-country ski trails and a plowed parking area during the winter.

A recent survey (E. Kaufmann, 2014) has found that wildlife watching was the activity participated in by the greatest portion of visitors to Moosehead Lake region. Moose watching is especially popular, and some guide services offer Moose watching tours as well as outings focused on birding and other wildlife watching. A variety of non-game birds (cormorants, gulls, bitterns, ospreys, bald eagles, loons, and great blue herons) are commonly seen on Moosehead Lake and other waters in the region.

The lake hosts at least three float plane bases that serve sightseers and remote woods camps. The Katahdin, a 115-foot, 100-year old former steamship once used to haul logs, offers extended cruises on the lake during the summer and fall, departing from Greenville's East Cove.

The Big Squaw Mountain ski area, privately-owned and currently operated by a non-profit group, is on the east side of Big Moose Mountain, adjacent to the Little Moose Unit. Big Squaw offers skiing on beginner and intermediate trails, with a rental shop, snack bar, lessons and children's area.

The Moosehead Lake Region Chamber of Commerce and other community entities sponsor a number of special events, many centered around outdoor recreation, each year. Some examples include a canoe and kayak race held on Brassua Lake and the Moose River, a 20-mile bike ride paired with a ride on the Katahdin tour boat, and a paddle-bike-run triathlon. A seaplane fly-in has been held the weekend after Labor Day in Greenville each year for many years.

Moosehead Lake Region Concept Plan and Conservation Easement Lands

In 2009, the Maine Land Use Regulation Commission (LURC) approved Plum Creek Timber Company's Concept Plan for the Moosehead Lake Region. The Concept Plan addresses conservation, ecological resources, contiguous working forests, recreation, economic development and regional planning. The Plan includes a 363,000-acre conservation easement, which covers a majority of the private forest lands to the east and west of Moosehead Lake. The easement is held by the Forest Society of Maine with BPL as a third-party holder with rights of enforcement. (These easement lands are depicted on Map Figure 1 as BPL Conservation Lands -Third Party Easement.) Most of the Public Reserved Lands addressed in this plan abut or are surrounded by the Plum Creek (now Weyerhaeuser) easement lands. The easement will ensure that sustainable forestry continues to be practiced in the Moosehead Lake region, protect wildlife habitat, prohibit residential development, and forever guarantee the right for the public to access the lands for traditional recreational pursuits. The Concept Plan also incorporates several recreational amenities which include, among other things, guaranteed access to 400,000 acres of land with more than 170 miles of road and trail easements that will expand and diversify outdoor opportunities for residents and visitors. The Bureau is working closely with Weyerhaeuser, under the guidance of a Trails Advisory Committee, to identify routes for new non-motorized trails that will be protected by trail easements. The Bureau has begun construction on these trails with funds provided by Weyerhaeuser. Although planning and construction will not be completed until 2018, it is projected that over 30 miles of new trails will be established through this process. The nine trail projects completed or planned in 8 townships will increase the diversity of non-motorized trails available to the public. The Bureau is also working to identify sites for new trailheads, boat access, and campsites that will be on land donated by Weyerhaeuser, not to exceed 50 acres in total.

Close to four percent of the Concept Plan area will be zoned for planned development (house lots and resorts) which can occur over the next 30 years under the terms of the Plan. This includes two resorts: one at Lily Bay on Moosehead Lake (east of Lily Bay State Park), another at Big Moose Mountain (north of the Little Moose Public Lands).

Appalachian Mountain Club's Conservation Lands

Appalachian Mountain Club (AMC) owns over 70,000 acres of conservation land in Maine, mainly in two large contiguous tracts—the Katahdin Iron Works (KIW; 37,000 acres) and Roach Ponds (29,500 acres) Tracts—east of Moosehead Lake. The smaller Baker Mountain tract, purchased in early 2015, abuts the KIW Tract and the Bureau's Beaver Cove Lot. AMC's management combines outdoor recreation, resource protection, sustainable forestry and community partnerships with the goals of supporting local forest products jobs (sustainable forest management occurs on the properties) and traditional recreation (hunting, fishing, hiking, mountain biking, snowmobiling and cross-country skiing) and creating new multi-day recreational experiences for visitors. There is an extensive non-motorized trail system and a series of campsites and hiking shelters open to the public. Four sporting camps are on the properties, offering camp-to-camp hiking and skiing on trails are also open to the general public.

The State of Maine holds a conservation easement on both the KIW Tract and the Roach Pond Tract, monitored by the Bureau (see Map Figure 1). The easements guarantee non-exclusive pedestrian access for primitive recreation, allows for sustainable timber harvesting, and allows operation of up to three sporting camps (including the existing two), and development of a limited number of remote cabins and backcountry huts.

Public and Private Recreation Initiatives

A number of initiatives to expand the four-season recreation opportunities in the Greenville and greater Moosehead Lake region and to attract more visitors and new residents have been ongoing for a number of years, and several significant projects have been accomplished.

Moosehead Visitor Center

In 2009, the Natural Resource Education Center at Moosehead worked with the Town of Greenville and the Maine Department of Transportation to construct a visitor center facility. The facility (at the site of a former DOT rest area on Route 6/15, 2.5 miles from downtown Greenville) houses visitor orientation and interpretation services, educational exhibits, both on-

site and off-site programs, cross-country ski and interpretive trails, and events that explain and celebrate the unique natural and cultural heritage of the region. Projects in progress include reconstructing the historic Big Moose fire tower (the first of its kind in the country, formerly located on Big Moose Mountain within the Little Moose Unit) at the visitor center, and installation of a traditional sporting camp cabin as a warming hut to serve the center's ski trails. The Bureau will be cooperating with the NREC to construct outdoor kiosks at the center that will orient visitors to the public lands in the region and the amenities offered such as hiking trails and campsites.

Moosehead Lake Scenic Byway

The Moosehead Lake Scenic Byway extends 59 miles along Route 15 from Greenville to Jackman and along the Lily Bay Road from Greenville to Kokadjo, providing direct access to Lily Bay State Park, the Little Moose Unit, East and West Outlets, and other public lots. The Corridor Advocacy Group, the local planning group convened by the Maine Department of Transportation and Eastern Maine Development Corporation to develop the byway plan, has identified increasing tourism business within the greater Moosehead area as its primary objective in undertaking development of the byway. In addition, acknowledging that it is the area's natural, scenic, recreational, historical, and cultural resources that attract visitors, the group sees resource conservation and enhancement as a complimentary and equally important objective.

Moosehead Region Branding Initiative

In 2014-15, the Moosehead Lake Region Economic Development Corporation worked with a community branding expert and a number of community stakeholders in an initiative to improve efforts to market the Moosehead Lake Region and to identify and define what makes Moosehead Lake unique. Public input efforts included a kickoff meeting attended by more than 150 people, a survey that was taken by more than 1,400 people, focus groups and other activities. Resulting from this process, a new Moosehead Lake Region brand direction identifying the region as "America's Crown Jewel" was presented to the community in April 2015. Work is continuing on a Branding and Marketing Action Plan for the Moosehead Lake Region.

Maine Residents' Participation in Outdoor Recreation Activities and Visitation to Public Reserved Lands and State Parks

Recent survey data collected for the Maine State Comprehensive Outdoor Recreation Plan (SCORP) and somewhat older data collected for the National Survey on Recreation and the Environment (NSRE) shed light on the outdoor recreation activity participation and preferences of Mainers (particularly as regards trail activities) and their use of the state's public lands. The 2002-2009 NSRE data indicates the day hiking is second only to walking in participation among Maine residents. The 2015 SCORP survey data also support the popularity of hiking among Mainers with nearly 70 percent of Maine resident recreationist participating and nearly two-third among residents overall. Also of interest are the nearly 48 percent of recreationists who snowshoe, 34 percent who ride an ATV and 32 percent who snowmobile. The SCORP data indicate that nearly 80 percent of Maine resident recreationists visited Maine State Parks within the past two years, and nearly half had visited the Public Reserved Lands. Regarding opinions on the most needed non-motorized trail resources contained in the SCORP survey, the Maine general population, recreationists, and non-resident recreationists who visited Maine were in agreement that easy and moderate day-hike trails in natural settings and educational/natural

history trails were the most needed. All three of these types of trails were considered by a majority of Maine residents to be "most needed."

Overall, these data indicate the types of activities offered on the public lands in the Moosehead Region remain popular with Mainers and the Public Reserved Lands and State Parks are among the most commonly used venues to enjoy those activities. Given these facts, the Bureau can expect continue high interest and demand for outdoor recreation access and amenities on the properties addressed by the Plan.

Federal Energy Regulatory Commission License for the Moosehead Project

The current FERC license for the Moosehead Project was issued November 25, 1997 with an expiration date of October 31, 2036. The project is operated by Brookfield White Pine Hydro, LLC, as a member of the Kennebec Water Power Company consortium, which holds the license. The hydropower project facilities consist of the dams at the East and West Outlets of Moosehead Lake and Moosehead Lake itself, where water is stored for downstream hydropower generation. The Project boundary encompasses the shoreline of Moosehead Lake to an elevation of 1,029 feet ("full pond"), as well as lands surrounding the dams and along the East Outlet. The FERC license contains a number of operational requirements for the project relating to recreation resources and land management; these include:

- Minimum flows in the East Outlet and West Outlet to benefit water quality, fisheries, and recreational opportunities and limitations on the rate of changes to stream flows (ramping rates);
- Limitations on fluctuations and drawdowns of Moosehead Lake;
- Measures to enhance salmon spawning habitat in Moosehead Lake and the East Outlet;
- Development of a plan to protect and enhance whitewater boating and fishing opportunities on the East and West Outlets;
- Development of a Comprehensive Land Management Plan in consultation with the State of Maine and others for lands within 200 feet of the full pond elevation of Moosehead Lake; and
- Development of a Recreation Plan in consultation with the State of Maine and others, with measures to maintain and improve facilities for public access, boat launching, and primitive boat-access camping on Moosehead Lake and the East and West Outlets, both within the project boundary and on non-project state lands.

In the 18 years since the license was issued, the required plans listed above have been developed and a number of measures have been implemented to enhance public access and recreational facilities on Moosehead Lake and the East and West Outlets per the license requirements and subsequent agreements that have been incorporated into the license. In 1999, a Moosehead Shoreline Management Agreement was negotiated and resulted in additional fee and easement lands on the East Outlet being conveyed to the State of Maine, under the management of the Bureau. In 2003, the licensee, the State of Maine and the Appalachian Mountain Club signed a Comprehensive Agreement for Long-Term Recreational Facilities Operation and Maintenance at Moosehead Lake. Under this agreement, the licensee provides an annual payment to the Bureau for the operation and maintenance of recreation facilities at the Moosehead Project, which in 2014 totaled about \$33,000.

Summary of Planning Implications

- 1. The Moosehead Region Public Reserved Lands lie on and around Moosehead Lake, Maine's largest lake, in an area highly valued for its natural resources. The culture and economy of the area are historically linked to the forest resources and outdoor recreation.
- 2. The recreation opportunities on the Public Reserved Lands are part of a much larger landscape-level system connecting Moosehead Lake with surrounding mountain ranges and historic travel routes including the nationally significant Appalachian Trail; the Northern Forest Canoe Trail; an interstate system of snowmobile trails, and a growing regional network of ATV trails.
- 3. New public and private initiatives to further develop the recreation-based economy, and to conserve the special natural areas in the Region are strong. The hundreds of thousands of acres of conservation easement lands in the region, primarily on Weyerhaeuser's commercial forestland surrounding Moosehead Lake and on AMC's extensive lands to the east, are central to both objectives.
- 4. The overriding attraction of the area for recreationists is iconic Moosehead Lake, the region's many ponds and streams, and the mix of undeveloped backcountry and commercial forest land open to traditional recreation uses. Careful stewardship is needed to protect these values while making the public lands available to enjoy.
- 5. There are many opportunities for development of public-private partnerships to further both conservation, and development and stewardship of recreational opportunities on the Bureau managed Public Reserved Lands - including partnerships or cooperative agreements with the Town of Greenville; the Moosehead Lake Region Chamber of Commerce; AMC; Maine Appalachian Trail Club (MATC); Brookfield White Pine Hydro, LLC; local snowmobile and ATV clubs; and others. These collaborative relationships are essential to good stewardship of the public lands.

IV. Resources and Management Issues for Lands in the Moosehead Region

General Management Focus

The Bureau's overall management focus for the Moosehead Region is built upon the following management principles and objectives:

- 1) practice sound multiple use planning;
- 2) utilize exemplary, state of the art resource management practices that protect resources from over-use, avoid conflicting use, control exotic species, and continually add value to the resource base and visitor's "back woods" experiences;
- 3) offer new recreation and educational opportunities where appropriate and compatible with the emphasis on more remote, dispersed, less developed activities, with or without vehicle access;
- 4) honor traditional uses wherever appropriate, and avoid restrictions on free and reasonable public access;
- 5) remain adaptable to changing environmental and cultural conditions through far-sighted planning, and cooperation and connectivity with adjoining landowners, and
- 6) conduct timber harvesting where appropriate in a manner that maintains or improves forest health and diversity, protects special natural features and visitor safety, enhances wildlife habitat, preserves the visual integrity of the landscape and produces a sustainable stream of high quality (over the long term) timber products; all within the Bureau's legislative and regulatory mandates and budgetary and staffing constraints.

Nearly 90 percent of the Public Reserved Lands addressed by this Plan are forested. Of those forested lands nearly 80 percent are regulated acres — those areas which the Bureau manages to yield a sustained flow of forest products and to improve the quality of the forest resource. The table below summarizes the forested and regulated acres for the larger management Units in the Moosehead Region and for the smaller lots combined into groups. Additional details on forest stocking and sustainable harvest levels in the overall Plan area are provided in Appendix E.

Summary of Forested and Regulated Acres in the Moosehead Region							
	Total	Forest	Regulated Acres				Unreg.
Management Unit(s)	Acres	Acres	Total	HW	MW	SW	Acres
Little Moose	13,951	12,813	9,557	4,322	3,803	1,432	3,256
Days Academy	7,460	7,089	6,770	2,915	3,061	794	319
Lots East of Moosehead L. ¹	2,023	1,964	1,878	473	940	465	86
Sugar Island and Lots West							
of Moosehead Lake ²	5,615	5,531	5,062	2,730	1,582	750	469
Shoreline Lands ³	2,137	2,027	0	0	0	0	2,027
Totals	31,186	29,424	23,267	10,440	9,386	3,441	6,157
Percent		89.4	79.1	<i>44.9</i> *	<i>40.3</i> *	14.8*	20.9

1. Includes Frenchtown, Shawtown, Beaver Cove and Bowdoin College Grant East lots

2. Includes West Outlet (original public lot only), Rockwood Strip, and Sandwich Academy Grant Lots

3. Includes Moosehead Lake East Shoreline Lands and West Outlet shoreline lands

* percent of regulated acres

Key: HW = hardwood, MW = mixedwood, SW = softwood

Little Moose Unit

This first half of this section provides background information on the Little Moose property, including the general character of the land base; geologic and ecological resources and natural communities; wildlife resources; historic and cultural resources; recreation and visual resources; and timber resources. The second half summarizes the key management issues and opportunities that the Plan will seek to address through the Vision, resource allocations and management recommendations for the unit.

Character of the Land Base

The Little Moose Unit is located in Moosehead Junction and Big Moose Townships in Piscataquis County, just west of Greenville (see Map Figure 1). The Unit is approximately 13,950 acres in size. The Unit includes the west side of Big Moose Mountain, with the unit boundary lying just below the 3,194-foot peak. Most of Little Moose Mountain is also within the Unit, with a long east/west ridgeline creating a natural north/south division of the Unit. The highest parts of the ridgeline reach over 2,000 feet in elevation. The terrain in the south part of the Unit is flat to gently rolling, while the north part has moderately rolling to steep terrain. Several ponds are nestled in lowlands below the Little Moose Mountain ridgeline. Although the land is predominantly forested, there are extensive wetlands in the Wiggins Brook bog complex at the southeast corner of the Unit, and smaller wetlands scattered elsewhere. The lowest ground in the Unit is along Wiggins Brook, at about 1,060 feet in elevation.

The forests at lower elevations consist of hardwood stands (mainly beech, birch and maple) and mixedwood stands. The higher elevation ground on Big Moose and Little Moose Mountains and other areas over about 2,000 feet in the central part of the Unit are dominated by spruce and fir. The lands were managed as commercial timberland for a number of decades before state ownership. Most of the lower elevation forests have been harvested by the Bureau during the past 30 years. Large areas of late-successional forest remain, with stands of spruce and northern hardwoods 200-300 years old along the Little Moose Mountain ridge.

Several exemplary natural communities (detailed below) are present at the higher elevations and in the wetlands that comprise the 504 acre Wiggins Brook bog complex. Moose Brook flows north out of Big Moose Pond and then eastward across the northeast quadrant of the unit, along with several tributaries, flowing into Moosehead Lake soon after leaving the Unit. The small streams in the west part of the Unit generally flow to the west and out of the Unit and eventually to Indian Pond, while those in the south generally flow southeast toward Wiggins Brook bog, which drains via Wiggins Brook eastward into Moosehead Lake.

Adjacent landowners are Penobscot Forest LLC to the south, Weyerhaeuser to the west and north, and a number of small private landowners to the north and east, between the unit and Moosehead Lake and adjacent to Route 6/15. Big Squaw Mountain Resort also shares much of the Unit's north boundary; those parcels were sold by the State in the late 1980s with deed restrictions that disallow commercial timber harvesting on much of the land while allowing the continuation and expansion of the ski resort on the property. The Maine Forest Service has jurisdiction of the 2.75-acre former fire tower site at the top of Big Moose Mountain, which is now used for radio transmission towers. Most of the adjacent Weyerhaeuser lands are included in the conservation easements contained in the Moosehead Lake Region Concept Plan, as

described in Section II. In 1990, the Bureau sold 35 leased lots along Route 6/15 to the leaseholders.

Natural Resources

Geology and Soils

Much of this unit's surface is composed of either exposed bedrock or covered with a thin layer of soil. However, a significant portion of the unit is also covered by till and eskers, which are thicker layers of soils comprised of mixtures of sand, gravel, clay and silt that were either deposited in this site by glacial ice or by streams when the glacier melted. The shallowest soils are the Ricker and Monson soils, which are very well-drained and found largely on ridgelines and mountain tops. In flatter areas, more poorly drained Telos and Monarda soils can be found, where they support lower elevation spruce - fir forests. Elliotsville soils can be found on many side hills of the mountains and hills. They are well drained and moderately deep (14-29") and commonly support Beech – Birch – Maple forests. While most of the soils are relatively shallow across the unit, there are a few pockets of deep loam textured mineral soils such as Chesuncook soils on parts of Little Moose Mountain. These soils could be one of the reasons many of the trees in that area have grown so large.

Natural Communities

The Little Moose Unit is comprised of upland and subalpine forest communities, and some significant wetlands. The upland forests are a mix of northern hardwoods (dominated by beech, sugar maple and yellow birch) on the lower elevations and softwoods (dominated by spruce and fir) on the mid and higher elevations. Most of the lower and mid-elevation forest is young (pole timber and small saw timber) with patches of more mature trees, particularly in riparian buffers.

Wiggins Brook Bog covers about 500 acres surrounding Wiggins Brook at the southeast corner of the Unit. Moore Bog is a 75 acre wetland nestled between Trout Pond Mountain and Big Moose Mountain near the northwest corner of the Unit. Several smaller wetlands are scattered across the Unit. All of the lands adjacent to the Unit's ponds, streams, and wetlands are riparian habitats, which typically provide good edge, food, travel lanes, and other wildlife benefits.

Exemplary Natural Communities and Rare Plant Species

Maine Natural Areas Program (MNAP) has recently completed ecological surveys on the Little Moose Unit, which identified exceptional natural communities and rare plant species. (A full Natural Resource Inventory Report addressing the BPL lands in the Moosehead Region, excerpted here, is available from MNAP.) High elevation areas of Big Moose Mountain are dominated by Fir–Heart-Leaved Birch Subalpine Forest, ranked S3 (rare in Maine) by MNAP. An exemplary Spruce-Northern Hardwoods Ecosystem has been identified along the central part of the Little Moose Mountain ridgeline with exceptional natural communities that include Low Elevation Spruce-Fir Forest and Beech-Birch-Maple Forest. Both are common forest types but are considered exemplary because of the stand composition of mature trees with an old growth component, including areas of old growth. Areas of old growth about 300 years old were found in the Spruce-Fir Forest, with red spruce trees that are some of the largest in Maine. The Beech-Birch-Maple Forest old.

The Eccentric Bog Ecosystem, a rare ecosystem type in Maine, of Wiggins Brook Bog is also identified as an exemplary natural community. Two other exemplary natural communities, Sheep Laurel Dwarf Shrub Bog and Sedge Leatherleaf Fen Lawn, both common types, have been identified within the larger bog system. Map Figure 2 depicts exemplary natural communities identified by MNAP. (Fact sheets on Maine's natural community types are available at http://www.maine.gov/dacf/mnap/features/commsheets.htm.)

Wildlife and Fisheries Resources

The Little Moose Unit contains a majority of the Big and Little Moose Mountains Focus Area of the Maine Wildlife Action Plan, one of 140 such areas of statewide ecological significance identified by state biologists. These areas support rare plants, animals, and natural communities; high quality common natural communities; *significant* wildlife habitats; and their intersections with large blocks of undeveloped habitat. There are no deer wintering areas primarily located on the Unit, although one such area overlaps a corner of the Unit west of Wiggins Brook Bog. One rare animal (wood turtle) has been recorded in the bog (last observed in 1986), and the bogs, as well as other wetlands on the Unit, are considered important inland waterfowl and wading bird habitat. Map Figure 3 depicts the Important Wildlife Features of the Little Moose Unit.

The mid-elevation spruce-fir forest may be utilized by a number of coniferous forest specialist bird species such as black-throated green warbler. The lower elevation hardwood forests are home to a wide variety of passerine bird species (e.g., black-capped chickadee, black-throated blue warbler, white-throated sparrow, cedar waxwing), and other common wildlife such as porcupine, snowshoe hare, moose, white-tailed deer, black bear, and red squirrel.

The extensive peatland complex at Wiggins Brook Bog provides habitat for bird species such as common yellow-throat, alder flycatcher, Wilson's snipe, and Lincoln's sparrow. MDIF&W and the Bureau installed a water control structure on Wiggins Brook that created a 65 acre wetland impoundment west of the Railroad Bed Road, which crosses the bog from north to south. The impoundment provides excellent waterfowl and other wildlife habitat in an area with few similar opportunities. The Bureau has installed nest boxes in the impounded area, which are used by hooded mergansers, common goldeneye, wood ducks and other waterfowl. Several species of dragonfly may also be found in this community.

The Unit surrounds most of 289-acre Big Indian Pond, and six other ponds up to 91 acres in area are located on the Unit. The west side of Shadow Pond, along Route 6/15, is also within the Unit. LURC (now replaced by LUPC), in the 1987 Wildland Lake Assessment, gave two of the ponds a fisheries rating of "outstanding" and five a rating of "significant." In addition, two ponds were given a resource value classification of "statewide significance" in recognition of the fishery and other natural values present. Five ponds are zoned as "remote" by LUPC; public vehicle access is permitted no closer than a half mile to a Remote Pond by LUPC regulations. The table below summarizes the available fisheries related and LURC assessment data on the ponds within the unit.

Native brook trout are present in all the ponds as well as in Moose Brook and its tributaries and possibly other streams. Angling on the Unit is regulated by MDIF&W; special rules are in affect for each of the ponds. Big and Little Moose Ponds and the Notch Ponds are classified by



MAP FIGURE 2
MDIF&W as "A List" or "Heritage" waters, while Trout Pond is classified as "B List" water. Big Indian Pond also has a limited lake trout population. Shadow Pond is stocked with brook trout and splake (a hybrid of brook trout and lake trout).

Physical and Fisheries Data on Lakes and Ponds within the Little Moose Unit								
Water Body	Max. Depth (feet)	Size (acres)	Principal Fisheries (see key)	Stocked? (Y/N)	LURC Fisheries Rating (see key)	LURC Resource Class (see key)		
Big Indian Pond	68	289	BT, LT	N	S	2		
Big Moose Pond	96	91	BT	N	0	1B		
Big Notch Pond	40	12	BT	N	S	2		
Little Moose Pond	50	25	BT	N	0	1B		
Little Notch Pond	21	10	BT	N	S	2		
Papoose Pond	no data	4	BT	N	NA	3		
Shadow Pond	38	16	BT, SP	Y	S	2		
Trout Pond	16	33	BT	N	S	2		
Sources: Maine Lakes: Geographic & Morphometric Information (MDEP/MDIFW, 2010), Maine Wildlands Lake								

Assessment (LURC, 1987); Lake Survey Maps (MDIF&W, various dates).

Key to Principal Fisheries

BT = brook trout, LT = lake trout, SP = splake.

Key to LURC Maine Wildland Lakes Assessment resource ratings

Fisheries: O = Outstanding, S = Significant, NA = No rating given.

Resource Class: 1A = statewide significance with 2+ outstanding values (may include fisheries), <math>1B = statewide significance with 1 outstanding value (may be fisheries), <math>2 = regional significance with 1+ significant values (may include fisheries), <math>3 = local significance or unknown significance with no significant or outstanding resource value, or limited information, NA = no rating given/missing data.

Commercial bait dealers are permitted to harvest live smelt at specified ponds, which for 2015 included Big and Little Moose Ponds, Trout Pond, and Shadow Pond. A Smelt Wholesale License is required and other special MDIF&W regulations apply.

Detailed mapping of rare, threatened or endangered wildlife and rare or exemplary plants and natural communities on much of the Little Moose Unit and the surrounding region is available from the Beginning with Habitat program (http://beginningwithhabitat.org/the_maps/pdfs/Greenville/Greenville Map 2.pdf *and* Greenville Regional Map.pdf).

Historic and Cultural Resources

No archeological sites are known on the Little Moose Unit. As mentioned above, Big Moose Mountain was the site of the nation's first forest fire lookout tower, installed by a timberland owner in 1905. The tower was transferred to the Maine Forest Service and was in service for over 60 years. It was removed in 2011 due to its poor condition. The fire warden's cabin associated with the tower still stands alongside the Big Moose Mountain hiking trail, 1.5 miles from the trailhead. The cabin is in poor condition, and has been vandalized. An interpretive sign at the trailhead tells the story of the fire tower.



MAP FIGURE 3.

Access

Both the north and south parts of the Little Moose Unit are accessed via Route 6/15. Vehicle access into the Unit is available via the North Road and Mountain Road, which form a loop in the north part of the unit, and Dyer Road, which crosses the south part of the unit (see Map Figure 4). All but a half-mile section of Mountain Road are maintained by the Bureau to public use road standards and are generally drivable by standard vehicles. The half-mile unimproved section is gradually being improved to the public use road standard as resources permit.

Two spur roads – 1.3 mile East Moore Bog Road and 0.25 mile Trout Pond Road – extend from the North Road into the northwest quadrant of the Unit, terminating at trailhead parking areas. A third spur road, West Moore Bog Road, wraps around 2,270-foot Trout Pond Mountain but is gated about a quarter mile from its junction with the North Road. The 100-foot wide Railroad Bed Road corridor across the south part of the Unit is owned by Penobscot Forest, LLC, which has granted permission for snowmobile and ATV use of the road. The Bureau is exploring with the owner a potential right-of-way swap that would provide the Bureau a permanent right-of-way for ORVs on the portion of the road on the Unit.

Recreation and Visual Resources

Hiking, walk-in camping, trout fishing, and snowmobile touring are among the top recreational attractions to the Little Moose Unit. As mentioned above, one of the Bureau's most popular hiking trails is the Big Moose Mountain trail. The two-mile out-and-back trail leads to the peak of the mountain, with sweeping views of Moosehead Lake and the surrounding region. (The trail terminates on the 2.75 acre MFS parcel.) Part way up the mountain a short side trail leads to a ledge overlook. A Big Moose Mountain "Natural Heritage Hikes" trail brochure has been produced by MNAP and is available on the Maine Trailfinder website. The mountain is also included on the Maine Birding Trail brochure as a recommended stop for birders.



View across the Unit and toward Moosehead Lake from the peak of Big Moose Mountain. Radio tower and solar panels are at far left.

The Little Moose Mountain trail runs along the ridge of Little Moose Mountain across the center of the unit, with side trails passing by picturesque Big and Little Moose Ponds and Papoose Pond and with spur trails to the Notch Ponds. The nearly 9-mile Little Moose trail network is accessible from trailheads at either end and from a central trailhead one-half mile from Big Moose Pond. For the past two seasons, Maine Conservation Corps (MCC) crews have performed trail repair work focused on the area around Big and Little Moose Ponds. The 3.7-mile Eagle Rock trail, completed by MCC in 2014, begins at a trailhead near the north boundary of the Unit and soon after crosses onto the adjacent Weyerhaeuser land. (See Appendix F for a summary of recreation and other improvements completed at Little Moose over the past decade.)



New bog bridging on the Little Moose Mountain trail.



View across Big Moose Pond from Little Moose Mountain trail overlook.

There are seven hike-in primitive campsites on Big and Little Moose Ponds and the Notch Ponds and one at Trout Pond. The hiking trails and campsites are depicted on Map Figure 5. As described above, the Unit's several ponds support native brook trout fisheries, and lake trout are present in one pond. Most have walk-in access only; Big Indian Pond and Trout Pond have drive-in access.

The Wiggins Brook Bog vicinity is a focus for local recreationists, who fish at the three-acre Gravel Pit Pond just east of the bog and walk on the Railroad Bed Road, which provides views across the bog. A parking area and three ADA-accessible fishing platforms connected by a shoreline trail have been installed at the pond, which is stocked with brook trout by MDIF&W several times each summer and fall to provide a "family and kid friendly" fishing opportunity.



Irises on the shore of Wiggins Brook Bog impoundment.



Fishing platform at Gravel Pit Pond.



MAP FIGURE 4.



MAP FIGURE 5.

MDIF&W also conducts educational programs at the pond. Informal carry-in boat access to Wiggins Brook Bog and a small parking area is available off the Railroad Bed Road at the water control structure, located about two-thirds of a mile south of the Greenville Industrial Park.

The good vehicular access at Little Moose makes the Unit amenable to multiple forms of dispersed recreation such as hunting, sightseeing and wildlife viewing. Pedestrian access provided by logging roads and favorable habitat conditions resulting from timber harvesting practices have made the property popular for hunting game birds, deer, bear and moose. The Bureau has designated 26 bear baiting sites on the unit, which are leased to hunters and guides. Although there are no designated bike trails, mountain biking is available on the road system.

The snowmobile trail winding north of Dyer Road (primarily on management roads), and the trail on the Railroad Bed Road are critical links in the ITS system. The North Road has also been designated a snowmobile route across the Unit, leading to ITS 88 just west of the Unit, with an alternate route following the Mountain Road. These trails are linked by a more primitive trail winding across the eastern part of the unit. All of the public use roads and the associated spur roads open to vehicle traffic are open to ATV use as "shared use" roads.³ An ATV trail, off the "shared use" road system, follows the snowmobile route across the east part of the Unit. Map Figure 5 depicts hiking trails, campsites, snowmobile and ATV trails and other recreational facilities in the Unit.

With their proximity to Greenville and Moosehead Lake, the peaks and ridges of the Little Moose Unit lands are a prominent part of the region's scenic landscape. The south slopes of Big and Little Moose Mountains are particularly visible from the Greenville Road (Route 6/15) as travelers descend Indian Hill into Greenville. The Unit is also visible from the portions of the Moosehead Scenic Byway along Lily Bay Road (particularly from Blair Hill) and Route 6/15.

Timber Resources

The regulated acres on the Little Moose Unit total 9,557 acres, about 69 percent of the total area. The mountainous terrain on Big and Little Moose Mountain and Wiggins Bog make up most of the unregulated acreage. The 1988 Plan established an administrative no-cut area (i.e., Special Protection resource allocation) extending north from the Little Moose Mountain ridgeline to encompass Big and Little Moose Ponds, Papoose Pond, and about 400 acres of otherwise operable forest around those waterbodies. In addition, about 1,200 acres of the Moose Brook drainage, in part overlapping the above no-cut area, is zoned by LUPC as P-UA (Protection subdistrict - Unusual Area).⁴ Despite the steep land, much of the tract's forest lies on reasonably fertile soils, capable of growing quality timber of all species, though the smaller areas of wet soils are better suited to softwoods.

³ Shared use is defined in the IRP as two or more activities using the same trail at the same time. Many gravel roads on the BPL lands will be open to passenger vehicles, ATVs, horses, and/or bicycles. Such roads are to be signed "shared use."

⁴ This drainage was formerly the location of Greenville's primary public water supply, hence the zoning. The town's water is now supplied by multiple wells drilled on State land adjacent to Wiggins Bog, and the former water system has been abandoned since the late 1990s.

Harvest History

The eastern part of the Unit (land acquired in 1975) had been harvested extensively though not especially heavily during the twenty years following World War II. These harvests preferentially targeted softwoods, especially spruce, and converted considerable mixedwood land to hardwood type. Harvests in the later acquisitions were heavier and more recent, occurring during the 1960s up through the early 1980s.

Harvesting under Bureau management has totaled nearly 83,000 cords for the period 1985 through 2014, with operations in most years, though less than 800 cords were cut during the six years 1993 through 1998. Harvest volume was two-thirds hardwoods, with 90 percent of those hardwoods being lower quality trees suitable only for pulpwood or biomass. Most stands have been harvested during this period, and those south of Little Moose Mountain have been entered twice. Most harvests have concentrated on retaining the better quality trees while establishing regeneration of desirable species. There have also been some thinnings to provide growing space for the residuals (trees remaining after harvest).

Stand Type Characteristics and Current Stocking

<u>Softwood</u> types occupy about 15 percent of the regulated acres, and most are found either on low and often wet sites or on the shoulders of the mountains. The former is rich in cedar and spruce, the latter mainly spruce. Stocking is about 27 cords per acre and species composition in the type is 50 percent spruce, 20 percent cedar, 12 percent fir, and about 5 percent each paper birch and red maple, with yellow birch and hemlock not uncommon. The spruce is generally of good quality, as is the younger fir. Other species' quality ranges from poor to good, with yellow birch the best, cedar the worst. Closed cover softwoods are not common on the lowlands where they would be useful as winter cover, other than some modest-sized cedar/spruce areas on the southerly part of the unit.

<u>Mixedwood</u> type is found on 40 percent of regulated forest, and typically occupies the middle slopes, or lower slopes where past preferential harvest of spruce and fir moved softwood stands to a mixedwood composition. The type overall holds about 24 cords per acre, with yellow birch and spruce sharing nearly half the volume. Red maple, fir, and sugar maple each are about 12 percent of stocking, and paper birch, cedar, and beech make up much of the remainder. The spruce, younger fir, and a significant minority of hardwoods are of good quality, as much of this type is on soils of relatively good fertility. The beech has been dying back in this type and the cedar tends to be of biomass-only quality, though some better stems have been found for bog bridging on trails.

<u>Hardwood</u> acres cover 45 percent of the forest, and are most common on mid-slopes ranging up to where the spruce begins to take over. A lot of what is now hardwood type shows as mixedwood on type maps from the 1950s, but was converted to hardwoods by harvesting preferences. Much of this former mixedwood land has red spruce as a major component in the understory, offering opportunities to move these acres back toward their former composition. Stocking averages about 25 cords per acre, and is dominated by sugar maple, nearly 40 percent of the total. Red maple and beech are at 14 percent and 13 percent, respectively, though their shares of the total are moving in opposite directions as red maple sprouts/regenerates aggressively and beech is suffering dieback. Spruce (11 percent), fir (9 percent), and yellow

birch (8 percent) split most of the remainder, with pockets of cedar and hemlock, and some runs of white ash.

Management Issues, Concerns and Opportunities

The Bureau of Parks and Lands will manage the Little Moose Unit for multiple uses including outdoor recreation, wildlife habitat, scenic and natural area protection, water quality protection, and production of forest products. The following discussion summarizes the key management issues and opportunities associated with each of these uses on the Little Moose lands.

Timber Management

The majority of the Little Moose lands will continue to be managed as a multiple use working forest. Timber harvests on the Unit will supply forest products to local mills and be a source of employment for loggers, truckers, road construction, and others in related businesses. Timber harvests will also be an important source of timber revenue to support the Bureau's management program.

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.

The approximately 9,557 acres of regulated forest may be allocated to timber management as a dominant or important secondary use. Timber management may be designated as a dominant land use but may also occur as a secondary activity on lands with other dominant resource allocations, such as Remote Recreation or Wildlife Management areas. For example, Wildlife will be the dominant use in riparian buffers and on wetlands and beaver flowages. Access is good throughout the Unit, with development of the forest management road system essentially complete.

Management of softwood should work to maintain or increase the spruce component while keeping the cedar and fir about the same as at present. Except on exposed areas with thin soils, much of the softwood type has sufficient height/age diversity to be managed for multiple age classes. Harvesting in mixedwood stands should concentrate on improving overall quality, especially in yellow birch and the maples, while working to revert former softwood acres back to that type, mainly by increasing the spruce component. Harvesting in hardwoods should favor sugar maple, yellow birch, and spruce, while retaining full-crowned beech where feasible. Protection of softwood regeneration, particularly spruce, is very important in this type.

Essentially all of the unit's forest is visible from one or more vantage point accessible to recreational visitors, in particular views from several places on the two mountains, but also from the numerous ponds and from public access roads. The valley between Big Moose and Little Moose Mountains is distantly but distinctly visible from Blair Hill across Moosehead Lake, and the south slopes of both mountains are in full view by travelers driving into Greenville from the south. Most views are distant but some are up close, and staff conducting timber management (including road layout) has kept this in mind when planning harvests.

Specific timber management issues and concerns include:

- The challenging terrain present on much of the Little Moose Unit warrants special care to ensure that harvesting can be done economically with minimal impact to the site.
- The visibility of the forest from multiple vantage points frequented by the public demands careful planning for timber harvesting and access. Much of the unit could warrant Visual Consideration Class II allocation, with some Class I allocation for close-up views.
- The P-UA zoning of the Big Moose Brook watershed needlessly complicates timber management and adds considerable administrative expense.

Wildlife and Habitat Protection

No endangered or threatened wildlife is known to be present on the Little Moose Unit. Northern long-eared bat, federally listed as threatened, may be present. The most significant wildlife habitats on the unit are within the wetlands and riparian areas. Protection for these areas is typically provided by a Wildlife dominant allocation, based on the "specialized habitat" criteria described in the IRP. On this unit, a large portion of the wetland habitat is contained within the Wiggins Brook Bog, which will be allocated to Special Protection – Natural Area due to the regionally significant ecological resources found there.

In the remaining wetland and riparian areas, the Wildlife allocation would be applied so as to demarcate a 330-foot buffer zone around the great ponds and on each side of the major streams, and a 75-foot buffer zone around wetlands, waterbodies less than 10 acres, and in minor riparian zones. (Minor riparian zones are generally designated around flowing water bodies upstream from the point where such water drains less than 50 square miles.) Any trail construction or other recreational development in these areas would need to be carefully planned to minimize potential impacts to these important habitats. Timber management is allowed in riparian zones to promote wildlife habitat.

Recreation Facility Development

The residents of Greenville and the surrounding region place a particularly high value on the existing recreation uses and the recreation potential of the Little Moose Unit lands. Development of new non-motorized trails – subject to development of this management plan, permitting and funding – is a prominent interest, as in preservation of the backcountry setting across the middle of the Unit and near-backcountry conditions in most other areas. There is also interest in re-establishing a former snowmobile trail connection between the north and south sides of the Unit, and other recreational enhancements. Therefore, a primary objective of this plan is to provide direction for the management of recreation uses and for development of trails and, potentially, other recreation facilities over the next 15 years within the context of the other land uses and the Bureau's management policies.

The need for recreational trail connectivity has been recognized by the Bureau as vital to the recreational opportunities and economy in the Moosehead Region. Continued use of the several miles of ITS snowmobile trail and ATV trail on the Unit are understood to be vital to the regional motorized trail networks.

Non-motorized Trails

Hiking Trails – The potential exists for new hiking trails on the Unit that would extend from and link existing trails on and off the Unit. One such trail would cross the western side of the Unit, connecting the Eagle Rock trail that extends north from the trailhead at the end of the East Moore Bog Road to the west end of the Little Moose Mountain trail. There is also the potential for new trail segments connecting the Big Moose Mountain trail to the Eagle Rock trail, and to the Little Moose Mountain trail in the vicinity of Big Moose Pond.⁵ In combination, these new trail segments could provide a backpacking loop trail encircling the west half of the Unit. In total, the new trail segments would add approximately 10.5 miles of hiking trail to the existing 11 miles of trial on the unit, with an additional 1.5 miles on a Weyerhaeuser easement.

The vision for this loop trail is for a semi-remote hiking experience, during which trail users would enjoy a varied environment with occasional highlights such as a view from the top of the knob south of Trout Pond. The experience will include occasional crossings of public use and logging roads, although these will be minimized to the extent practicable.

Given the magnitude of this potential trail construction, a preliminary consideration of construction costs is warranted. Specific construction costs estimates for trails require detailed analysis and vary greatly based on terrain, soils, access, and intended experience (e.g., highly developed trails with manicured tread and imported surfacing are more expensive than primitive footpaths on gentle, dry ground). That being said, recent experience with trail construction in the region provides some basis for a preliminary "ball park" estimate of \$20,000 per mile. Using this estimate, new trail development associated with completing a backpacking circuit at Little Moose Public Lands may cost roughly \$220,000. At least 60 percent of the funding for Little Moose hiking/backpacking trail work is slated to come out of the account funded by the Moosehead Lake Region Concept Plan's Trail Grant and Implementation Agreement – a dedicated fund paid out by Weyerhaeuser to support regional non-motorized trails planning and construction through 2018. BPL will be responsible to maintain the trail once built.

Walking/Running Trails – There is interest in the local community in developing more opportunities on the Unit close to Greenville for family-oriented day-use recreation, in particular easy walking/day-hiking trails that would be attractive to both residents and visitors. Ideally, such trails would connect to town (adjacent to the east side of the Unit). Connections to existing attractions in the south part of the Unit such as Wiggins Brook Bog and the Railroad Bed Road trail are also desirable. Trails with an interpretive and wildlife-viewing purpose and orientation are of particular interest, as there are few such opportunities in the region. It is envisioned that such trails could double as snowshoeing/cross-country skiing trails in the winter.

A related interest has been also expressed for trails in the south part of the Unit that would provide an attractive place for such activities as trail running and potentially mountain biking, separated from the motorized uses that occur on the Unit's roads and on the Railroad Bed Road. The conceptual proposal presented to the Bureau includes 5K and/or 10K loop trails, which it

⁵ These potential connecting trails on the Unit have been discussed by the Moosehead Lake Region Concept Plan trails advisory group, led by the Bureau in partnership with Weyerhaeuser. This group has identified new trails in the Little Moose Unit and vicinity as a top priority.

was suggested could further benefit the local community by providing a venue for trail running races/fundraisers. The proposal suggests routing of such trails where possible on existing forest management roads/snowmobile trails, particularly those branching off Dyer Road. Proponents of the concept are not adverse to continued timber harvesting in the vicinity of the trails (in contrast to harvesting near hiking trails, which the Bureau limits with Visual Consideration buffer zones in recognition of the general public preference and expectation of a primarily undisturbed setting while hiking in forested areas).

Any initiative to develop walking/running trails in the south part of the Unit would depend on the Bureau entering into local partnerships to support construction and maintenance of the trails.

Wildlife Viewing/Interpretive Trail/Boardwalk – The local community has suggested that the Bureau consider developing a wildlife or interpretive trail, possibly in conjunction with one of the above trail concepts. For example, an easy walking trail or a running trail in the vicinity of Wiggins Brook Bog that could include a boardwalk component on the bog, which would take advantage of the unique habitats and wildlife viewing opportunities there. It has also been suggested that the reclaimed former landfill on Dyer Road, now planted to grass, could be an appropriate setting for wildlife viewing or an interpretive trail, given the improved viewing afforded by the lack of trees.

Motorized Trails

Snowmobile Connector Trail – Snowmobiling interests are concerned about increasing constraints on east-west snowmobile trail connections in the Little Moose vicinity. This concern has been heightening by plans to plow Dyer Road on and off the Unit for timber harvesting for the next several years, coupled with ongoing plowing of much of the North Road most winters for commercial timber harvesting and firewood cutting. Non-motorized recreation interests would also like the North Road to be plowed each winter as far as the Big Moose Mountain trailhead to facilitate use of the Big Moose Mountain trail.

Due to these concerns, the Bureau's ORV Division and snowmobile interests have been working to identify a potential new snowmobile route crossing private land to the south of the Unit and skirting the Unit boundary, connecting Dyer Road/ITS 86 to ITS 88. As an alternative, snowmobile interests have proposed reestablishing a two-mile former "club trail" on the Unit, partly following old roads. It would connect the existing ITS 86 trail north of Dyer Road with the Mountain Road, which is an existing alternate snowmobile route when the primary route on the North Road is unavailable due to plowing of the road. This route would cross a gap in the Little Moose Mountain ridgeline about a half mile east of the Notch Ponds.

The proposed connector trail on the Unit would cross the Little Moose hiking trail in a location that field staff indicates receives little winter use. The connector would bring snowmobile activity within about two-thirds of a mile of Big Moose Pond, partly separated from the pond by higher ground on the Little Moose ridgeline. This is slightly more distant from the pond than the current alternate snowmobile route on the Mountain Road, which this re-established connection would replace. (It should be noted that commercial smelt harvesters currently access Big Moose Pond during the winter using a primitive snowmobile trail linked to the Mountain Road.) The

ridgeline area has had (under the 1988 Plan and previous IRP) a Backcountry resource allocation; under the current IRP, a corridor around the proposed trail could be allocated to Backcountry – Motorized, which would continue the emphasis on backcountry recreation while allowing this motorized use. The remainder of the ridgeline and the adjacent areas surrounding the Notch Ponds and Big Moose Pond could be allocated to Backcountry – Non-mechanized, where motorized uses are not allowed.

ATV Trails – No additions to the existing ATV trail network on the Little Moose Unit have been proposed. ATV traffic may be displaced temporarily from the Dyer Road if conflicts arise with logging traffic on Dyer Road or Brochu Road on the Unit or on adjacent lands during the current harvest cycle.

Other Potential New Recreational Facilities and Enhancements

The Bureau has preliminarily evaluated development of a new parking area and trailhead for the Little Moose Mountain trail using an old asphalt road that comes off Route 6/15 near the east end of the trail. The new trailhead would be more visible to travelers than the existing trailhead at the Moose Mountain Inn motel, and could be linked to the trail with little new trail construction, using the existing snowmobile trail corridor that passes nearby and crosses the Little Moose trail. This project would require removal of the old asphalt as it is too deteriorated to maintain.

The informal carry-in boat access trail at Wiggins Brook Bog on the downstream side of the water control structure has eroded into the steep bank, and could be improved with installation of steps or other hardening. It may also be feasible to expand the parking area somewhat in conjunction with boat access improvement.

In this same location, it may be feasible to respond to the interest expressed in enhanced wildlife viewing with the installation of a viewing platform on the bog.

At the Gravel Pit Pond, one of the three fishing platforms needs to be repositioned closer to the water to function properly, and brushwork around access trails, improved signage and other maintenance would improve the well-used facility.

On the east side of Big Indian Pond, several unauthorized campsites have developed at a popular informal recreation site, resulting in multiple user-created fire pits and improper waste disposal. Development of formal primitive walk-in campsites here (as was proposed in the 1988 Plan but not built) would reduce these impacts and provide a higher quality experience.

If the backpacking loop trail discussed above was developed, BPL would consider developing new primitive campsites to serve backpackers in the northwest corner of the Unit, near the fire warden's cabin on the Big Moose Mountain Trail, and at the junction of the intersection of the Eagle Rock Trail and the (proposed) link trail to Big Moose Mountain.

Administrative Issues

Road Maintenance

The Bureau is responsible for maintenance of the several miles of public use roads and management roads that remain open to vehicles on the Unit. The Town of Greenville is responsible for maintaining Dyer Road as far as the closed landfill under the terms of the landfill lease. The abutter to the north of the Unit along the North Road uses the road to access their lands for timber harvesting and are responsible for road maintenance as needed in association with that use.

Gates on Management Roads

The Bureau has installed gates on certain management roads to allow ATV passage while preventing passage of trucks or jeeps. With the greater presence of wider side-by-side type ATVs (aka UTVs or utility vehicles), it has become a more common occurrence for these ATVs to go around gates, cutting trees and potentially creating an unauthorized passage for trucks and jeeps.

Signage and Other Visitor Information

The Bureau has recognized that the Little Moose Unit would benefit from more and improved signage and other means of providing information about the Unit to visitors. For example, the existing signage at the North Road entrance to the Unit could be updated and improved to better convey the diverse recreational opportunities available on the Unit. The informational brochure and map posted at parking areas and trailheads and distributed to the public is outdated and needs revision. It has been suggested that on-site signage and brochures should be supplemented with on-line maps and apps for mobile devices that would further expand communication about recreational amenities, rules for visitors, etc. There is interest in the community in exploring how the Bureau's signage and related efforts could contribute to the regional branding effort (discussed in Section III above). Signage improvements could potentially be coordinated with Moosehead Scenic Byway planning and development.

Hiking Trail Maintenance

The public has expressed concern about maintenance of hiking trails on the Unit, particularly in reference to blowdowns and hard to see trail blazes. Some also felt that trail markings were often too low to be seen in the winter when snow cover is deep. In relation to both existing and potential new trails, members of the local community have proposed the formation of a non-profit hiking/trail running organization that would cooperate with the Bureau in the development and maintenance of trails in the Unit. AMC has staff with trail expertise based in Greenville whom it was suggested could guide and support such a volunteer organization in their work.

On the Big Moose Mountain hiking trail, small bridges and timber steps have decayed after two decades of service and require replacement. Additional trail work is also needed. The estimated cost for this work is \$25,000. At the terminus of the trail, on the MFS parcel, small non-biodegradable debris (bits of plastic, fiberglass insulation, roofing nails, etc.), presumably from demolition of an old radio communication structure, is scattered among the rocks. The aesthetics of this scenic destination would be improved by a clean-up of the area.

Fire Warden's Cabin

In its present poor condition, the cabin is an attractive nuisance. As evidenced by the graffiti covering the interior walls, visitors commonly enter the structure. They are at risk of injury due to the rotten entry steps and decayed floor boards. The remnants of blue plastic tarps placed on the roof are a detriment to the aesthetics of the site and to the experience of passing hikers. Holes in the roof are hastening the deterioration of the structure.

Snowmobile Access to Big Moose Pond

As described above, snowmobiles travel into Big Moose Pond from the west for commercial smelt fishing using an informal trail from Mountain Road. MDIF&W has expressed the desire to continue to include Big Moose Pond in this program, citing both fishery and economic benefits. However, this Plan (as did the 1988 Plan) designates the area surrounding the pond Special Protection, a resource allocation that does not allow motorized activities. A further concern is that ATVs are also using the route kept open by snowmobilers to access the pond.

Firewood Program

For a number of years, the Bureau has issued permits for commercial and individual firewood cutting on the Unit, most recently along the North Road. The local community considers the access to firewood provided by the program to be increasingly important, for its positive economic impact and benefit to local residents in meeting their home heating needs.

Gravel Resources

An uncommon feature of this unit is the abundance of gravel deposits. A large gravel pit is alongside the Railroad Bed Road near the Greenville Industrial Park. The Bureau has developed other pits along the North Road and elsewhere on the Unit. A partial inventory of the gravel resources on the Unit was conducted in the past, but a complete inventory is needed to make best use of this resource.

Leases and Agreements

A two-acre lease site for public water supply wells and associated pumping and treatment facilities and distribution pipeline is near Wiggins Brook Bog, off the Railroad Bed Road. Moose Mountain Inn on Route 6/15 leases 3.3 acres of adjacent BPL property for the motel's operations, while providing a trailhead on their property for the Little Moose Mountain trail.

The Town of Greenville has a lease for the solid waste landfill along Dyer Road, which closed in 2011; the lease will continue while the Town conducts monitoring and maintenance of the now-reclaimed landfill parcel over the next 30 years as required by the Maine Department of Environmental Protection (DEP). DEP requirements for maintaining the barrier soil and vegetative growth layer (grass ground cover) on the landfill may impose constraints on development of trails or other recreation amenities.

Vision for the Little Moose Unit

The Little Moose lands are a recreationally significant forestland prominently situated in the "backyard" of Greenville and adjacent to Moosehead Lake, perhaps the state's most iconic waterbody, with existing and potential links to a variety of non-motorized and motorized trail networks.

The Little Moose lands will provide a flow of forest products with a majority of the property managed as a multiple-use working forest for quality timber, respecting wildlife habitat needs and accommodating recreational trails. The firewood cutting permit program will continue, benefiting local residents and the local economy.

Protections will be provided with appropriate allocations for sensitive natural resources, such as exemplary natural communities, wetlands and riparian habitats.

A primary focus of the local community and visitors to the area is the existing recreation opportunities and the additional recreation potential of the lands. The Little Moose Mountain ridgeline and the nearby remote ponds and surrounding areas will continue to be managed for primitive backcountry recreation experiences. Varied recreational interests and the local community are interested in the development of certain new recreational amenities on the Unit. The Bureau will work with these interests to plan, build and maintain new recreation amenities as needs dictate and resources allow, particularly new trails for hiking (connecting existing trails to expand loop trail opportunities), and potentially "family-friendly" accessible running/walking trails. Opportunities will also be explored for enhancing wildlife viewing areas and/or trails, potentially in conjunction with development of a wetland viewing platform or boardwalk. Additional primitive campsites will be developed at popular informal camping sites at Big Indian and will be considered in conjunction with new hiking trails. Actions will be taken to enhance fishing access and facilities at the Gravel Pit Pond and carry-in boat access at Wiggins Brook Bog.

Traditional dispersed recreation activities such as hunting, trapping, and fishing will continue on the unit. Snowmobile use of the Railroad Bed Road and management roads north of Dyer Road will continue, as will snowmobile and ATV use of other existing trails on public use and management roads that are important links in the regional trail networks. The Bureau will consider, if a route skirting the Unit does not prove feasible, redeveloping a snowmobile trail link across the Little Moose Mountain ridgeline near the Notch Ponds, connecting the trails south of the mountain with the Mountain Road, with the objective of reducing conflicts with winter use of roads for timber harvesting.

The Bureau will take steps to improve signage and other visitor information on the Unit and disseminated through maps, brochures and other media. Ongoing improvement of the Mountain Road will continue as resources allow, culminating in a completed public use loop road. The Bureau will consider plowing of the North Road to the Big Moose Mountain trailhead, when not plowed for timber harvesting, and plowing the trailhead parking area.

Proposed Resource Allocations for the Little Moose Unit

The following "allocations," as shown on Map Figure 6 - Little Moose Dominant Use Allocations, define general management objectives and direction for specific areas within the Unit. (Secondary allocations are not shown on the map.) See Appendix C for a description of designation criteria and management direction for the various allocation categories.

Special Protection Areas (Dominant Allocation)

- An area totaling approximately 415 acres and consisting primarily of higher elevation ground surrounding the adjacent Big and Little Moose Ponds, Papoose Pond, and the Notch Ponds. This designation recognizes the exceptionally scenic nature of the area, and the generally steep terrain and fragile soil conditions. Backcountry non-mechanized recreation will be a secondary allocation in this area. Commercial timber harvesting is not allowed.
- An area of approximately 350 acres encompassing the unimpounded portion of the Wiggins Brook Bog complex (east of the Railroad Bed Road corridor), recognizing its value as a regionally significant natural area. Recreation will be a secondary use in this area. Commercial timber harvesting is not allowed. (Timber harvests will occur on the eskers extending into the bog, which are not included in this allocation, with the purpose of enhancing and perpetuating the unusual red pine forest community found there.)

Backcountry Recreation - Non-Mechanized Areas (Dominant and Secondary Allocation)

• Approximately 805 acres along the Little Moose Mountain ridgeline and adjacent lands surrounding the Special Protection areas described in the first bullet above. Existing hiking trails will continue and new connecting hiking trails may be developed in this area. No timber harvesting would occur. Also as a secondary allocation in the Little Moose Mountain Special Protection area.

Backcountry Recreation - Motorized Area (Dominant Allocation)

• Approximately 10 acres of ground in a 200-foot wide corridor across the Little Moose Mountain ridgeline, between the Notch Ponds and Big Moose Pond (see Map Figure 7). The purpose of this allocation is to provide an option to route a snowmobile connector trail, mainly following old roads and a former club-maintained trail, with the objectives of maintaining east-west snowmobile travel across the Unit while existing routes are affected by road plowing and maintaining regional snowmobile trail connectivity. No timber harvesting would occur due to the adjacency of Little Moose Mountain trail and the Backcountry - Non-mechanized areas along the Little Moose Mountain ridgeline.

Wildlife Management Areas (Dominant Allocation)

• A total of about 1,570 acres as a dominant allocation in the following areas: (1) the riparian zone (330 feet) around ponds and wetlands and along each side of several streams, including Moose Brook and its tributaries, the inlet streams to Big Indian Pond and Big Moose Pond, and the outlet stream to Trout Pond (excepting areas allocated to Special Protection); (2) the major riparian zone (330 feet) along each side of the primary tributary flowing into Wiggins Brook Bog from the north, the portions of the Wiggins Brook Bog complex not included in the Special Protection allocation (primarily the impounded portion east of the Railroad Bed Road), and Moore Bog; (3) the minor

riparian zone (75 feet) along the remaining perennial streams in the Unit. Remote Recreation is a secondary allocation in these riparian areas.

Timber Management is a secondary use in the riparian buffer areas, subject to wildlife, recreation, and visual resource concerns.

Remote Recreation Areas (Dominant Allocation)

• A Remote Recreation buffer would apply to areas within 500 feet of the Big Moose Mountain and Eagle Rock hiking trails, and the portions of the Little Moose Mountain trails not within the Special Protection, Backcountry, or Wildlife allocations, totaling about 380 acres. Similar buffers would also apply to the preliminary routes of proposed new hiking trails (subject to change to conform to final trail routes) where they are not within the Special Protection, Backcountry, or Wildlife allocations (totaling about 670 acres).

Timber Management is a secondary use in the trail buffer areas, subject to wildlife, recreation, and visual resource concerns. No new motorized trails would be allowed in these areas. New forest management roads would be limited to the extent practicable, but may be constructed where access options are limited or where extending an existing road may help reduce impacts of harvesting activity on trails and trail users. Skid trails located so as to minimize impacts on trails to the extent practicable would be allowed.

Visual Consideration Areas (Secondary Allocation)

- <u>Visual Class I</u> areas (generally areas where foreground views of natural features that may directly affect the enjoyment of viewers) will be defined as a secondary allocation on the ground for areas adjacent to the primary access roads (North Road, Mountain Road, and Dyer Road) and areas around developed recreation sites and designated non-motorized trails.
- <u>Visual Class II</u> areas will be defined as a secondary allocation in areas beyond the immediate foreground, such as background views of forest canopies from ridgelines and background hillsides viewed from public use roads, or interior views beyond the Class I area likely to be seen from a road or trail; due to the presence of the hiking trails on Big and Little Moose Mountains, the slopes of those mountains as well as Trout Mountain and the prominence in the central part of the Unit south of North Road are included in this allocation.

Developed Recreation - Class I Areas (Dominant Allocation)

- All roads or trails designated for public motor vehicle use, snowmobile use, or ATV use.
- Parking areas and trail heads to serve both motorized and non-motorized (hiking and running/walking) trails; these are small areas of less than an acre in most cases.
- The former landfill area (now capped and seeded to grass).

Timber Management Areas (Dominant Allocation)

• All other areas not allocated above are designated Timber Management dominant (approximately 9,540 acres); includes a majority of the area north of Little Moose Mountain and west of Big Moose Mountain and much of the area south of the Little

Moose Mountain, excepting the portion allocated to Special Protection or Wildlife in the Wiggins Brook Bog area.

• Recreation will be recognized as an important secondary use within the timber dominant allocation. Timber management will be conducted so as to limit crossings and other direct impacts of any established non-motorized trails to the extent possible without placing excessive constraints on access to timber.

	•						
Allocation	Dominant	Secondary*	Total	%			
Special Protection	760	Not applicable	760	5.5			
Backcountry Non-mechanized	805	760	1,565	11.3			
Backcountry Motorized	10	Not applicable	10	<1			
Wildlife Management	1,570	Not applicable	1,570	11.3			
Remote Recreation	1,050	1,140	2,190	15.7			
Visual Consideration – Class I	0	~1,250**	1,250	9.0			
Visual Consideration – Class II	0	~2,600**	1,900	13.7			
Developed Recreation – Class I	155	Not applicable	155	1.1			
Timber Management	9,540	2,190	11,730	84.4			
Note: Acreages are representations based on GIS metrics rounded to the nearest 5 acres, and do not sum to the total Unit acreage due to measuring error and limits of GIS precision (above acres are overall low by approx. 1%).							

Little Moose Unit Allocation Summary

* Includes both secondary *allocations*, as defined in the IRP and which may restrict certain activities, and secondary *uses*, which specify allowed uses but do not impose restrictions. **Preliminary estimate, to be refined in the field as part of the forest prescription process.





MAP FIGURE 6.



MAP FIGURE 7.

Management Recommendations for the Little Moose Unit

Recreation

Hiking, Backpacking and Camping Facilities

- Designate a route for a hiking/backpacking trail, potentially in part on abutting Weyerhaeuser lands, which would provide a 2-3 day backpacking loop by linking the existing Big Moose Mountain and Little Moose Mountain trails.
- Create a new trailhead on the abandoned asphalt road (a former section of Route 6/15) at the east end of the Little Moose Mountain ridgeline and connect to the existing trail with a new trail segment, where possible following the snowmobile trail corridor. The deteriorated asphalt surface will be removed from Route 6/15 to the new trailhead (about 1,000 feet).
- Establish 1-2 new primitive walk-in campsites near the east shore of Big Indian Pond, in the vicinity of the informal beach area; extend the Little Moose Mountain trail to reach these campsites and the parking area north of Big Indian Pond.
- Consider the establishment of 1-2 primitive campsites along any new backpacking loop trail developed on the Unit, to support a two day trip.

Other Non-motorized Trail Opportunities

- Work with community trail advocates to explore options for a walking/running trail south of Little Moose Mountain in the vicinity of Dyer Road. To the extent practical, any trails developed would follow existing forest management roads, linked by new trail segments following skid trails where appropriate. The objective of any such project would be to create trails appropriate for walking and trail running, using native surface material as much as possible and limiting trail surface improvements to the minimum level necessary to permit trail maintenance with an ATV-mounted mower. Trail development would be dependent on a local partnership to share trail development and maintenance responsibilities. Trails could be developed using a phased approach, constructing linked loops to reach the final desired length (up to about 6 miles). Timber harvesting would continue in the trail area and the forest management roads would be reopened as needed for timber harvesting.
- Explore options for development of a low-challenge, short (less than 1 mile) interpretive and/or wildlife oriented trail in the south part of the Unit near Greenville, potentially in the Wiggins Brook Bog area or at the reclaimed former landfill. If the focus is placed on the bog area, consider options to incorporate a boardwalk and/or wildlife viewing platform into the trail. (A trail and boardwalk constructed in 2011 at the Bureau's Salmon Brook Bog may provide a useful example of a similar project and lessons learned.) Accessibility accommodations would be considered in the development of such a trail, to expand access to recreation experiences on the Reserved Lands.

Trail Maintenance

- As resources allow, increase routine BPL maintenance of hiking trails on the Unit to provide more frequent and consistent removal of blowdowns, trail reblazing, etc.
- Utilize MCC crews to conduct the needed structural repairs on the Big Moose Mountain trail within the next few seasons, as resource permit.

- Coordinate with MFS to clean up small debris from the MFS parcel at the terminus of the Big Moose Mountain trail.
- Cooperate with interested local individuals and organizations working to establish a volunteer trail development and maintenance group. The purpose of the group will include assisting in the development and maintenance of any new trails in the Moosehead Region approved by the Bureau and maintenance of existing and new trails and related infrastructure. Such an organization may also have a role in contacting trail users in the field and disseminating trail etiquette and safety information.

Motorized Recreation

- Continue to allow snowmobile use of the existing groomed trails north of Dyer Road, on the North Road and the alternate route on the Mountain Road, and on the connecting trail across the east end of the Unit, as shown on Map Figure 5. If permission is granted, continue snowmobile use of the Railroad Bed Road, pending transfer of right-of-way to the Bureau.
- If a route off the Unit on abutting lands to the south proves infeasible, work with the ORV Division and snowmobile interests to route a new trail, about two miles in length and contained in the corridor across the Little Moose Mountain ridgeline allocated to Backcountry Recreation Motorized, following old roads and a former "club trail" and connecting the ITS 86 snowmobile trail north of Dyer Road to the Mountain Road. The trail would not be open to ATV use. This new groomed trail connection would replace the current route following the North and Mountain Roads when portions of that route are being plowed.
- Continue to allow ATVs to use the public use and management roads on the Unit as shown on Map Figure 5. Where needed, replace current gates with wider or "P" style gates to allow side-by-side ATVs to pass while excluding larger vehicles (e.g., jeeps and pickups).

Winter Recreation

- Consider providing plowed access to the Big Moose Mountain trailhead, when not plowed for timber harvesting, and plowing the trailhead parking area for improved and reliable access to snowshoeing and winter hiking.
- Plow the new Little Moose Mountain trailhead (when built) off Route 6/15 to provide improved access to the trail for snowshoeing and winter hiking.

Other Recreation Enhancements

- Improve the carry-in boat access to Wiggins Brook at the downstream side of the water control structure, with steps or other hardening installed on the steep upper portion of the eroded access trail, or rerouting of the trail to moderate the grade.
- Conduct repairs and maintenance at the Gravel Pit Pond to include repositioning of the fishing platform on the south side the pond, brush clearing, and minor trail repairs or resurfacing.

Public Access and Management Roads

• As resources allow, continue improvement of Mountain Road to the public use road standard with the objective of a complete public use road loop in the north part of the Unit.

Wildlife/Rare of Exemplary Ecosystems and Habitats

• Coordinate with MDIF&W on any potential motorized or non-motorized trail or boardwalk development in areas allocated to Special Protection and Wildlife Management to ensure protection of sensitive wildlife habitats.

Timber Management

- The Bureau will manage areas allocated to Timber Management as a multiple use working forest. Timber resources where allocated will provide a diverse forested environment and generate high quality-high value products to support Bureau operations and Maine's timber-based economy. The Bureau will practice multi-aged management with a long-term focus primarily on mature quality timber.
- Because of the high elevation lands on this unit, the presence of the Big Moose and Little Moose Mountain hiking trails, and the Unit's visibility from the Moosehead Scenic Byway and surrounding highways, public use areas and waters (including Moosehead Lake), most timber management is subject to Visual Class II considerations.

Administrative Issues

Signage and Visitor Information

- Work with community organizations to design and install improved signage and/or a kiosk at the North Road entrance with area maps and information highlighting the recreational opportunities and amenities of the Unit.
- Assess signage and visitor information provided at other locations on the Unit for possible improvements, and needs for signage at new locations.
- Develop an updated and revised Little Moose Unit brochure and map for distribution to the public.

Fire Warden's Cabin

• In the near term, implement measures to discourage visitors from entering the cabin and remove remnants of blue tarps from the structure. Assess options for preserving the cabin and halting further deterioration. If preservation is determined to be no longer practical, take action to remove the cabin and restore the site. The State Historic Preservation Office (SHPO) will be consulted regarding possible preservation or removal of the structure.

Snowmobile Access to Big Moose Pond

• The Bureau will require a Special Use Permit for snowmobile access to Big Moose Pond using the existing primitive trail for the purpose of commercial smelt fishing. The primary intent is to increase management oversight on the amount and character of motorized activity at the pond consistent with the Special Protection resource allocation and non-motorized backcountry management focus. Permits will limit motorized activity to the amount necessary to conduct the smelting activity. BPL will coordinate with MDIF&W to identify potential permittees (individuals issued Live Smelt Wholesaler permits).

Firewood Cutting Program

• Continue the firewood cutting program under which individual and commercial harvesters may harvest firewood is designated areas and under the supervision of the Bureau's forester.

Gravel Resources

• Continue to maintain existing gravel pits as needed for road maintenance and pursue a comprehensive survey of gravel resources on the Unit.

LUPC P-UA Zoning

• Work with LUPC to petition for a rezoning of the P-UA zone in the Moose Brook drainage based on the abandonment of the former public water supply infrastructure in the drainage following its replacement with a well system elsewhere in the Unit.

Days Academy Unit

Following the same outline as for the Little Moose Unit, the first half of this section provides background information on the Days Academy property, including the general character of the land base; geologic and ecological resources and natural communities; wildlife resources; historic and cultural resources; recreation and visual resources; and timber resources. The second half summarizes the key management issues and opportunities that the Plan will seek to address through the Vision, resource allocations and management recommendations for the unit.

Character of the Land Base and Acquisition History

The 7,460-acre Days Academy Unit is a nearly entirely forested swath of property on the east shore of Moosehead Lake in Days Academy Grant Township, extending about 5.5 miles from north to south and 2.5 miles from east to west, with about seven miles of undeveloped shoreline. The highest elevation on the Unit is Little Kineo Mountain at 1,927 feet, followed by Shaw Mountain at 1,653 feet; the lowest elevation, 1,029 feet, is at the Moosehead shoreline.

The property was conveyed to the State of Maine in 1990 as a part of land trades between the State and Scott Paper Company. As part of the same transaction, Scott Paper Company granted a conservation easement to the State of Maine on nine miles of Moosehead Lake shoreline in Days Academy Grant, to a depth of 500 feet, extending south of the State property (see Map Figure 8). The conservation easement extinguished development rights but allows the Bureau to locate and maintain up to nine new water access campsites and to continue to manage existing campsites for public use. Scott Paper retained timber harvesting rights, and limited harvesting has occurred.

Natural Resources

Geology and Soils

The natural character of the land base is derived from the bedrock and the effects of glaciation which deposited sands and gravels, cobbles, boulders, and other material over the bedrock. Site