

# Seboomook Unit Management Plan



**Maine Department of Conservation  
Bureau of Parks and Lands**



**March 2007**



## ADOPTION CITATION

In accordance with the provisions of 12 M.R.S.A, Chapter 202-B and consistent with the Bureau of Parks and Lands Planning Policy and Integrated Resource Policy for Public Reserved and Nonreserved Lands, State Parks, and State Historic Sites (revised December 18, 2000), this management plan for the Seboomook Unit is hereby adopted.

RECOMMENDED: Willard Harris DATE: February 21, 2007

Willard Harris  
Director  
Bureau of Parks and Lands

APPROVED: Patrick K. McGowan DATE: 3/5/07

Patrick K. McGowan  
Commissioner  
Department of Conservation

ADOPTED DATE: 3/5/07 REVISION DATE: \_\_\_\_\_



## Table of Contents

	<b>Acknowledgements</b>	
<b>I.</b>	<b>Introduction</b> .....	<b>1</b>
	About This Document .....	1
	What is the Seboomook Unit? .....	2
<b>II.</b>	<b>The Planning Process</b> .....	<b>4</b>
	Statutory and Policy Guidance .....	4
	Public Participation .....	4
<b>III.</b>	<b>The Planning Context</b> .....	<b>6</b>
	Acquisition History .....	6
	Relation to North Maine Woods .....	6
	Parks and Lands Overlap .....	8
	Public-Private Partnerships .....	8
	New Water-Based Recreation Opportunities .....	9
	Remote Location .....	10
	Public Recreation Resources in the Broader Region .....	10
	New Regional Recreation Opportunities - Public/Private Initiatives .....	16
	Trends in Recreation Use .....	18
	Summary of Planning Implications .....	19
<b>IV.</b>	<b>The Character and Resources of the Unit</b> .....	<b>20</b>
	Overview .....	20
	Seboomook and Canada Falls Parcels .....	24
	St. John Ponds Parcel .....	46
	Baker Lake Parcel .....	52
	Big Spencer Mountain Parcel .....	60
<b>V.</b>	<b>A Vision for the Unit</b> .....	<b>66</b>
<b>VI.</b>	<b>Resource Allocations</b> .....	<b>69</b>
	Overview Summary .....	69
	Seboomook Lake Parcel .....	82
	Canada Falls Parcel .....	85
	Baker Lake Parcel .....	86
	St. John Ponds Parcel .....	88
	Big Spencer Mountain Parcel .....	89
<b>VII.</b>	<b>Management Recommendations</b> .....	<b>90</b>
	Seboomook and Canada Falls Parcels .....	90
	St. John Ponds Parcel .....	95
	Baker Lake Parcel .....	95
	Big Spencer Mountain Parcel .....	97
<b>VIII.</b>	<b>Monitoring and Evaluation</b> .....	<b>98</b>
<b>IX.</b>	<b>Appendices</b>	
	A. Advisory Committee Members	
	B. Summary of Management Issues	
	C. Bureau Response to Written Public Comments	
	D. Deed Restrictions and Agreements	
	E. Guiding Statutes	
	F. Glossary	

G. References

- H. Natural Resource Inventory of the Bureau of Parks and Lands Seboomook Unit (under separate cover)
- I. Timber Harvest Plan (under separate cover, to be added when a detailed harvest plan is developed for the Unit)

### ***Acknowledgements***

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

Kathy Eickenberg – *Seboomook Unit Management Plan Coordinator*  
Cindy Bastey – *Chief Planner, Bureau of Parks and Lands*  
Peter Smith – *Regional Manager, Public Reserved Lands Western Region*  
Matt LaRoche – *Manager, Penobscot River Corridor*  
Tom Charles – *Chief of Silviculture, Bureau of Parks and Lands*  
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*  
Tom Desjardin – *Historic Sites Specialist*  
George Powell – *Boating Facilities Director, Bureau of Parks and Lands*  
Gena Denis – *Geographic Information System Coordinator*

In addition, much of the material in the Plan related to natural resources, especially Geology and Soils, Hydrology and Water Quality, Natural Communities, Wetlands, Ecological Processes, and Rare Plant and Animal Species was provided by the Maine Natural Areas Program, whose staff conducted a natural resource inventory for the Bureau and provided a detailed report, written by Brooke Wilkerson, which is included in this Plan (under separate cover) as Appendix H – Natural Resource Inventory of the Bureau of Parks and Lands Seboomook Unit.

Information about archaeological and historic resources information was also provided by Art Spiess at the Maine Historic Preservation Commission, and Jim Clark of the consulting firm TRC in Ellsworth, who conducted archaeological investigations on the Unit on behalf of Great Northern Paper and the Land for Maine’s Future program during the acquisition phase.

The Bureau also acknowledges the helpful participation of the Seboomook Unit Management Plan Advisory Committee (listed in Appendix A), and the many members of the public who participated in the ten public meetings held during the preparation of this Plan.

# I. Introduction

## *About This Document*

This document constitutes a ten-year Management Plan (the Plan) for the Reserved Land properties collectively known as the “Seboomook Unit” managed by the Maine Bureau of Parks and Lands (the Bureau). The Plan includes background information about the planning process and the regional context of the Plan, but the core of the Plan is a description of the character and resources in the Unit, a Vision for the future of the Unit, and management allocations and recommendations. Appendices provide a summary of issues raised during the planning process, as well as written comments submitted by members of the public and other state agencies during various phases of the plan’s development, and the Bureau’s response to those written comments.

One objective of the Plan is to provide a balanced spectrum of opportunities across the Unit, and in keeping with the opportunities and resources available in the broader surrounding Moosehead Region. In developing the management recommendations for each parcel, the Bureau has been mindful of this broader perspective.

The Seboomook Unit Management Plan is a commitment to the public that the Seboomook Unit lands 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 within the Plan area, 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. The management plans describe monitoring and evaluation procedures for recreational use, wildlife management, management of Ecological Reserves, and timber management.

The Seboomook Unit Management Plan will be effective for a 10-year period. After that time, a review and update of the information and management objectives will be conducted. The Bureau recognizes that some resources and management issues will undergo change over time, and several of the stated objectives will require longer than the 10-year Plan period to achieve.

## ***What is the Seboomook Unit?***

The Seboomook Unit is comprised of four distinct parcels (Figure 1).

- (1) **Seboomook and Canada Falls:** This is the largest parcel, and includes 41,436 acres, located north and west of Moosehead Lake in Pittston Academy Grant, Soldiertown Township, Plymouth Township, Seboomook Township, and Little W Township. It includes 40,583 acres surrounding Seboomook Lake and extending south to the north end of Moosehead Lake, with 58 miles of water frontage; and 853 acres in a 24-mile shoreland strip adjacent to Canada Falls Lake and the South Branch of the Penobscot River, which flows out of Canada Falls Lake and drains into Seboomook Lake.
- (2) **St. John Ponds:** North of the Seboomook Parcel lies the St. John Headwater Ponds Parcel, a 3,917 acre block surrounding a series of small ponds at the top of the St. John River watershed, located in T4R17 WELS. It includes lands surrounding Upper First St. John Pond, Lower First St. John Pond; Robinson Pond; and the southern half of Third St. John Pond. This parcel was acquired with the condition that it be managed as an Ecological Reserve.
- (3) **Baker Lake:** Further North, in T7R17 WELS, it includes 1,650-acre shoreline buffer around Baker Lake, also within the St. John River drainage.
- (4) **Big Spencer Mountain:** To the south and east of Seboomook Lake is the Big Spencer Mountain Parcel, 4,242 acres acquired, like the St. John Ponds Parcel, with the stipulation that it be managed as an Ecological Reserve.

These lands offer a wide-ranging spectrum of high quality resources and recreational opportunities, including

- some of the best whitewater boating in the state (with predictable whitewater boating flow releases on the South Branch and boatable minimum flows on the West Branch);
- outstanding native brook trout lake fishing on Canada Falls Lake;
- big river salmon and trout fishing on the West Branch of the Penobscot;
- an increasingly popular muskellunge fishery at Baker Lake;
- one of the region's most prominent mountains, Big Spencer Mountain;
- varied wildlife viewing, hunting and trapping opportunities (two active eagles nests, loons, moose, deer, bear, and more);
- 14 primitive camping areas, with a total of over 50 campsites; and
- two businesses (in-holdings in the Unit): Historic Pittston Farm, once the hub of Great Northern's logging operations in the West Branch District, now a sporting camp; and Seboomook Wilderness Campground at the north end of Moosehead Lake, on the east end of the Seboomook Parcel, accessed through the Unit via the South Seboomook Road.

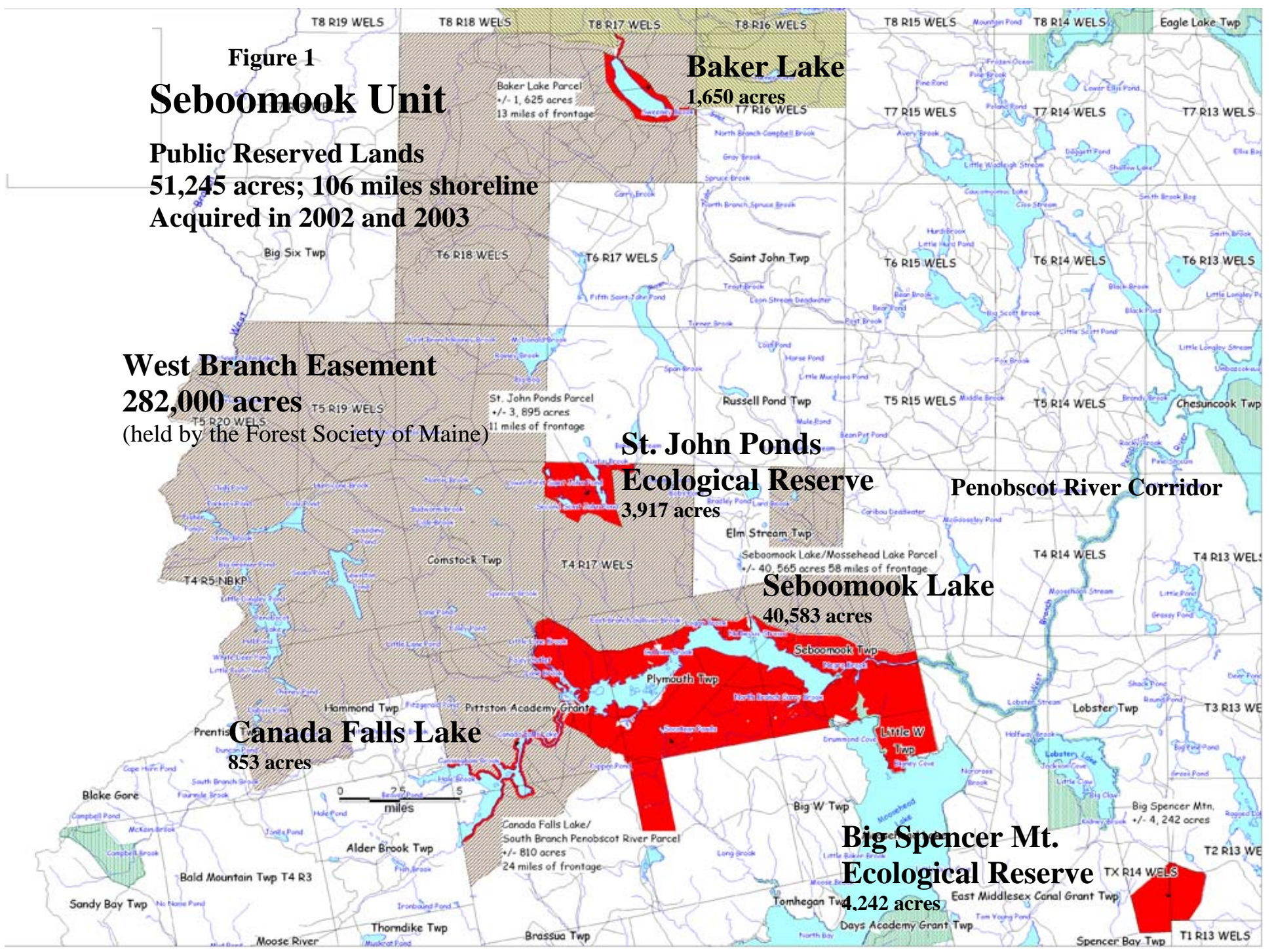


Figure 1

# Seboomook Unit

**Public Reserved Lands**  
51,245 acres; 106 miles shoreline  
Acquired in 2002 and 2003

**West Branch Easement**  
282,000 acres  
(held by the Forest Society of Maine)



## II. The Planning Process

### *Statutory and Policy Guidance*

Multiple use management plans are statutorily required for Public Reserved Lands pursuant to Title 12 MRSA § 1847 (2), and must be prepared in accordance with the guidelines set forth in the *Integrated Resource Policy* revised and adopted in December 2000 by the Bureau. 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 and 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.

### *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 Unit. In total ten public meetings were held on the plan, including three Advisory Committee meetings. The final public meeting on the proposed plan was held October 3, 2006. This was followed by a 30-day public comment period.

*Resource Assessments:* The first phase of the planning process includes a thorough study of the resources and opportunities available on the Seboomook Unit. Beginning in the summer of 2004, Bureau staff undertook an intensive review the natural and geological, historic and cultural, fisheries and wildlife, recreation, and timber and renewable resources. Much of this information was obtained by conducting formal inventories of specific resource areas (Natural Resource Inventory, Cultural Resource Inventory, etc.). 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 a number of all-day reconnaissance field trips to the Unit. The first was to inventory and characterize the land-based resources and recreational features (primarily camping sites and roads); the second was to view and experience the water-related opportunities on Canada Falls Lake, the South Branch, Seboomook Lake, and the West Branch from Seboomook Dam to Roll Dam campsite; the third involved an aerial reconnaissance (helicopter) with Maine Natural Areas Program staff focusing on the significant natural areas at Seboomook Lake, Canada Falls, St. John Ponds, and Baker Lake; and the fourth involved a snowmobile tour of the snowmobile trails system on the Unit and its connection to the surrounding trails, particularly the “Moosehead Loop.”

*Issue Identification/Discussion through Public Meetings:* Another component of the planning process involved conducting a variety of forums to determine and discuss management issues needing to be addressed by the Plan. These forums included

- a Public Scoping Session held in Greenville on August 31, 2004 to hear from various members of the public regarding the management concerns they had for the Unit properties;

- two “focus meetings” to hear from members of the public about concerns related to appropriate types of access to Unit, and access fees, including the future relationship of the Unit to the North Maine Woods system, held on October 12, 2004; and April 13, 2006;
- a focus meeting held on March 23, 2005 to hear concerns and issues regarding appropriate recreational uses for the Unit; and
- two special meetings with a work group established specifically to address public access and gate fee issues, including the future relationship of the Unit with the North Maine Woods system, held December 6, 2004, September 19, 2005.

*Advisory Committee Formation and Review of Preliminary Inventory and Assessment:* In May 2005 the Bureau documented the resources and management issues identified as described above into a Preliminary Plan or Pre-Plan. At the same time a Public Advisory Committee was formed to review and discuss the Pre-Plan document on a more formal basis, and to provide input on the overall process for developing the Plan. Members of this Committee were selected on the basis of their resource expertise, and for their regional and local knowledge in areas important to the management of the Unit. A meeting to review the Preliminary Plan was held June 8, 2005.

*Advisory Committee Review of the Bureau’s “Vision and Management Recommendations” :* On September 27, 2005 the Bureau met with the Advisory Committee to review its proposed Vision and Management Recommendations for the Unit. This included review of proposed “resource allocations,” or areas designated for a specific type of management such as remote recreation, wildlife management, timber management, etc. Bureau planning and regional staffs are responsible for developing and proposing these allocations, which define the type and intensity of management to be applied for all of the lands within the Plan area (a more descriptive explanation of the allocation system may be found in the Bureau’s *Integrated Resource Policy*). A follow-up Advisory Committee meeting was held on May 11, 2006 to review revisions resulting from the comments received on the proposed vision and management recommendations.

*Public Meeting on Final Draft Plan:* Comments from the Advisory Committee on the Draft Vision and Management Recommendations, along with any comments from other members of the public and various resource professionals, were considered in developing the final draft of the Plan. This Plan was presented and explained at a public meeting on October 3, 2006 so that members of the public would have an opportunity to express any comments and concerns about the Plan. This was followed by a written comment period through November 3, 2006.

*Commissioner’s Review of the Proposed Plan, and Plan Adoption:* Comments received on the Final Draft Plan were then considered in preparing a Management Plan for review by the Director of the Bureau of Parks and Lands. Upon his recommendation, the Plan was then reviewed and approved by the Commissioner of the Department of Conservation.

For a record of information presented and comments received at the public meetings held during the development of this Plan, see the Bureau’s website:

<http://www.state.me.us/doc/parks/programs/planning/seboomook/index.html>

### **III. The Planning Context**

#### ***Acquisition History***

The Seboomook Unit was acquired in December 2003 as part of a larger land conservation effort known as the “West Branch Project.” The West Branch Project resulted in state acquisition of the Seboomook Unit including approximately 51,580 acres of land, and acquisition of a conservation easement held by the Forest Society of Maine on another 282,000 acres surrounding the state lands (Figure 1). By the terms of the easement, the surrounding lands will be managed for timber using sustainable forestry practices, while providing traditional public access (vehicular access on designated roads and pedestrian use throughout), protecting environmentally sensitive areas, and prohibiting future development.

Many agencies and organizations participated in the campaign to acquire these lands, with the Forest Society of Maine playing a key role along with the Bureau. Major funding was provided by the USDA Forest Legacy Program, together with funds from the Maine Bureau of Parks and Lands, the Land for Maine’s Future Program, The Nature Conservancy, the Maine Outdoor Heritage Fund, the National Park Service’s Land and Water Conservation Fund, the Forest Society of Maine, the US Fish and Wildlife Service, and many other organizations and individual donors.

The Seboomook Unit lands were acquired subject to a number of acquisition agreements, which affect or condition how the Bureau may manage these lands. These agreements include:

1. Big Spencer Mountain and St. John Ponds Parcel: to be designated as Ecological Reserves.
2. Baker Lake Parcel: to be managed for remote recreation.
3. Seboomook, Canada Falls, Baker Lake and Moosehead Lake shorelines: subject to loon protection measures.

#### ***Relation to North Maine Woods System***

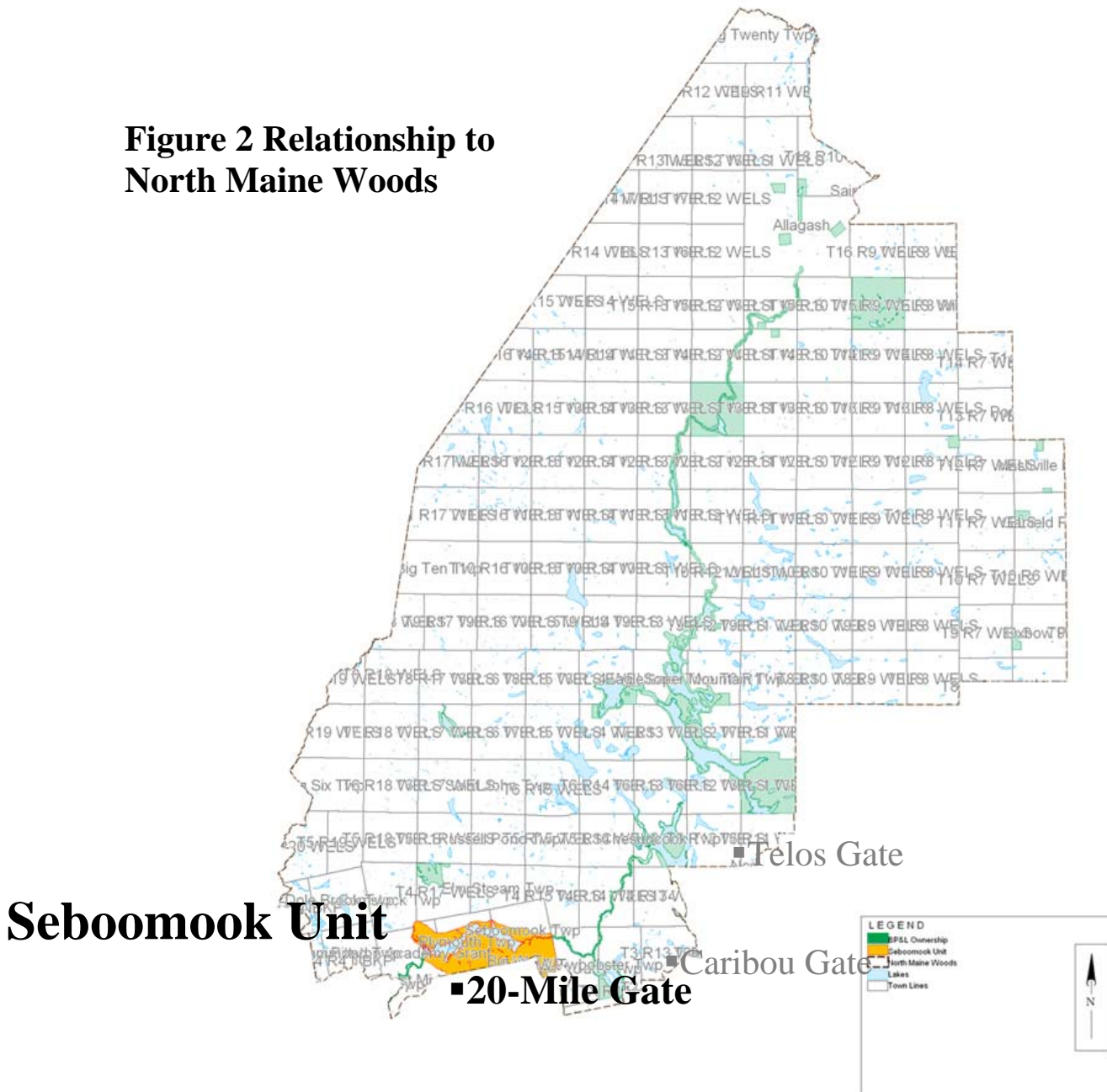
The Seboomook Unit lands lie in the northern forested half of the state where, since the 1800’s, development has been sparse and the land has been largely owned by private timber companies. While the large timber management owners traditionally allowed public recreational use of their lands for hunting, fishing, trapping, and other backcountry uses, the opening of the lands with a network of roads in the 1960’s following elimination of river log drives lead to the formation of the North Maine Woods (NMW) recreation management system. The NMW organization operates a coordinated system of gates and charges day use and camping fees for recreational use of these private, largely working forest lands. Participating landowners include a number of private timber and land management companies as well as the State of Maine, and The Nature Conservancy.

The North Maine Woods 20-Mile gate, located at the entrance to the Seboomook Unit, is not part of the Seboomook Unit, but is located on lands owned by Merriweather, LLC and managed by

Wagner Forest Management Company. Since 1999, this gate has been used to control non-winter vehicular access to the North Maine Woods system in this region. Prior to that, the gate was operated by Great Northern Paper Company, the long-time previous owners of the extensive West Branch region.

The Seboomook Unit is currently part of the NMW recreation management system. It is located at the periphery of the system (Figure 2), and abuts the 282,000-acre conservation easement that extinguishes development rights and provides the public with both vehicular and pedestrian access rights, that is also within the North Maine Woods system.

**Figure 2 Relationship to North Maine Woods**



## ***Parks and Lands Overlap***

The lands acquired as part of the Seboomook parcel overlap the Penobscot River Corridor (PRC), which begins 400 feet below Seboomook Dam. The Bureau now has management control of the lands adjacent to two additional river sections tying into the PRC water trail – The North Branch and the South Branch of the Penobscot River. The water recreation opportunities on the Seboomook and Canada Falls parcels are logical extensions of the opportunities available in the Upper PRC. Since the PRC is part of the State Parks system, and the rest of the Unit is part of the Public Reserved Lands system, the Seboomook Unit incorporates the Bureau’s two management models. Parks are generally smaller parcels that have relatively intensive recreation use, charge user fees, and have an active recreation management presence; while Public Reserved Lands are generally larger tracts managed for multiple uses including timber and wildlife management, with more dispersed recreation use, and generally no recreation use fees. Given the types of recreation activities expected to occur on some parcels within the Seboomook Unit, the management of the Seboomook Unit reflects a blend of these two models.

## ***Public-Private Partnerships***

The resources of the Seboomook Unit historically have been managed as private lands with strong public partnerships. Under state ownership, these partnerships are continuing and growing.

- The Unit is located at the gateway to the North Maine Woods system that manages public recreational use of these private forest lands. This area occupies an important niche in the long tradition of public use of Maine’s extensive, privately held, undeveloped, back-country north woods for hunting, wildlife viewing, fishing, and boating. The acquisition of the Seboomook Unit coincided with the acquisition of permanent public vehicular and pedestrian access rights to 282,000 acres of privately held working forests surrounding the Unit.
- The Seboomook Unit includes two waterbodies that have been historically managed for the benefit of the downstream woods industries – first to store and transport logs by holding and releasing water; and later to store water for downstream hydropower generation. Under Great Northern’s ownership, another tradition of cooperation was developed, with agreements related to fisheries flows and easements for public recreation use along the Penobscot River (including in West Branch in the Seboomook area). Although Great Northern sold the lands surrounding Seboomook and Canada Falls Lakes, it retained ownership of the islands, a 10-foot strip above the high water mark around these lakes, lands around the dams, and three parcels with informal boat access sites. Today Great Lakes Hydro America, LLC owns these lands, and has already partnered with the Bureau in the improvement of whitewater boating access facilities on the South Branch and West Branch. In addition, a conservation easement, to be held by the Bureau, is being developed for the Seboomook islands and the 10-foot shoreline strip.

- Within the Unit are two private business in-holdings –Historic Pittston Farm and Seboomook Wilderness Campground. Both have expressed interest in working with the Bureau on provision of services that are mutually beneficial. Pittston Farm is already working with whitewater boaters to provide shuttle services, and is also planning to develop horse trails on its 44-acre property to serve its clients and is interested in pursuing opportunities for additional trails on the Seboomook Unit lands. Seboomook Wilderness Campground has traditionally provided supplies and services to area recreationists at its campground store.

### ***New Water-Based Recreational Opportunities***

On December 22, 2004 Great Lakes Hydropower LLC, owner of dams at Canada Falls Lake and Seboomook Lake, received a new license from the Federal Energy Regulatory Commission for operation of these dams for storage purposes to supplement storage at the downstream Ripogenus hydroelectric project. The water management program provided for Seboomook and Canada Falls lakes in the new license is a significant improvement over past management, which was characterized by near complete drawdown of the lakes over winter, and variable drawdowns during the open water season. Under the new license:

- Lake water levels will be held more stable and will enhance fisheries and wildlife values and provide significant new or enhanced recreational opportunities for flatwater boating and camping on the lakes,
- Higher minimum summer flows and scheduled whitewater boating releases on the South Branch and the West Branch of the Penobscot River will increase opportunities for use of these rivers for both technical and beginning-intermediate whitewater boating, while enhancing fisheries habitat.
- Fall flow augmentation in the North Branch as well as the West Branch will provide increased big river fall fishing opportunities for landlocked salmon and wild trout.



*South Branch of the Penobscot River – BP&L photo*

### ***Remote but Accessible Location***

The Seboomook Unit is far enough from populated areas, interstate highways, and utilities to be considered “remote,” yet it is accessible by car. In this sense, the term “semi-remote” is appropriate for this Unit. It is located more than 75 miles from an interstate, and 20 miles from a paved road, yet it can easily be visited on a day-use basis by residents and visitors staying in the nearby “gateway” communities of Greenville (population 1,419) and Jackman (population 1,057), which lie within 35 miles of the Unit.

### ***Public Recreation Resources in the Broader Region:***

The following lists the impressive array of public and quasi-public recreational resources found in the broader region (see Figures 3a, 3b and 3c):

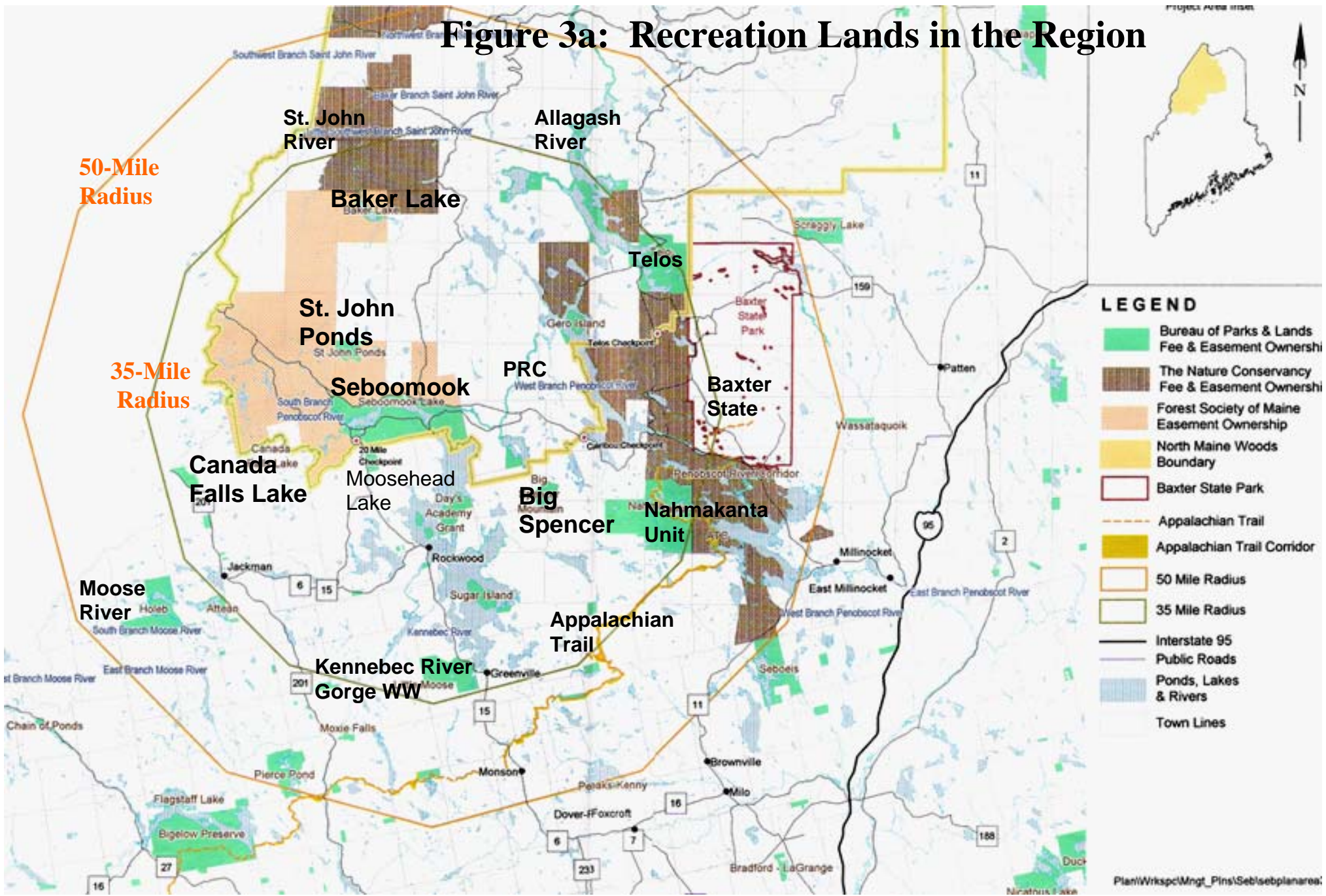
- The start of the Penobscot River Corridor, down to Ripogenus Gorge
- The start of the Allagash Wilderness Waterway (State Park)
- The start of the Moose River Bow Trip
- The Kennebec Gorge whitewater boating area
- The start of the Upper St. John River trip (Maine’s best known unregulated, undeveloped big river extended canoe trip; the longest free-flowing river segment in the eastern U.S.)
- Baxter State Park
- Six other Public Reserved Lands including
  - Days Academy Grant and Sugar Island on Moosehead Lake,
  - Little Moose Unit just outside of Greenville,
  - Gero Island in Chesuncook Lake,
  - the Telos Unit in T6R11 WELS,
  - the Chamberlain Lake Unit
  - the Nahmakanta Unit in Rainbow Township, T1R12 WELS, and T1R11 WELS
- Lily Bay State Park on Moosehead Lake
- The Debsconeag Lakes Wilderness Area (The Nature Conservancy )
- Katahdin Ironworks State Historic Site and surrounding Appalachian Mountain Club acquired Lands
- Portions of the “100-mile Wilderness” section of the Appalachian Trail- Whitecap Mountain to Baxter Park
- Hundreds of miles of snowmobile trails between Jackman and Millinocket, including the popular Moosehead Loop trail passing through the Seboomook Unit (Figure 3b)
- A growing network of ATV trails, especially west of Moosehead Lake (Figure 3c)

Within a 50-mile radius, the following additional public recreational resources are available:

- The Lower Penobscot River Corridor (Ripogenus dam to the Debsconeags)
- Peaks-Kenny State Park (Sebec Lake)
- Sebois Reserved Lands Unit (Sebois Lake)
- Holeb Reserved Lands (around Holeb and Attean Ponds)
- Bigelow Preserve (Flagstaff lake) and Dead River Public Reserved Lands
- The Dead River canoe/whitewater boating trip
- The Appalachian Trail from Caratunk to Baxter State Park

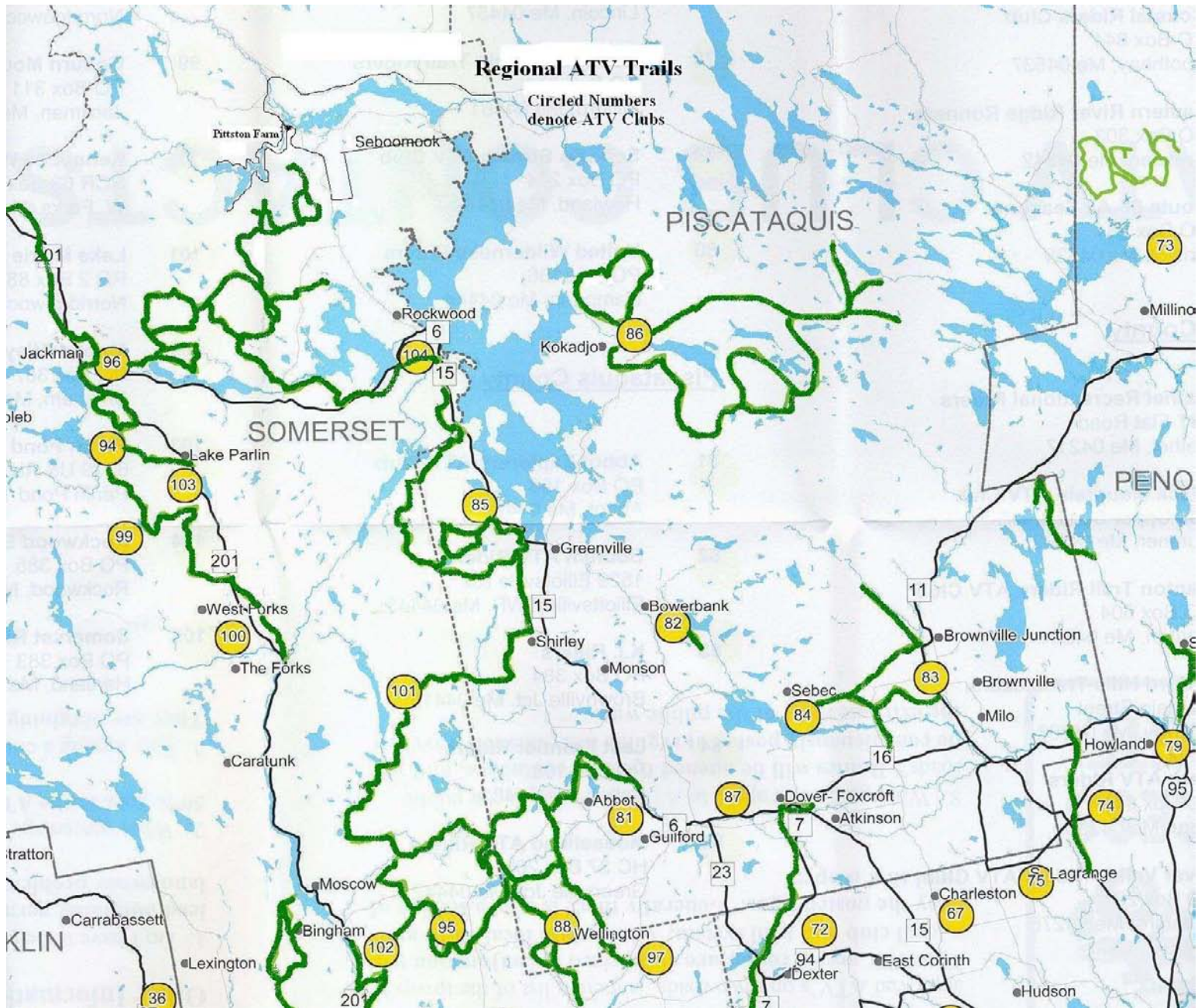


# Figure 3a: Recreation Lands in the Region



**Figure 3b: Regional Snowmobile Trails**





**Figure 3c: Regional ATV Trails**

The Tables below include a more thorough listing of these and other public recreation resources in this region.

**PUBLIC RESERVED AND NONRESERVED LANDS  
within a 50-mile radius of the Seboomook Unit**

<b>PISCATAQUIS COUNTY</b>					
<b>CTY</b>	<b>TOWN</b>	<b>NAME</b>	<b>FEE AC</b>	<b>CE AC</b>	<b>TOT AC</b>
PIS	Beaver Cove	Beaver Cove	778	0	778
PIS	TXR14, T2R13, Northeast Carry	Big Spencer	4,348	0	4,348
PIS	Bowdoin College Grant	Bowdoin College Grant E	960	0	960
PIS	Soper Mtn, Eagle Lake Twp, T7R12, T7R13, T7R14, T9R13	Chamberlain Unit	8,127	0	8,127
PIS	Chesuncook Twp	Chesuncook	4,055	0	4,055
PIS	Days Academy Grant	Days Academy Grant	7,309	550	7,859
PIS	Frenchtown Twp	First Roach Pond	0	525	525
PIS	Frenchtown Twp	Frenchtown	23	0	23
PIS	Big Moose Twp, Little Moose Twp	Little Moose	13,552	0	13,552
PIS	Spencer Bay Twp, Lily Bay Twp	Moosehead Lake	1,650	0	1,650
PIS	T1R11, T1R12, Rainbow Twp	Nahmakanta	44,006	0	44,006
PIS	T08 R14 WELS	Otter Pond	1,423	0	1,423
PIS	T4R9, Lake View Plt	Seboeis	10,981	0	10,981
PIS	Days Academy Grant	Sugar Island	4,208	0	4,208
PIS	T6R11, T6R12, T7R11	Telos	22,969	0	22,969
					<b>125,464</b>

<b>SOMERSET COUNTY</b>					
<b>CTY</b>	<b>TOWN</b>	<b>NAME</b>	<b>FEE AC</b>	<b>CE AC</b>	<b>TOT AC</b>
SOM	Bald Mountain Twp T2	Bald Mountain Twp	1,793	0	1,793
SOM	Dead River Twp, Bigelow Twp	Bigelow Preserve	15,140	0	15,140
SOM	Caratunk	Caratunk E, N, S	1,330	0	1,330
SOM	Flagstaff Twp, Dead River Twp, T3R4 BKP WKR	Dead River Peninsula	8,390	0	8,390
SOM	Dennistown Plt	Dennistown Plt	1,000	0	1,000
SOM	HAMMOND TWP	Hammond	960	0	960
SOM	Bradstreet Twp, Holeb Twp, Attean Twp, T5R7 BKP WKR	Holeb	20,144	11	20,155
SOM	Johnson Mountain	Johnson Mtn	960	0	960
SOM	MOOSE RIVER	Moose River S	282	0	282
SOM	Little W Twp, Sapling Twp, Seboomook Twp	Moosehead Lake – “Seboomook Unit”	771	0	771
SOM	Pittston Acad Cg, Little W Twp, Comstock Twp, W Middlesex Canal Gr, Soldiertown Twp, Seboomook Twp, Plymouth Twp, T7R7, T4R17 WELS	West Branch – “Seboomook Unit”	46,841	0	46,841
SOM	Moxie Gore	Moxie Gore	360	0	360
SOM	Pierce Pond Twp	Pierce Pond	0	1,315	1,315

SOM	Rockwood Strip	Rockwood Strip E Doyle, W	283	0	283
SOM	Sandwich Acad Grant	Sandwich Acad Grant	480	0	480
SOM	Sandy Bay Twp	Sandy Bay	2,712	0	2,712
SOM	Taunton & Raynham Acad Grant	Taunton & Raynham Acad Grant	674	0	674
SOM	The Forks Plt	The Forks Plt N, S	1,011	0	1,011
SOM	Upper Enchanted Twp	Upper Enchanted Twp	320	0	320
SOM	West Forks Plt	West Forks Plt Central, NE, NW, SW	1,285	0	1,285
					<b>106,062</b>

**STATE PARKS AND HISTORIC SITE LANDS**  
*within a 50-mile radius of the Seboomook Unit*

<b>PISCATAQUIS COUNTY AND SOMERSET COUNTIES</b>					
<b>CTY</b>	<b>TOWN</b>	<b>NAME</b>	<b>FEE AC</b>	<b>CE AC</b>	<b>TOT AC</b>
PIS	T5R11, T6R11, T6R12, T7R11, T7R12, T7R13, T7R14, T8R14, T9R12, T9R13, T10R12, T10R13 WELS; Soper Mtn, Eagle Lake Twp	Allagash Wilderness Waterway	15,801	0	15,801
PIS	T1R10, T1R11, T2R10 WELS, Rainbow Twp	Appalachian Trail	0	7,653	7,653
PIS	Elliotsville	Elliotsville Parcel	1,276	0	1,276
PIS	Days Academy Grant	Farm Island	980	0	980
PIS	Katahdin Iron Works Twp	Katahdin Iron Works State Historic Site	5	0	5
PIS	Brownville, KIW Twp, Williamsburg Twp	Katahdin Iron Works RR Trail	43	0	43
PIS	Beaver Cove	Lily Bay State Park	933	0	933
PIS	Lobster Twp	Lobster Lake	2,300	0	2,300
PIS/SOM	T1R9, T1R10, T2R9, T2R10, T3R11, T3R12, T4R12, T4R13, T4R14, T5R14, T6R13 WELS; Chesuncook Twp, E Middlesex Canal Gr, Lobster Twp, NE Carry, Rainbow Twp, Seboomook TWP	Penobscot River Corridor	0	4,936	4,936
SOM	Dead River Twp	Bigelow Preserve	8,472	0	8,472
SOM	West Forks Plt	Moxie Falls	217	0	217
SOM	Seboomook Twp	Penobscot River Corridor (within the Seboomook Unit)	212	0	212
					<b>42,828</b>

## ***New Regional Recreation Opportunities – Public/Private Initiatives***

In the greater region broadly defined as within a 50-mile radius from the Seboomook Dam, there are both public and private initiatives to either develop additional recreational resources, or secure additional public recreational lands. These efforts are likely to increase recreational opportunities in the region, and to attract more use to the region.

“100 Mile Wilderness” Initiative - In December of 2003 Governor Baldacci laid out components of the “Maine Woods Legacy” initiative that would strengthen “the connection between economic health and conservation in the Maine Woods.” Part of that initiative included efforts focused on the “100 Mile Wilderness” section of the Appalachian Trail, in which local residents, businesses, economic development groups and conservation groups such as the Eastern Maine Development Corporation, the Maine Appalachian Trail community and the Sierra Club would work together to explore new opportunities throughout this region that would “enhance economic development, recreational access and land protection.” The effort has been supported by an economic study conducted by the University of Maine, Department of Resource Economics and Policy and the Eastern Maine Development Corporation.

Western Mountains Foundation Proposed Hut to Hut Multi-Use Trail - This proposal would establish a 180-mile trail corridor from Bethel to Brassua Lake, with the first phase centered on the northern end of the proposed system. It would be a four-season trail, for hiking, mountain biking, and cross-country skiing, and would include some water-based recreation opportunities. The proposal is still in its developmental stages.

Piscataquis Tourism Task Force: This Task Force was established to develop a tourism development implementation plan for Piscataquis County. It is composed of representatives of the following organizations: UM Cooperative Extension, Maine Highlands Corporation, Southern Piscataquis Chamber of Commerce, Moosehead Lake Region Chamber of Commerce, Town of Brownville, Town of Dover-Foxcroft, Town of Greenville, Piscataquis County government, and the PCEDC-Cultural Heritage Ecotourism Committee. In 2003-2004 this Task Force participated in the development of a survey of attitudes about nature-based and cultural-heritage tourism in Piscataquis County, conducted by researchers from the University of Maine in 2004. A total of 402 residents and 207 businesses responded to the survey. A report on the survey entitled *Nature-Based and Cultural-Heritage Tourism in Piscataquis County – Survey Analysis* is available online at [http://www.umaine.edu/mcsc/Research/EcoDev\\_menu.htm](http://www.umaine.edu/mcsc/Research/EcoDev_menu.htm)

The following excerpts some of the findings:

- In general, respondents felt more favorably toward increases in non-motorized activities than motorized ones.
- Over half of respondents would like to see increases in current levels of camping and hiking (59.2%), cross-country skiing (53.3%), and kayaking and canoeing (50.4%). Of over 370 respondents, only 3 indicated that they would like to see less of those activities.
- Almost half of respondents (49.3%) want snowmobiling to remain at its current level, while 25.6% wanted it to increase, and 15.7% wanted it to decrease.

- ATV-riding is the only activity that a plurality of respondents (39.3%) would like to see decrease in coming years. Only 18.0% want ATV-riding to increase, and 30.5% prefer it to remain at the current level.

Maine Nature Tourism Initiative: In September 2004 the Maine Department of Economic and Community Development (DECD) commissioned a study to assess Maine’s opportunities in nature-based tourism. A nationally-known experiential tourism development consulting firm, FERMATA, Inc. worked with state agency representatives, members of various state level organizations, and stakeholders in three rural pilot areas, one of which was the Maine Highlands region, an area that includes the Seboomook Unit. FERMATA, Inc. identified sites of interest for tourism itineraries – identified routes for tourist guides. Big Spencer Mountain and Pittston Farm were among those sites of interest. This information was collected in collaboration with the Piscataquis Tourism Task Force. One of the recommendations for carrying this work forward was to “strengthen the appeal of the local region as a recreational destination with a rich cultural and natural history.”

Growing Landowner/ATV Club Trail Network: The Bureau of Parks and Lands, Off Road Vehicle Program supports the formation of local ATV clubs to work with private landowners to develop and steward ATV trails. This program has gained momentum as ATV use has increased during the past 5 years (see next section). In 2004, the Maine legislature passed a law that made it illegal to operate an ATV on another person’s land without the permission of the landowner (12 M.R.S.A Section 13157-A Operation of ATVs). Many landowners quickly saw the benefits of working with clubs rather than individuals in working out agreements that allowed continued use of existing trails and development of new trails on their lands. The result has been a proliferation of clubs and club sponsored trails, aided by funds dedicated to ATV trails primarily from ATV registrations (over 90% of the funds available) and a portion of the gasoline tax revenues (less than 10% of the funds). In 2006 there were 10 ATV clubs within a 50-mile radius of the Seboomook Unit (136 clubs statewide). Within the Greater Moosehead region, seven clubs received trail grants in 2006 to help construct 311 miles of trails; and 3 municipalities have received grants for another 358 miles of trails. This illustrates how fast opportunities for this sport are growing, in response to an ever-increasing demand.



New ATV/Snowmobile Bridge over the Moose River in Rockwood (BP&L Photo)

## *Trends in Recreation Use in the State and Region*

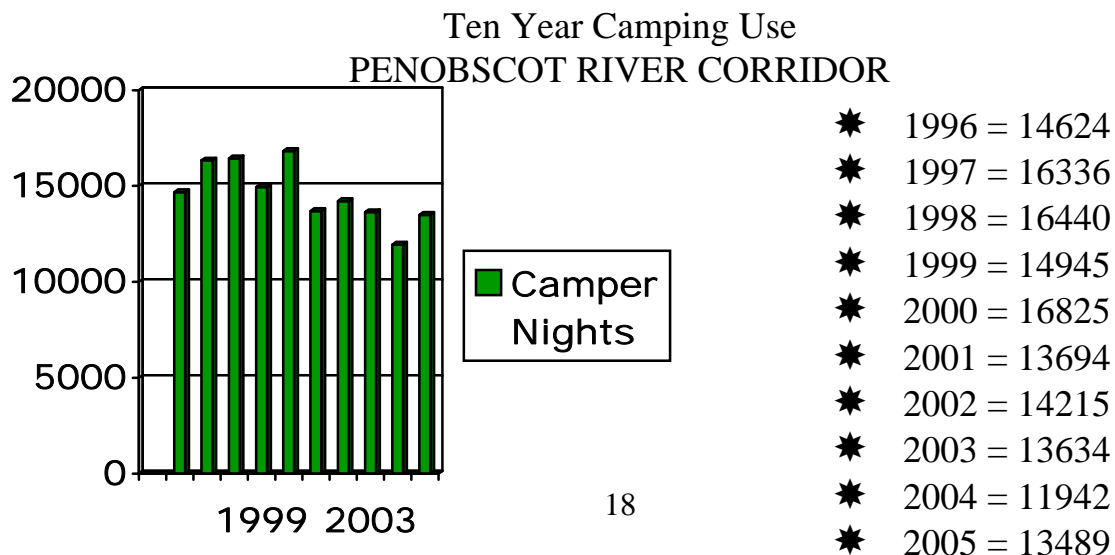
North Maine Woods System: Recreation use of the North Maine Woods system has shown a declining trend since the mid-1990's. In 1999 the West Branch region, including the Seboomook Unit lands, was added to the NMW system, and use jumped from 181,814 visitor-days to 297,266 visitor-days, but use has since declined steadily to 231,914 visitor days in 2005. Use through the 20-Mile gate, at the entrance to the Seboomook Unit, was 42,227 visitor-days in 2005, following a steady decline from 59,218 in 2000. All of the above figures are for spring through fall use; there are no data for winter recreational use in the NMW system.

State Parks: Day use to Maine State Parks increased from 1.75 day use visits in 1993 to 2.32 million visits in 2001, and declined thereafter. In 2006 estimated day use was 1.75 million visits. Camper nights at state park campgrounds followed a similar trend, increasing from 208,000 nights in 1993 to 253,000 in 2002, and then declining. Use in 2006 was 229,000 camper-nights. A decline in economic conditions after 2001 likely contributed to the decline in use that followed an eight-year increasing trend.

Penobscot River Corridor: Use of the Penobscot River Corridor (primarily rafting in the Lower West Branch Penobscot and canoe trips in the Upper West Branch) has fluctuated depending on weather and economic conditions. During strong economic conditions, from 1996 to 2000 camper-nights fluctuated roughly between 14,500 and 16,500; since 2001 it has fluctuated between 12,000 and 14,500 (see below).

Snowmobile Registrations: In contrast, snowmobiling has increased as reflected in snowmobile registrations. The Maine Snowmobile Association reports registrations of 80,833 in 2001-2002 winter season, and over 100,000 in the 2004-2005 season. Registrations were down to 75,096 in the 2005-2006 season due to an abnormally warm winter with little snow.

All-Terrain Vehicle Registrations: Bureau records (kept by fiscal year beginning in July) show that ATV registrations are rising, from 45,337 in FY 2001 to 62,478 in FY 2006. ATVs are not allowed in the North Maine Woods system, but there is interest in a Moosehead Loop trail similar to the existing snowmobile trail around Moosehead Lake, which passes through the Seboomook parcel. In addition, clubs on the west side of Moosehead, connecting from Jackman to Rockwood and Greenville, are interested in a destination/stopover trail to Pittston Farm.





## *Summary of Planning Implications*

1. The Seboomook Unit is located in a **semi-remote region**, at the edge of the vast North Maine Woods system. The 20-Mile gate, located at the entrance to the Unit, is the “gateway” to the western region of the North Maine Woods, including, notably, the start of the St. John River canoe trip and Penobscot River Corridor.
2. The Seboomook Unit has a **unique set of recreation values** that combine backcountry recreational opportunities, and the availability of a range of accommodations on the Unit or at private establishments within the Unit. The Seboomook Unit includes significant wildlife habitat, a prized wild trout and land-locked salmon fishery, remote headwaters ponds, unusual whitewater boating opportunities, and an opportunity to snowmobile in the North Maine Woods, where groomed trails are rare. Further, the Unit surrounds a historic farm that once was the center of operations for Great Northern Paper Company, and was an important area for prehistoric populations. Visitors may choose from a number of primitive campsites at the Unit, nearly all of which are located on lakes or rivers, may stay at either of the two commercial establishments embedded in the Unit which provide tent, cabin or RV options- Historic Pittston Farm on Seboomook Lake, or Seboomook Wilderness Campground on Moosehead Lake.
3. The Seboomook Unit, with its many high value recreational opportunities, its accessibility, and its proximity to the draw of Moosehead Lake and possible new recreational developments in the surrounding areas (such as Plum Creek’s Moosehead Lake Region Concept Plan), is **likely to become a major recreation destination**.
4. There are many **opportunities for development of public-private partnerships** on this Unit, including partnerships with North Maine Woods, Pittston Farm and Seboomook Campground, and Great Lakes Hydro America, LLC.
5. The configuration of public uses and the intersection of the Penobscot River Corridor (Park) with this Public Reserved Lands Unit offer an opportunity for the Bureau to develop a **new blended “Parks” and “Lands” management model** for this Unit.

## IV. Character and Resources of the Seboomook Unit

### Overview

**Semi-Remote Character:** The Seboomook Unit lies at the edge of Maine's northern forest area, a largely undeveloped region that occupies the northern half of the state and is part of a northern forest region stretching from the Adirondacks in New York to the Canadian maritime provinces. This area forms what some call the largest undeveloped landscape east of the Mississippi. A substantial portion of the area is owned by large private timber management holdings, and has been actively managed for timber since the 1800's. Since the late 1960's when use of the region's waterways for log runs ended, the north Maine woods, including the Seboomook Region, has been laced with a network of logging roads. The Unit is accessible by vehicle over a gravel road, with the nearest paved road twenty miles distant.

**Hydrology:** Lands in the Seboomook Unit include parts of the headwaters to three of Maine's major waterways: the Penobscot, St. John, and Kennebec Rivers. The units encompass several headwaters lakes and ponds in the St. John drainage, including Baker Lake, Upper First St. John Pond, Lower First St. John Pond, Second St. John Pond, and Robinson Pond. It also includes significant ownership around two lakes in the headwaters region of the Penobscot River drainage - Seboomook Lake and Canada Falls Lake. Finally, the Unit includes a significant length of the north shore of Moosehead Lake, the headwaters for the Kennebec River.



*Seboomook Lake (BP&L photo)*

It is interesting to note that Moosehead Lake, formed after the glacier receded about 11,000 years ago, originally drained into the Penobscot River drainage through an outlet at the north end of the lake, now an extensive bog/wetland complex. About 8,700 years ago the land rose in that area, as the land rebounded from the weight of the glacier, and the drainage pattern shifted to the current outlet of the lake, the East Outlet, which drains to the Kennebec River (Spiess, 2004).

While the headwaters of the St. John River are completely uncontrolled, both the Penobscot and Kennebec River headwater lakes are controlled by dams operated for storage for downstream hydroelectric facilities (at the Ripogenus Dam in the case of the Penobscot River and at Indian Pond on the Kennebec River). These headwater storage projects have been recently relicensed by the Federal Energy Regulatory Commission with the Moosehead Project [FERC No. 2671] license order dated November 25, 1997, effective for 39 years and the West Branch Storage Project [FERC No. 2634] license dated December 24, 2004, effective for 50 years.

**Natural Communities and Ecology:** Encompassed within the 51,245 acres of the Seboomook Unit are many of the important ecological features of the Seboomook area, including lakes and associated large wetlands, montane krummholz communities, spruce-fir and northern hardwood forests, and a number of rare plant and animal species. The chart below summarizes some of the key acreage information for the unit.

Seboomook Unit by Parcel	Total Acreage	Forested Wetland (ac)	Open Wetland (ac)	Open Water Acreage	Wading Bird Habitat (ac)	Deer Wintering Areas (ac)
<b>Baker Lake</b>	1,650	172	263	1,252	428	0
<b>Big Spencer</b>	4,242	15	26	0	30	0
<b>Seboomook/ Canada Falls</b>	41,436	1,769	1,318	6,838/	1,767	3,220
<b>St. John Ponds</b>	3,917	199	333	497	600	0
<b>Total</b>	51,245	2,155	1,940	8,791	2,825	3,220

Source: Maine Natural Areas Program, Natural Resource Inventory (Wilkerson, 2005)



*Seboomook Lake (BP&L photo)*

**Forest Resources:** Common forest types in the region include spruce-fir forests and northern hardwood forests. The spruce-fir forests tend to occur on broad wet flats and often fit the natural community description for a Spruce – Fir – Cinnamon Fern Forest. Spruce-fir forests also occur on low hills in the region and tend to form the matrix forest in the region. Hardwood forests are often embedded in the spruce-fir matrix. Drier sites often support beech, while moister areas host sugar maple and yellow birch.



*Aerial photo over the West Branch, looking towards Moosehead Lake, showing areas of recent harvests. BP&L Photo*

The Seboomook parcel is 97 percent wooded with 21 percent softwood, 30 percent hardwood, and the remainder in mixed wood. The Canada Falls parcel is dominated by softwoods, predominantly spruce (70 percent).

The vast majority of Big Spencer Mountain is forested with tolerant hardwoods, with nearly 25% of its 4,242 acres in ledge or sub-alpine fir. The St. John Ponds parcel has a high percentage of sugar maple. Baker Lake is about half softwoods, and half hardwoods.

In addition to harvesting by commercial timber interests, natural disturbances in the area have helped shape the forest. In hardwood communities, the dominant natural disturbance tends to occur as small gaps from ice, windthrow, or natural tree mortality. Small-scale fires, most often caused by lightning strikes, are another common disturbance in the northern forest. Fires on parts of the Seboomook unit in the last century produced even-aged stands of aspen (*Populus spp.*), a fast-growing species that often quickly regenerates after a fire. Fire can be a significant influence in spruce-fir flats, often producing even-aged, single story stands. The twisted, stunted trees on top of Big Spencer Mountain result from exposure to high winds, ice, and cold temperatures.



*South Branch of the Penobscot River – Jim Clark; TRC photo*

The following summarizes the average timber volumes on the Seboomook parcel as compared to other BP&L lands and lands statewide and in Somerset County. Relative to the Seboomook parcel, timber volumes on the Canada Falls parcel are slightly higher, and Big Spencer Mountain, which includes a mature northern hardwood stand, is significantly higher; while the St. John Ponds and Baker Lake parcels are significantly lower.

<i>Standing Timber Volumes per Acre</i>	
<b>BP&amp;L**</b>	
All actively managed lands 1999	20.9
Seboomook Parcel 2001*	15.6
<b>Statewide 1995 USDA data**</b>	14.5
<b>Somerset County 1995 USDA data</b>	13.8
* BP&L estimate based on Wagner data.	
**"Statewide" is limited to the seven northerly "regions" used for the USDA Forest Service inventory, omitting the Capitol and Casco Bay regions.	

**Historic and Cultural Resources:** The rich history of the Seboomook Unit dates back to the earliest use of the area by Native Americans, more than 10,000 years ago. In addition, we know that the Penobscot Indian Nation has continuously used this area, which is part of their historic homeland - the Penobscot River drainage - for thousands of years (Clark et. al., 1998). It is likely this area was used seasonally, due to the harsh climate, and as a travel corridor in connection with trade of the highly valued rhyolite deposits in the Kineo formation. Evidence of its use is generally thought to be associated with campsites located along the rivers and streams used as travel corridors and fishing areas. These areas have been heavily scoured by logging drives, or inundated by dams, so that whatever remains is likely a small portion of what was once a rich physical record of this early pre-historical period. Nevertheless, archaeological investigations in the area have found some significant artifact sites, and most shoreline areas are designated as sensitive areas requiring archaeological study prior to development for campsites or other recreational facilities.

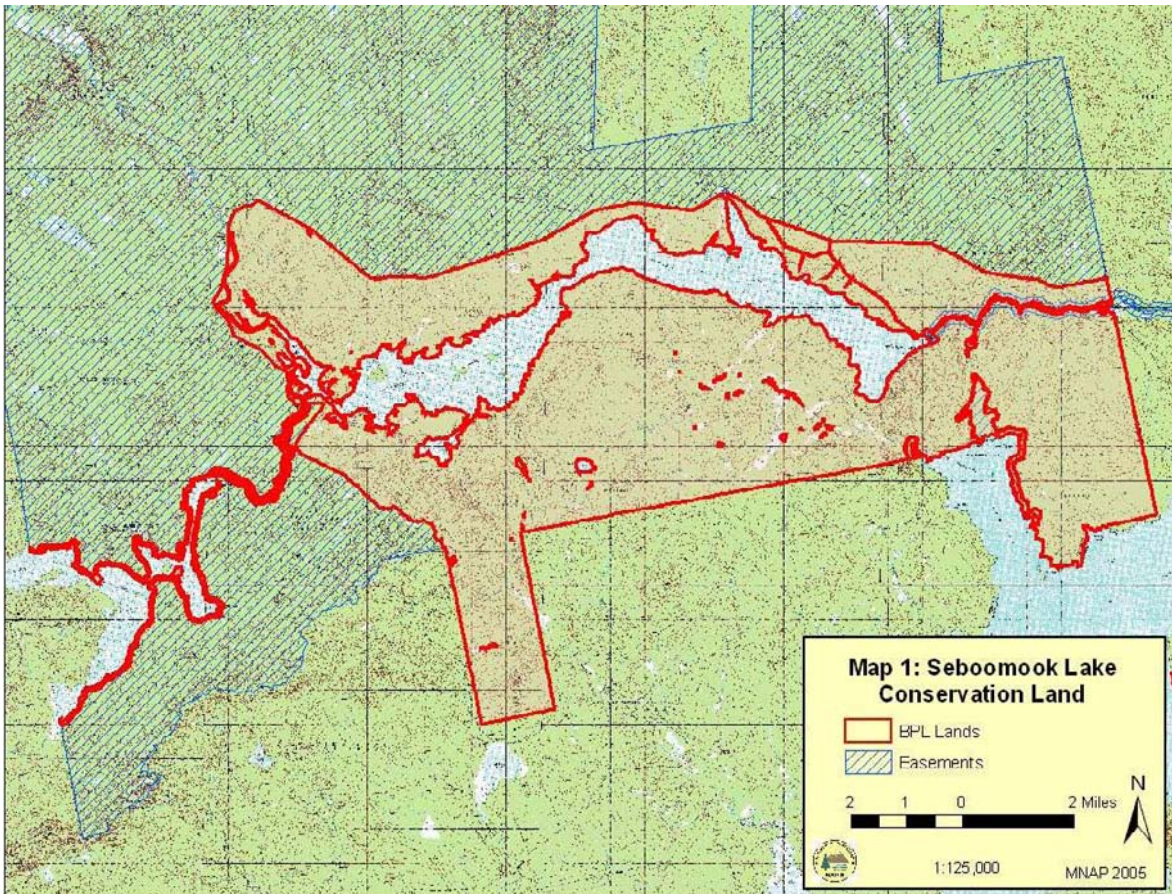
The area has had a long history of use by logging interests. Starting in the mid-1800s the legislature to begin granting charters to various groups of individuals to build dams in northern Maine in recognition of the importance of the logging industry to the Maine economy. At the turn of the century, Great Northern Paper established its Millinocket mill and began acquiring rights to the many small dams on the waterways of the Penobscot River. Pittston Farm was established sometime between 1850 and 1879, and was purchased by Great Northern Paper Company in 1906, when it became the center of its operations in the western Penobscot region.



## *Seboomook and Canada Falls Parcels*

**Character of the Land Base:** The 41,436 acre Seboomook Lake – Canada Falls parcel is by far the largest BP&L unit in the region, including a large block the surrounds Seboomook Lake (40,583 acres) and a shoreline strip on the eastern and northern shorelines of Canada Falls Lake and along the South Branch of the Penobscot River (853 acres) that varies in width generally between 250 and 500 feet (Figure 5). This is a landscape of gentle hills – with a maximum elevation rise of 590 feet from the lakes. There are two LURC-designated remote ponds on the Seboomook parcel – Socatean Ponds #1 and #2 (vehicular road access must be blocked within ½ mile of these ponds; snowmobile access is allowed). Both Canada Falls Lake and Seboomook Lake are largely undeveloped, with only four private camp lots on Canada Falls Lake and seven private camp lots on Seboomook Lake. The lakes are scenic with high recreation value, and lodging and camping is available along the lakeshore. The surrounding uplands have been harvested heavily over the preceding decades.

The block of land between the two main arms of the Canada Falls Lake is Passamaquoddy Tribal Trust land (land held in Trust for the Passamaquoddy Tribe by the U. S. Department of Interior). Merriweather, LLC owns the lands beyond the state-owned lands in the Seboomook and Canada Falls parcel, subject to a conservation and public access easement negotiated as part of the West Branch Conservation Project.



*Figure 5: Seboomook-Canada Falls Parcel*



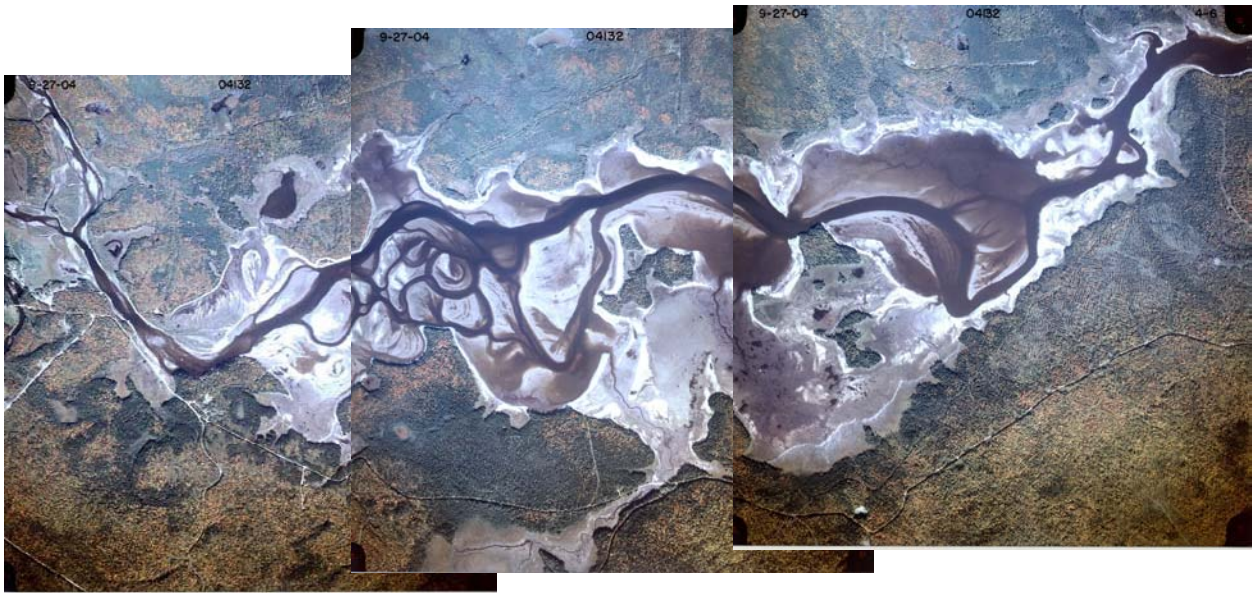
*Pittston Farm on Seboomook Lake at the confluence of the North and South Branches – MNAP photo*

### **Natural Resources:**

**Geology and Soils:** The Seboomook and Canada Falls Lake parcel is underlain with distinctly layered, mildly metamorphosed sedimentary rocks along with a small amount of volcanic rocks. The vast majority of this glacial till was deposited during the last glaciation. Soils in the Seboomook unit range from poorly drained to somewhat excessively drained. In most cases the soils have their origins in dense glacial till, but some soils – especially on the western half of the lake – are derived from glaciofluvial deposits such as outwash plains, deltas, and eskers.

**Hydrology and Water Quality:** Seboomook Lake is a totally artificial lake, created as an impoundment on the West Branch of the Penobscot River for log driving purposes. The existing Seboomook dam, at the east end of Seboomook Lake, was constructed in 1936, replacing a series of four earlier timber dams. At full pond the lake surface area is 6,838 acres and the storage capacity is approximately 5.1 billion cubic feet. The drainage area, including Canada Falls Lake, is 526 square miles. Present operation is store and release, and the lake is normally drawn down by December each winter to provide safe storage for any winter runoff and spring snow melt.

## Seboomook Lake West Bay Fall- 2004



Seboomook Lake is 12 miles long, and a constriction in the middle of the lake divides it into two distinct basins. Maximum depth is 20 feet for the western (upper) basin and 52 feet for the eastern (lower) basin. The upper basin is shallow with numerous islands and coves. Most of the major tributaries to the lake are located in the upper basin. When the lake is drawn down more than about 10 feet, the upper basin becomes riverine with braided channels.

The deeper and larger lower basin maintains a large pool area even at maximum drawdown. There are only a few small islands in the lower basin, though many areas have gravel and boulder substrates. The southern shore also contains a long ledge outcropping. Seboomook Lake. Secchi disc visibility extends to a depth of 7.9 to 11.2 feet (2.4 to 3.42 meters).

Canada Falls Lake, like Seboomook, is a riverine impoundment, with finger-like arms. From the dam at Canada Falls Lake, the lake follows what is essentially a widened river channel before branching into arms that follow the South Branch and two old tributaries – Bog Brook and Alder Brook. Huge masses of driki armor the heads of each of the arms and this is also true for much of the southern shoreline where driki extends more than 164 feet (50 m) out from the modern shoreline in some places. Some erosion occurs along the north shore of the lake where the banks are steeper. Navigation at low water is challenging due to the degree of channel meandering. The terrain in the upland is level to gradually sloping into the upland.

The existing dam was constructed in 1921, downstream from a previous dam. The dam had major repairs and improvements completed in 1982. The lake has a surface area of 2,521 acres. At full pond, Canada Falls Lake's elevation is 1,238 feet. Maximum depth is 26 feet, and average depth is 10 feet. Secchi disc visibility extends to a depth of 4.2 to 7.4 feet (1.27 to 2.25 meters).



The Canada Falls dam, Seboomook dam, and Moosehead Lake dams are controlled in accordance with licenses issued by the Federal Energy Regulation Commission (FERC). The following is a summary of the water management provisions of these licenses:

- According to the Moosehead license (issued in 1997 and effective for 39 years), water levels on Moosehead Lake may be drawn down by a maximum of 4.5 feet.
- The new license for the West Branch Storage Project (issued in December of 2004, effective 50 years) includes new provisions on the timing and extent of lake drawdowns, minimum flows for the rivers below the dams, and provision of recreational (whitewater) boating flows and affects Seboomook Lake, Canada Falls Lake, the South Branch of the Penobscot River, the North Branch of the Penobscot River, and the West Branch of the Penobscot River. Full implementation of the new water management regime, specifically winter drawdown limits, is pending a final safety analysis and approval by FERC.

Lake water management will avoid or minimize the impact on aquatic life by limiting the magnitude and duration of the drawdowns and by controlling the timing of the drawdowns.

- Canada Falls Lake will be managed for a near-natural lake level regime. Maximum drawdown for the lake, effective upon completion of an engineering safety assessment, will be 3.5 feet compared to 26 feet in the past, which will provide maximum habitat in the Canada Falls reservoir for the native brook trout fishery, and will result in more robust emergent and aquatic bed wetlands, and associated wildlife.
- Maximum drawdown at Seboomook Lake under the new license, effective upon completion of an engineering safety assessment, will be 17 feet compared to typically 33 feet in the past, and will not occur until winter. Drawdown will occur gradually beginning in mid-summer, and accelerated in the fall to meet fishery management goals (see below). While this will continue to dewater the upper basin during the late fall until early spring, in the lower basin there will be a significant increase in water retained for overwintering brook trout habitat.
- Both lakes will be managed for relatively stable levels during the waterfowl and loon nesting season (May 15 through July 15), followed by a gradual drawdown to the winter gate settings, which will enhance wetland development and fall shore feeding opportunities for migrating birds.

South and West Branch River flow regulation under the new license will provide fishery and recreational boating flow enhancements in the South Branch and West Branch from July 15 to the winter gate setting, with particular emphasis on maintaining high quality spawning and rearing habitat for salmon and brook trout in the West Branch, and recreational boating flows on the South Branch.

- Minimum flows below Seboomook dam will increase from 150 cubic feet per second (cfs) to 500 cfs to support fisheries and minimum recreational boating flows.
- Flows below Seboomook dam will be increased to typically between 750 and 1,250 cfs between September 1 and October 14 for fish attraction (attracting salmon from Chesuncook Lake into the West Branch for fall spawning), angling, and recreational boating.



*South Branch of the Penobscot River – photo courtesy of Jim Clark at TRC*

- There will be one whitewater boating flow release of 1500 cfs below Seboomook dam on the Saturday of Labor Day weekend.
- Minimum flows below Canada Falls dam will increase from 50 cfs to 75 cfs to support aquatic habitat.
- Scheduled whitewater boating releases on the South Branch ranging from 500 to 900 cfs will take place every Saturday beginning in July and lasting through September 15.

*North Branch River flow augmentation:* Still pending final approval by the Federal Energy Regulatory Commission is a fall flow release from Long and Dole Ponds into the North Branch of the Penobscot River (about 100 cfs flow augmentation throughout September) to provide another fall big river salmon fishery, which is rare in this area.

Wetlands: The Seboomook and Canada Falls Lake parcel contains 1,769 acres of forested wetlands and 1,318 acres of open wetlands, not including areas that are exposed during low lake levels (Map 3). This includes a significant amount of wading bird habitat. The largest wetland complex is Carry Bog, in the southeast part of the unit. This wetland was once the original outlet of Moosehead Lake, when it drained into the West Branch of the Penobscot River.

Ecological Processes: As with other areas in the region, spruce budworm has played a prominent role in forest disturbance on the Seboomook parcel. By preferentially selecting balsam fir as its host, spruce budworm effectively decreased the amount and quality of fir on the unit.

Beavers are the dominant influence in many of the palustrine wetlands in the unit, such as Carry Bog. Beavers build dams to give them safe access to the hardwoods they prefer to eat. When active, beaver ponds flood adjoining uplands, enlarging wetlands and creating new areas for wetland species to colonize. Once the hardwoods within a safe distance of the pond are gone, beavers often abandon their dam and build a new dam in a different location. These abandoned

ponds typically slowly fill with sediment and transition from marshy wetlands back to uplands. By creating and abandoning impoundments along the stream course, beavers create a mosaic of habitats for other plant and wildlife species.

The hydroelectric storage dams on the unit cause large winter drawdowns – up to 17 feet in the case of Seboomook dam. Observations on other large, impounded lakes indicate that vegetation dynamics in dammed lakes are vastly different than in relatively undisturbed lakes (Don Cameron, MNAP). Fluctuating water levels can also be disruptive to animals; this is discussed further in the Fisheries and Wildlife section.

Rare Plant and Animal Species: A number of rare plant species are known from the Seboomook unit. These include water starwort (*Callitriche heterophyla*), Orono sedge (*Carex oronensis*), swamp-fly honeysuckle (*Lonicera oblongifolia*), Wiegand’s sedge (*Carex wiegandii*), and northern fir-moss (*Huperzia selago*).

Two bald eagle nesting sites are known from the unit. Both nests were used actively in 2004 by breeding pairs that successfully produced young.

Creepers, a small mussel species of special concern, are found in two locations in the unit. This small mussel is found only in streams and rivers in Maine, though in other areas it has been reported living in lakes.

Extra-striped snaketail and broadtailed shadowdragon, dragonflies designated as special concern species, are found along the outflow of Seboomook Lake.

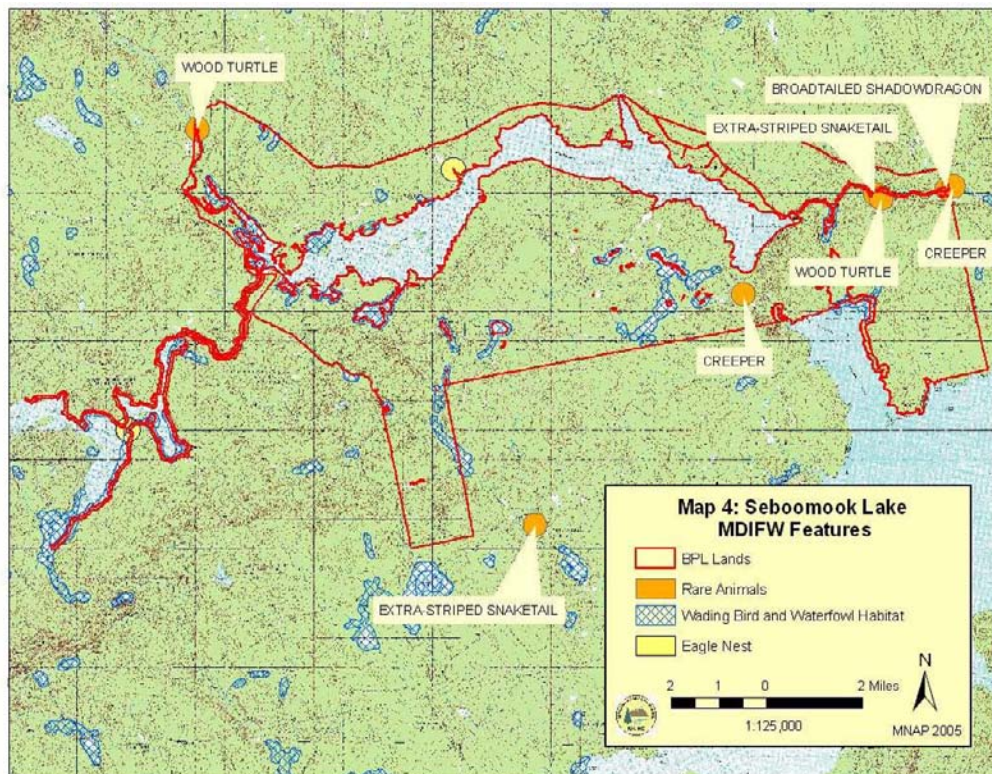


Figure 6: Rare Plant and Animal Species

Wood turtles, considered of special concern, have been found on the Seboomook unit. Wood turtles are declining throughout their range, with Maine harboring some of the largest and most viable populations in the U.S. One of the greatest threats to Maine’s wood turtle populations is illegal collection for the pet trade; collectors can quickly decimate local populations.

Natural Communities: The area surrounding Seboomook Lake contains a wide range of upland, wetland, and aquatic communities. Three areas in the unit stand out as having state-wide significance: one natural community and two ecosystems.

- Exemplary Bulrush Beds found in a number of coves and shallow areas in the shallower western basin of the lake.
- A 215-acre exemplary Unpatterned Fen Ecosystem. The Carry Bog wetland complex is made up of a series of wetlands running west to east along Carry Brook, about a mile and a half south of the east end of Seboomook Lake. The wetlands are influenced by heavy past and current beaver activity, creating a mosaic of numerous natural community types, each of which is too small to be considered exemplary quality on its own. Collectively, however, the mosaic of forested and non-forested natural communities comprise an exemplary ecosystem. Natural communities included in this ecosystem are Mixed Graminoid Shrub Marsh, Northern White Cedar Seepage Forest, Water-Lily – Macrophyte Aquatic Bed, Spruce – Fir – Cinnamon Fern Forest, Sheep Laurel – Dwarf Shrub Bog, Spruce – Larch Wooded Bog, Mixed Tall Sedge Fen, and Sweet Gale – Mixed Shrub Fen.

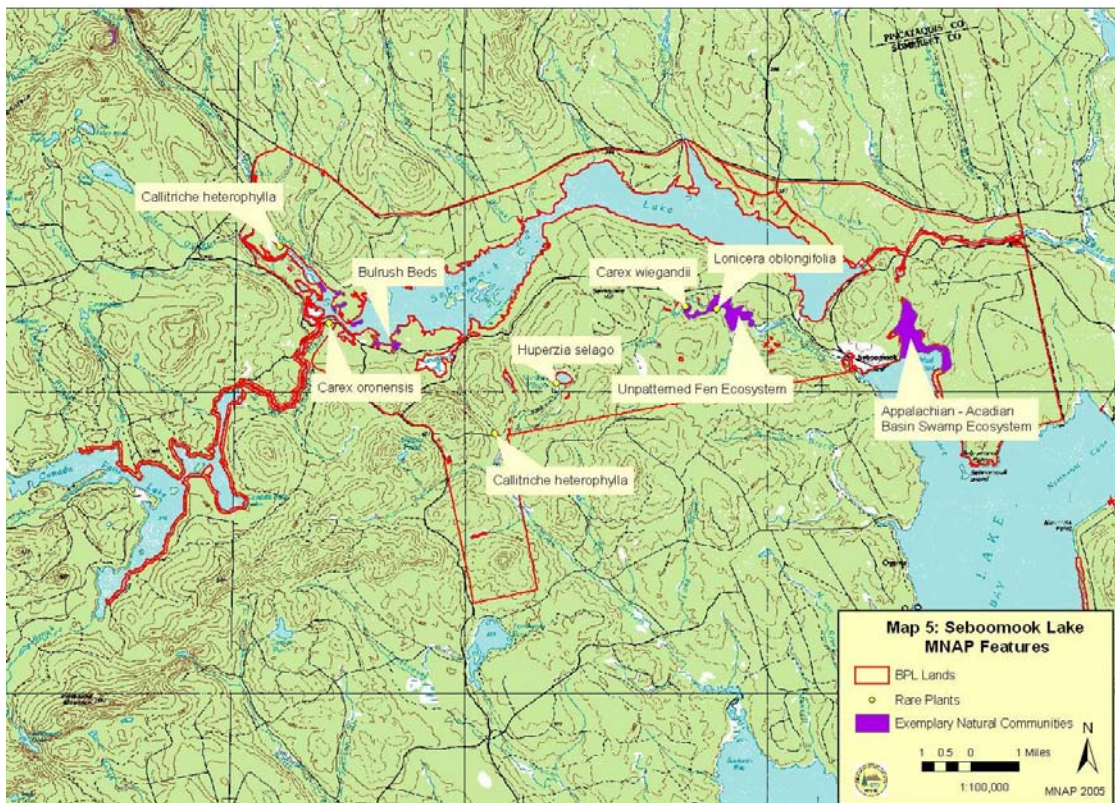


Figure 7: Exemplary Plant Communities and Ecosystems

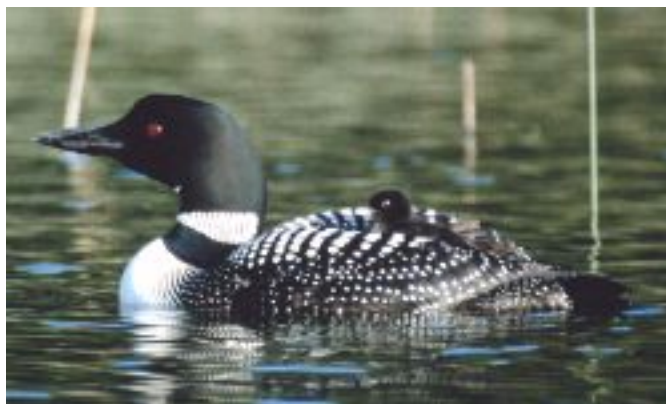
- A 240-acre exemplary Appalachian-Acadian Basin Swamp Ecosystem is found north of Mud Cove in the Northwest Cove of Moosehead Lake. The large forested wetland includes closed canopy peatland areas alternately dominated by black spruce and northern white cedar. Along the subtle stream drainage, old beaver activity has created a more open canopy Northern White Cedar Woodland Fen. Most of the forested wetland has little to no signs of cutting, and a few cored cedar trees were 108 and 176 years old.

Other wetlands in the unit include Bluejoint Meadows and Alder Shrub Thickets along drainages such as Socatean Stream. Cedar Woodland Fens and Spruce – Larch Wooded Bogs can be found in wetland basins such as the abandoned river meander on the north side of the North Branch of the Penobscot River in the unit. Spruce – Fir – Cinnamon Fern Forests are a common forested wetland type in Seboomook, found near Socatean Pond, in the drainage north of Socatean Pond, and on Seboomook Point. Semi-enriched hardwood sites were also encountered frequently, especially in the unharvested stream buffers that intersect Seboomook Road. Typical sites have a canopy dominated by sugar maple with white ash, red spruce, and yellow birch also prominent.

Wildlife Resources: With an abundance of water and wetlands, the Seboomook parcel is home to a broad array of Maine’s well-known wildlife species. The Bureau will manage these lands to support and enhance the specific habitat needs of several of these, including prominently, deer and Canada lynx (which have complementary needs), as well as grouse and the Common Loon.

The Common Loon is a species of heightened interest as federal funds from the North Cape oil spill settlement were used in part to purchase the Seboomook lands. The North Cape oil spill settlement funds are intended to permanently protect loon nesting habitat as compensation for the loons killed by the spill. As a condition of the funding, new recreational facilities on state-owned lands within the Seboomook Unit are prohibited within 1,000 feet of a loon nesting site, and within the next 1,000 feet consent is required from the U.S. Fish and Wildlife Service (or the Maine Department of Inland Fisheries and Wildlife as its agent).

Studies by the BioDiversity Research Institute (BRI) conducted using loon mitigation funds in 2004 identified loon territories (inhabited by a pair of loons) and nest sites on Seboomook Lake, Canada Falls Lake, Moosehead Lake, and Baker Lake, and assessed productivity for that one season. The Biodiversity study noted that overall 2004 was a good year for loon chick production in the area assessed



(included 13 lakes in the general region of the West Branch conservation easement and state acquired lands in the Seboomook Unit), noting that productivity was lower on the managed reservoirs (including Seboomook and Canada Falls Lakes) than on the natural lakes, due to water level fluctuations. As noted in the Hydrology discussion, beginning this year, water levels will be

maintained at relatively stable levels during the nesting season, and as a result, we can anticipate higher success rates for nesting loons in the future.

Wetland habitats on the unit provide important habitat for waterfowl and wading birds such as great blue heron, American bittern, black duck, mallard, Canada goose, ringneck duck and common merganser. Songbirds frequently observed in or near wetlands are red-winged blackbird, common snipe, spotted sandpiper, tree swallow and swamp sparrow.

Beaver and muskrat are generally confined to the tributary rivers and streams because of the past substantial water level changes in Seboomook Lake, which leave lodges stranded and subject to predation. Continued substantial fall drawdowns on Seboomook Lake will remain a limiting factor for use by beaver and muskrat. However, more stable levels on Canada Falls Lake may increase the suitability of some riparian areas of this lake for beaver and muskrat. River otter, mink, coyote, fox, pine marten and many prey species of mice, shrews and voles are common to abundant on the unit.

Past timber harvesting has created significant areas of early successional forest, which is habitat for a number of species, including moose, bear, grouse woodcock, and the endangered Canada lynx. Lynx prey on snowshoe hare which thrive in early successional forests. The Bureau will manage the parcel to provide both mature and early successional forests. Grouse and woodcock are actively sought by hunters, especially early in the season. Moose, hunted in the fall, are abundant in this area but the lack of extensive clear-cuts will decrease habitat quality and population size over time. Black bear are also numerous on the unit. As with moose, the loss of early successional stage forest as the forest matures could result in a decline in habitat suitability for bear, unless management of the unit results in more quality beech stands.

The previous land manager, Wagner Forest Management Company, and the Maine Department of Inland Fisheries and Wildlife had executed a cooperative management agreement for approximately 5,400 acres of deer wintering area on the Seboomook unit. While there may be ample early successional habitat, the lack of suitable winter shelter in this region limits deer populations below what the summer habitat can support. This area of Maine lies at the northern edge of Wildlife Management District 9, which is rated as having moderately severe winters (4 severe winters per decade) and the southern edge of Wildlife Management District 4, which has severe winters (9 severe winters per decade). Deer wintering areas declined precipitously after the salvage harvests that took place during the spruce budworm infestation. Increasing the amount of deer wintering habitat will help restore deer populations in the area.

Fisheries Resources: Brook trout are present in both lakes and comprise the bulk of the recreational fishery. Canada Falls Lake has a good wild brook trout population, which has been enhanced since 1994 by an agreement reached between the Maine Department of Inland Fisheries and Wildlife and Great Northern Paper Company (prior owner of the dams) to limit the winter drawdown on Canada Falls Lake to 11 feet instead of the allowable 26 feet. This resulted in a significantly larger population of wild brook trout in that lake. New restrictions that limit the drawdown to only 3.5 feet will substantially increase the habitat for this fish. Landlocked salmon and rainbow smelt have been stocked in both lakes with little success except for the smelt in Seboomook. Other species common to both lakes are lake chub, common shiner, blacknose dace, white sucker, longnose sucker and fallfish. Many of these species serve as alternate hosts for fresh water mussels. White perch and lake whitefish are absent from both water bodies.

Maintenance of the dam at Seboomook Lake is important to avoid population of the upper watershed lakes with perch that compete with the native brook trout. For this same reason, MDIFW's management objectives do not include the development of fish passage facilities at the Seboomook dam.

The West Branch is a popular fall landlocked salmon fishery, with flows from Seboomook Lake ramped up during the month of September to attract fish from Chesuncook Lake (and simultaneously draw the Seboomook Lake level down in preparation for winter). In addition, there is a spring trout fishery in the South Branch, in part from drop-downs from Canada Falls Lake, and the West Branch is also a popular trout and salmon fishing area in the spring. New lake water level and river flow management regimes that began in the spring of 2005 should enhance the fisheries habitat within the Unit, particularly for native brook trout and landlocked salmon by providing minimum flows in the rivers that vary by season in accordance with the life stages of these species, and when winter drawdown limits are approved by FERC, by providing more overwintering habitat in the lakes.



*West Branch of the Penobscot River – BP&L photo*

### **Historic and Cultural Resources:**

Nomenclature: Seboomook is an Abenaki word for “at or near the large stream.” Socatean Pond is based on another Abenaki word meaning “divided into two parts.” Three brooks flow into Seboomook Lake from the north. Nulhedus Stream is named from an Abenaki word meaning “falls on each side.” Logan Brook is named for its slow-moving water, while Gulliver Brook is named in reference to Jonathan Swift’s Gulliver from Gulliver’s Travels. Negro Brook at the west end of Seboomook Lake was named for an African American lumberman who cut logs there. Seven Mile Hill is named for its location, seven miles from Seboomook.

Prehistory: A report prepared on archaeological investigations in the Seboomook Unit region as part of the licensing effort for the Seboomook and Canada Falls dams (1998, Clark, J., E. Moore and R. Will, *Results of Phase I Archaeological Survey of the Storage Project [FERC No. 2634]*) describes the pre-historical context for the region. The report notes a number of artifacts have been found in the area over the course of several investigations by others conducted as early as 1914, which provide evidence of a long history of human presence in the region.

The following are excerpts from that report:

Maine possesses an archaeological record of human activity that likely dates back more than 11,000 years ago. Archaeologists have divided this long record of prehistoric cultural history into three major periods (Paleo-Indian, 9,500 to 11,500 years ago; Archaic, 2,800 to 9,500 years ago, and Ceramic or Woodland, 500 to 2,800 years ago) . . . Archaeological remains from all three periods have been found within the project area.

Archaeological remains recovered from Seboomook Lake indicate that human activity occurred there for most, if not all, of Maine's cultural prehistory. This is not surprising given the fact that several major waterways are present in the project area that, not only would have offered important food resources to Native people, but also would have served as important transportation routes.

(In addition), a dark gray, fine-grained metasandstone has been identified within the Seboomook Formation which underlies a portion of the project area. . . dependent on quality, rock such as this could have been sought out for prehistoric tool making.

Maine's earliest inhabitants are referred to as Paleo-Indian. The Paleo-Indian Tradition is widespread throughout North America between 11,500 and 9,500 years ago and is believed to include the first migrants into the New World from Asia. Elsewhere, these immigrants relied on large game animals--many of which are now extinct--for food. . . . the discovery of a few fragmentary bone remains at early sites elsewhere in New England indicate that caribou may have played an important role in Paleo-Indian subsistence. It is also likely that available small mammals, birds, and fish were probably taken as food.

Paleo-Indian settlement pattern is characterized as one of small, temporary campsites. By the end of the Paleo-Indian period . . . the environment had undergone a transformation from mixed tundra/woodland to forest that contained, among other tree species, white pine, and oak.

Very few Late Paleo-Indian Tradition sites have been found until recently. One site within the project area near Pittston Farm at the west end of Seboomook Lake also contains Late Paleo-Indian remains . . . Another artifact fragment discovered during (this) Phase I on Canada Falls Lake is also associated with the Late Paleo-Indian period.

Other artifact finds show that people used the Seboomook Lake area during the Archaic Period (c. 9,500 to 2,800 years ago) and the Ceramic (Woodland) Period (c. 2,800 to 500 years ago).

. . .during the Early and Middle Archaic periods (between 9,500 and 6,000 years ago). . . forests continued to expand in Maine and changed from largely coniferous species to forests of mixed hardwoods and softwoods. . . . The inferred settlement and subsistence pattern for the Early Archaic suggests that small groups of nomadic hunters and gatherers continued to live in Maine and possessed a much more diversified economy than their Paleo-Indian ancestors. . . The first cemetery sites known in Maine appear in this time period. They include burials sprinkled with red ochre and grave offerings of ground stone tools including woodworking gouges, slate spear points, and ground stone rods.

The Late Archaic period . . from 6,000 years ago to 2,800 years ago, . . experienced many changes in forest composition and in the kinds of wild food plants and animals available for gathering and hunting. Habitation sites--many of them covering thousands of square meters--are also recorded from a variety of locations including coastal shell middens, lake margins, and along large and small waterways.



The introduction of pottery-making into Maine Indian culture signifies the beginning of what archaeologists in Maine call the Ceramic period. . . Ceramics first appear in the archaeological record of Maine about 2,800 years ago and persisted until European contact. Aboriginal ceramics and other diagnostic Ceramic Period artifacts have been recovered from the project area. However, due to the cool climate, it is improbable that any food growing by prehistoric Native peoples occurred in the project area.

In a report summarizing archaeological research conducted as part of the West Branch Project acquisition (Spiess, 2004), it is noted that the West Branch of the Penobscot was part of a well-known canoe route to Quebec incorporated into surveys of Maine in 1761 and 1764, following Native American canoe routes. Two portage carries between the Kennebec and Penobscot Rivers, located at the north end of Moosehead Lake, were used by early Native Americans (and are still used by canoeists today): the Northeast Carry, in the township of the same name, and the Northwest Carry, in Seboomook Township. By 1847 the Northeast Carry route included a 2 mile wooden track railway pulled by draft animals, as well as portage.

Historical Use of the Area for Logging Operations: Starting in the mid-1800s the legislature began granting charters to various groups of individuals to build dams in northern Maine in recognition of the importance of the logging industry to the Maine economy. These early dams were commonly timber crib and/or earthen fill structures that were prone to rot and washed out frequently. By the turn of the century, when Great Northern Paper established its Millinocket mill and began acquiring rights to many of these small dams, some had already undergone numerous episodes of breaching and rebuilding. In 1870, a charter was granted to the Canada Falls Dam Company; while the Seboomook Dam was chartered in 1893. These dams were later rebuilt to serve as hydropower storage dams.

Pittston Farm was established sometime between 1850 and 1879, and was purchased by Great Northern Paper Company in 1906, after which it was expanded to include over 100 acres and serve Great Northern's timber operations. Barns housed over 100 horses and held over 300 tons of hay. The complex included a blacksmith shop, pump house, ice house, grain storage for 6,000 bushels, a potato storage house for 6,750 bushels of vegetables, and eventually included a boarding house for 40 men, a 50 seat dining hall, and hospital facilities.



*Pittston Farm 1914 – Great Northern Paper Co. archives*

After mechanical tractors replaced horses, and rivers ceased to be used for log drives, the farm gradually changed to a sporting camp serving hunters, anglers, and outdoor enthusiasts. The farm was not included in the state acquisition of the Seboomook Unit, but its role as a historic site and destination for recreationists is intimately linked with the Seboomook Unit.

History of Seboomook Landing: Seboomook Landing, at the northwest corner of Moosehead Lake, while not within the Seboomook Unit, is part of the rich history of this area. Developed as an elite resort in the early 1800's, it was reached via steamship out of Greenville. It included quite a complex of buildings at one time, which were later used as a prisoner of war camp during World War II, where German prisoners (some from Rommel's elite Africa corps) worked in the timber industry in the region. Today those historic structures are gone, and Seboomook Landing is the site of a private campground.

History of Seboomook Lake Dam: The Seboomook Lake dam was chartered in 1893. The first dam was a timber crib structure with an 18 foot head that was replaced in 1912 by a larger timber dam with a 28 foot head. Another dam was built downstream of the 1912 dam in 1926. Great Northern Paper Company built the existing concrete dam in 1936 and the last major repair work was made in 1988 (Clark, Moore and Will, 1998).

The construction of the earlier timber crib dams entailed a major effort, as described below (excerpted from Clark, Moore and Will, 1998):

Alfred Greer Hempsted, in his comprehensive history of lumbering in the West Branch area, described the 1926 construction of the Seboomook dam.

The first timber of the...dam was laid on October 25, 1926, and the dam was ready for the spring drives. Some idea of the amount of work done in that period can be gathered from the amount of material used. It is estimated that 1,000,000 board feet of timber, 14,000 cubic yards of rock, 21,000 board feet of hard pine for the gates, and 25 tons of iron were used. [The dam] is built on solid ledge which necessitated the removal of 2,500 cubic yards of seamy and loose ledge, which was later used for ballast...An Ingersoll Rand compressor was used in the nearby quarry for getting out rock for ballast. The timber used was...cut at Nigger Brook Camp...and at Burbank [Stream]...C. J. Sargent was in charge of hauling the timber to the dam...To accommodate the 150 men and 20 horses needed in the construction of the dam, it was necessary to build a set of camps. They were constructed on the north bank of the river opposite the boom house. The camps were all made of boards and covered with tar paper; no logs were used. The set of camps consisted of two bunk houses, a cook room, an office and foreman's room, a filer's camp and wash room, a blacksmith's shop, a tool house, a dynamite house, a garage, and a hovel with a hay shed in the center. (Hempsted 1931: 71-75).

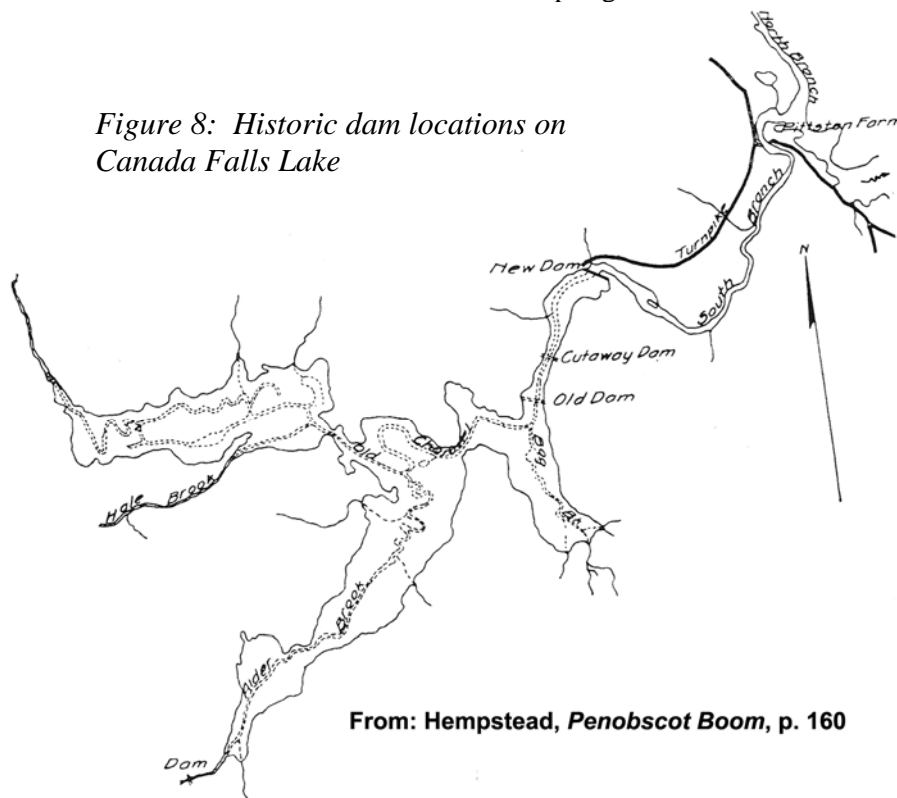
From its earliest construction, booms at Seboomook Dam sorted timber from the upper part of the West Branch. By releasing water from the dam, operators could drive logs though a canal into Carry Pond to within one thousand feet of the highest point between Penobscot and Kennebec waters. There, two steam-powered chains, each 600 feet long and built in 1893, towed them over the height and dropped them into a wooden sluiceway that ran the two miles down to Carry Brook. From there, the brook's waters moved them to Moosehead Lake where they could be boomed and towed down the lake to East Outlet. Then the logs were driven down the Kennebec River to lumber mills and manufacturing plants all along the Kennebec. This chain

and sluiceway system operated until Great Northern Paper bought the dam company in 1926. In an average year, the system moved eight to ten million board feet.

History of Canada Falls Dam: The Canada Falls Dam lies west of Seboomook Lake on the South Branch of the Penobscot River. A series of dams were constructed on the South Branch, the earliest upstream of the present dam, which failed and were replaced numerous times. The early history of the Canada Falls Dam is provided by Clark, Moore and Will, 1998:

In 1870, a charter was granted to the Canada Falls Dam Company and two structures were built -- a dam 0.5 miles below Bog Brook and a roll dam just below the present-day dam (letter from Brian Stetson to Earle Shettleworth, April 18, 1996). Both of these structures were subsequently washed out. In 1890, another dam was built which washed out the following spring. It was rebuilt in the fall of 1891 and washed out once more in the spring of 1892.

*Figure 8: Historic dam locations on Canada Falls Lake*



**From: Hempstead, *Penobscot Boom*, p. 160**

In 1912-13 a new dam with a 26-foot head of water flooded the region behind it, creating the Canada Falls Deadwater. By backing up this water and releasing it at the time of drives, it would exert enough pressure to drive logs to the Seboomook Dam operation. In 1922, the Canada Falls Dam Company built a concrete dam about 100 feet downstream eventually replacing the wooden dam; which was purchased and improved by the Great Northern Paper Company in 1926-27.

Great Northern made extensive repairs to the concrete dam in 1982. The dam is now owned by Great Lakes Hydro America, LLC which purchased Great Northern's hydropower assets in 2002.

In the 1960s, the Maine Forest Service maintained a popular campground at Canada Falls Dam on lands owned by Great Northern Paper Company. Later the North Maine Woods organization was formed by the north woods landowners to manage the recreation sites formerly managed by the Forest Service.

**Canada Falls Campground 1960**



A TYPICAL MAINE FOREST SERVICE CAMP SITE



## **Recreation Resources:**

**Recreational Uses:** Recreation on the unit includes fishing, hunting, camping, wildlife viewing, boating, snowshoeing, back-country skiing, and snowmobiling. There is interest in expanding allowed uses to include horseback riding, bicycle riding, and ATV riding. These uses are not normally allowed in the NMW system. However, in 2006 Pittston Farm was granted permission to allow horses to be trailered into their facility.

**Recreation Facilities and Opportunities:** The Seboomook and Canada Falls parcels have some developed facilities, including a number of primitive campsites and boat launches, described below. In addition, visitors can choose to stay at a commercial campground – the Seboomook Wilderness Campground, or at a sporting camp and lodge – Historic Pittston Farm, which, although not part of the state ownership, are imbedded in it as “in-holdings” and provide an unusual spectrum of food and lodging opportunities for this otherwise remote area. The following facilities and opportunities are available on the Seboomook and Canada Falls Parcels. Map 6 shows campsites, boat access sites, and snowmobile trails on the Unit.

**Campsites:** There are 10 designated primitive camping locations on the Seboomook and Canada Falls parcels including 47 campsites; these are former NMW campsites now owned by BP&L. In addition, there are two camping locations at sites owned by Great Lakes Hydro America LLC at Seboomook Dam, with a total of 3 campsites. Except for one campsite, the Seven-Mile Hill campsite, these campsites are all on water. Two on Canada Falls Lake are water access only. Two of the campsites on the West Branch below Seboomook Dam (Roll Dam and Burbank) are part of the Penobscot River Corridor West Branch trip.

**Boat Launch and Canoe Portage Facilities:** There are four boat launch facilities on the Seboomook and Canada Falls parcels; including two on Seboomook Lake, one on Canada Falls Lake, and one on the West Branch of the Penobscot River at Roll Dam. In addition, there are existing canoe portages around both Seboomook and Canada Falls Dams. The boating and canoe portage facilities on Seboomook Lake and Canada Falls Lake are owned and maintained by Great Lakes Hydro America as part of their Hydropower License requirements, and will be improved within three years of the date of the most recent License, December of 2004.

**Canoeing and Whitewater Boating Opportunities:** The Penobscot River Corridor is a water trail that is part of the State Parks system. The start of the West Branch trip has been traditionally either at Roll Dam, now part of the Seboomook Unit; or at Lobster Stream off the Lobster Trip Road. The popular take-out for this trip is at Umbazooksus Stream. This is about a 35 mile trip. Some travel all the way to the Ranger cabin and boat launch at the constriction between Ripogenus Lake and Chesuncook Lake, another 16 miles all on the lake. Some folks also extend the trip by putting in at Seboomook Dam (another 2.5 miles) and a few even start at the boat access at the other end of Seboomook Lake (another 17 miles).

With State ownership of the Seboomook Unit, the Bureau now has management control of the lands adjacent to two additional river sections tying into the water trail – The North Branch and the South Branch of the Penobscot River, whose confluence is the inlet to Seboomook Lake just above Pittston Farm.

Boating Flow Releases: Under the new FERC hydro license issued in December of 2004, new whitewater boating opportunities will be available on the South Branch, West Branch and North Branch of the Penobscot River.

The South Branch will be managed to have whitewater boating releases every Saturday beginning in July and lasting through mid September - this is a more technical whitewater boating area than the West Branch, with Class V water. Flows will range from 500 cfs to 900 cfs, as compared to a minimum flow of 75 cfs. The South Branch is one of 29 Class V boating stretches featured in “Steep Creeks of New England, a Guide to Class V Runs for the Experienced Whitewater Enthusiast” by Greg and Sue Hanlon (1999).



*Canada Falls Dam – photo courtesy of Jim Clark at TRC*

Notably this run is the only one of the 29 that will be available on a regular and predictable basis due to the scheduled releases – the others are boatable only in the spring runoff and after storms if you get there at the right time. Recent publicity in the March/April boating publication “American Whitewater” features the South Branch and the unique opportunity to also stay at a historic farm – Pittston Farm.

The boating flow release schedule for Canada Falls-South Branch is set as follows:

Flow releases (cfs), Saturdays from 10:00 AM to 3:00 PM:

Weekend	July	August	September
1	500	600	750 (Labor Day Sat)
2	600	750	600
3	600	600	500 (on or before the 15 <sup>th</sup> )
4	900	750	

On the West Branch, the new hydro license also calls for higher minimum flows below Seboomook Dam – 500 cfs compared to the past minimum of 150 cfs; this will provide a nice flow level for beginning to intermediate level whitewater boating below Seboomook Dam. There is also one scheduled higher “technical” flow – 1,500 cfs, - to occur on the Saturday of Labor Day Weekend.

For the North Branch; beginning in 2006, there will also be a fall flow release timed for fisheries attraction made possible by releases from water stored at Long and Dole Pond. This could also benefit those wanting to begin an extended PRC trip via the North Branch.

Snowmobile Trails: The “Moosehead Loop Trail” crosses the Seboomook Unit as shown on Figure 9. It is part of an extensive system around Moosehead Lake and connects to the West to Jackman and to the East to Millinocket. Pittston Farm is a major hub for snowmobilers, with food, gas, and lodging available.

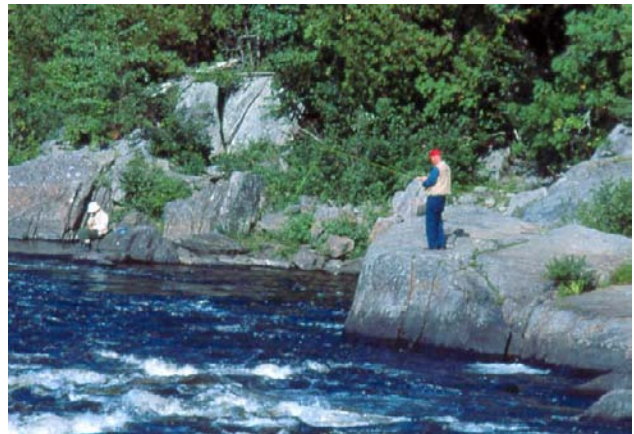


*Snowmobiles at Pittston Farm refueling and following the groomer - BP&L photos*

Hunting and Fishing: The Seboomook area attracts hunters for deer, moose, bear and small game. Both Historic Pittston Farm and Seboomook Wilderness Campground are used by hunters as base camps, and the late fall is one of the busiest seasons of the year for these establishments. Deer hunting pressure and buck harvest rates are rated as low by MIF&W in the surrounding wildlife management districts (WMD):

	<u>WMD 8</u> <u>east of Moosehead</u>	<u>WMD 9</u> <u>west of Moosehead</u>	<u>WMD 4</u> <u>north of Moosehead</u>
Hunter-days/mi <sup>2</sup>	30	30	15
Bucks/100 mi <sup>2</sup>	34	19	25

The West Branch of the Penobscot River below Seboomook Dam is a highly popular salmon and brook trout fishery, and one of the few quality big river fisheries in the north Maine woods area. Canada Falls Lake has a productive wild trout population, which, under the new management of the lake (see hydrology) is likely to support an even more robust wild trout population.



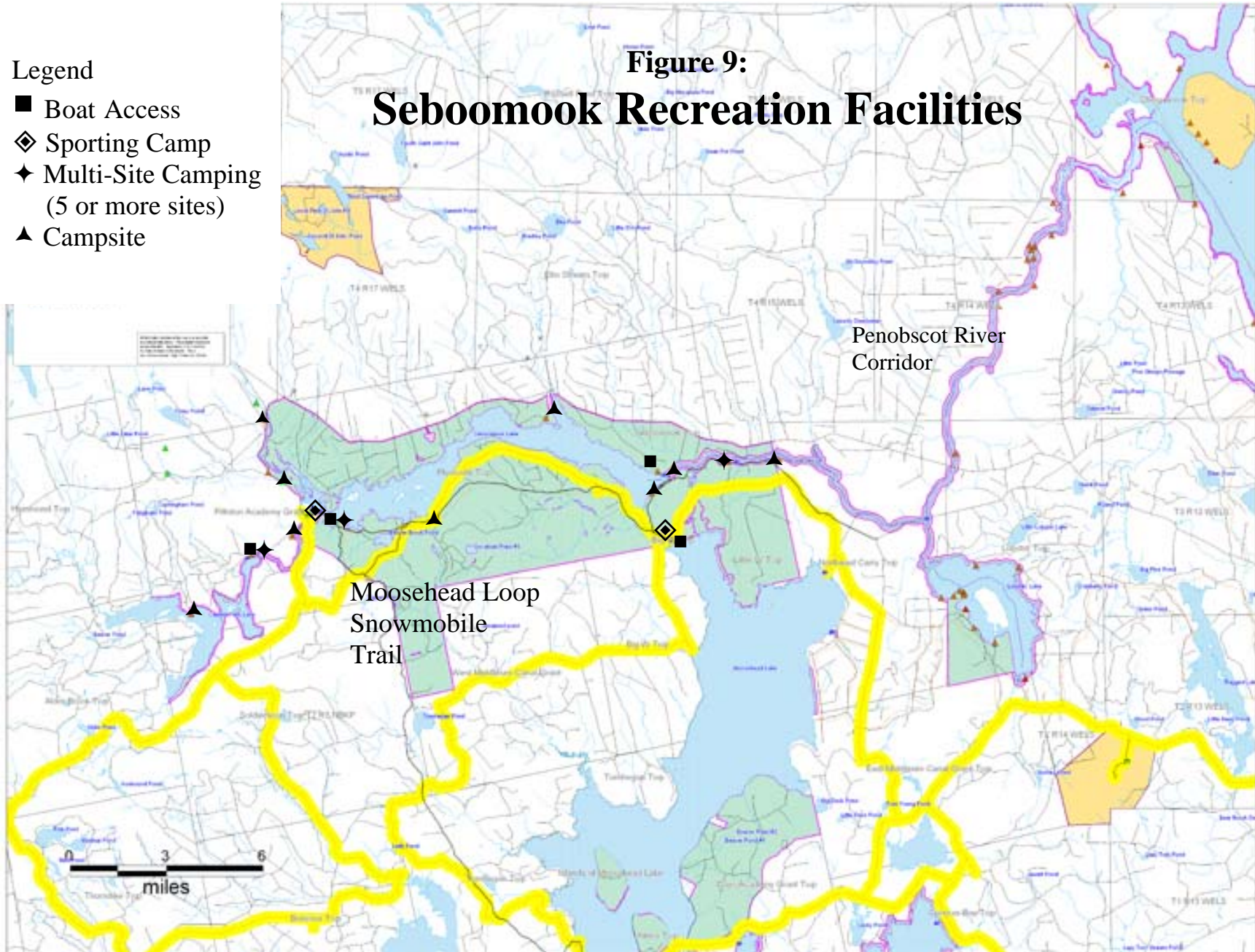
*Fishing on the West Branch  
Bill Silliker photo, courtesy Forest Society of ME*

Bear Baiting Sites: Prior to acquisition by the state, North Maine Woods operated 11 beat baiting sites on lands now within the Seboomook parcel. NMW has continued to operate these sites for the Bureau during the Plan development.

Legend

- Boat Access
- ◆ Sporting Camp
- ◆ Multi-Site Camping (5 or more sites)
- ▲ Campsite

**Figure 9:  
Seboomook Recreation Facilities**





## **Timber Resources:**

Seboomook Parcel: This parcel is mostly gently rolling topography surrounding a twelve mile long lake. Except from on the lake itself, vistas tend to be modest in length though the forested hills and shorelines are attractive.

Harvest History: The forest has an extensive history of timber harvesting. During the 1970s and 1980s, harvests were mostly driven by spruce budworm damage, and included widespread clear-cuts on the lands between the lake/river and the Golden Road, except on Pittston Academy Twp, which holds the largest areas of tall, closed canopy softwood stands on the tract. At the end of this period and into the 1990s, large clear-cuts were made on the southeast part of the tract, covering the eastern 2/3 of Little W Twp. Most of the clear-cuts have been treated with herbicides, and hold good stocking of spruce-fir seedlings and saplings, occasionally with significant pine component.

Over the past ten years, harvesting has mostly been heavy partial cuts south of the lake, in all types. The Seboomook unit was acquired by the state in 2004 from Merriweather, LLC, who purchased the land from Great Northern Paper Company in the mid 1990's. Wagner Forest Management LLC managed the land for Merriweather. Merriweather initiated another round of cutting south of the lake from 2001 to 2003. This most recent harvest included heavy cutting of the extensive stands dominated by mature aspen in the Carry Brook drainage, in response to the recent jump in demand for aspen products. There has also been a limited amount of light thinning of softwoods done with cut-to-length processors.

The most pressing silvicultural need is further harvesting of mature aspen. The road access is mainly in place, though most of the new roads need to be graveled. These mature stands are beginning to lose value. Though no other areas appear to demand imminent harvest, there are many on which an improvement harvest would be desirable. This tract is almost all good growing land, with sufficient stocking and quality to provide substantial timber volumes in the near term, and increased volumes once the regeneration in the 1970s clear-cut acres is ready for commercial thinning, probably at least 20 years away.

Stand Types: Softwood stands cover 8,600 acres, 21% of the parcel. Most are found on moderately well to somewhat poorly drained sites, with a lesser amount in areas of poor drainage. Over ¾ of the softwood acres are dominated by spruce-fir, the remainder by wet-site species such as cedar, tamarack, and black spruce. The most extensive stands of tall, closed canopy softwoods are found on the northwest corner of the tract, in a major deer wintering area (DWA). Another sizable DWA is located at the opposite corner on Little W Twp, and is partially in good softwood cover and partially in recent, well regenerated clear-cuts.

Mixedwood stands were divided by Wagner into predominantly softwood (8,300 acres, 20% of the parcel) and predominantly hardwood (10,500 acres, 26% of the parcel).

Hardwood stands cover just under 12,000 acres, 30% of the parcel. The most abundant hardwood species tract-wide on all types are red maple, sugar maple, yellow birch, white birch, then aspen. As red maple is common in all types, the leading species in hardwood stands is sugar maple, and yellow birch is probably next, red maple third. Most hardwood stands have

received some harvesting during the past thirty years, with the cut usually being heavier in the intolerant hardwood type due to shorter lived species. Most tolerant hardwood stands hold sufficient stems of good quality to produce valuable timber products, and large old trees are scattered throughout most acres.

**Canada Falls Parcel:** This 853-acre parcel consists almost entirely of riparian buffer along the lake and river. It is often steep-sided river corridor, and even when flatter will not be conducive to timber management due to its narrow and elongated character and, more importantly, its recreational and visual character. The forest types here resemble those of the larger Seboomook tract for volumes, but are heavier to softwoods. Over 70% of the parcel timber volume is softwoods, 40% in spruce alone, 18% fir, 13% cedar. The leading hardwoods are yellow birch, sugar maple, and red maple, all at 6-7%. Volume averages almost 20 cords per acre, in part because harvesting has been lighter near the waters.

**Administrative Concerns:**

**Roads:** There are approximately 30 miles of public use roads in this unit, principally the South Seboomook Road, the “Cut-off” or “Shortcut” Road, the Roll Dam Road, and the Seboomook Dam Road. The 20-mile Road and the Canada Falls dam Road are not part of the Seboomook Unit. The state does not own any portion of the Golden Road; the deed specifies the boundary as a 120-foot offset from the road centerline. However, the state has secured vehicular access rights for use by the public of the above mentioned roads that connect to the Seboomook Unit and within the surrounding West Branch easement lands. The state does not have vehicular access rights at this time for the entirety of the 20-mile road, but is working to secure those rights.

The condition of the roads on the Unit at the time of acquisition was very rough. Many of these roads were impassable in the spring which is when a large amount of use occurs (fishing and whitewater boating). In addition, the Roll Dam Road and the Cut-off Road were both difficult to negotiate in the summer without 4-wheel drive.

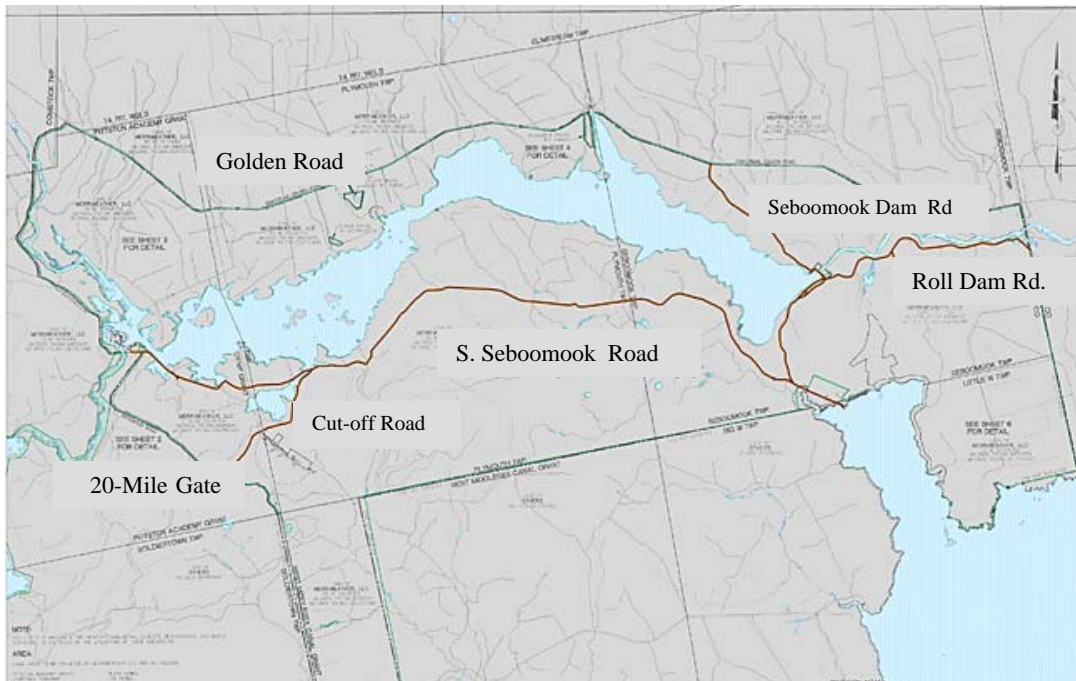


Figure 10: Road Systems in and surrounding the Seboomook Parcel

In 2004 the Bureau focused its attention on assessing the state of the main public vehicular access roads. In addition, work began on a “stop-gap” basis on the worst sections of the South Seboomook Road with the Bureau supplying materials and a user donating machine time. In 2005 major work was done on the Roll Dam Road; and in 2006, on the South Seboomook Road.

The Bureau plans to continue to improve and upgrade these roads to our standards over the next several years. The goal of these access improvements is to correct environmental problems, prevent future degradation of the road system and provide improved public access.

All of the work will be done on existing roads around Seboomook Lake and the West Branch of the Penobscot. Although the Cut-off Road is in poor condition it is not essential for vehicular access but does reduce travel distances by 5.5 miles. (Note: The Bureau does not own the road around Baker Lake or Canada Falls Lake. The main vehicular access road to the St. John Ponds parcel, the Gulliver Brook Road, was and continues to be gated by the adjacent landowner in order to comply with LURC Remote Ponds zoning for these ponds (see below for a summary of these restrictions).

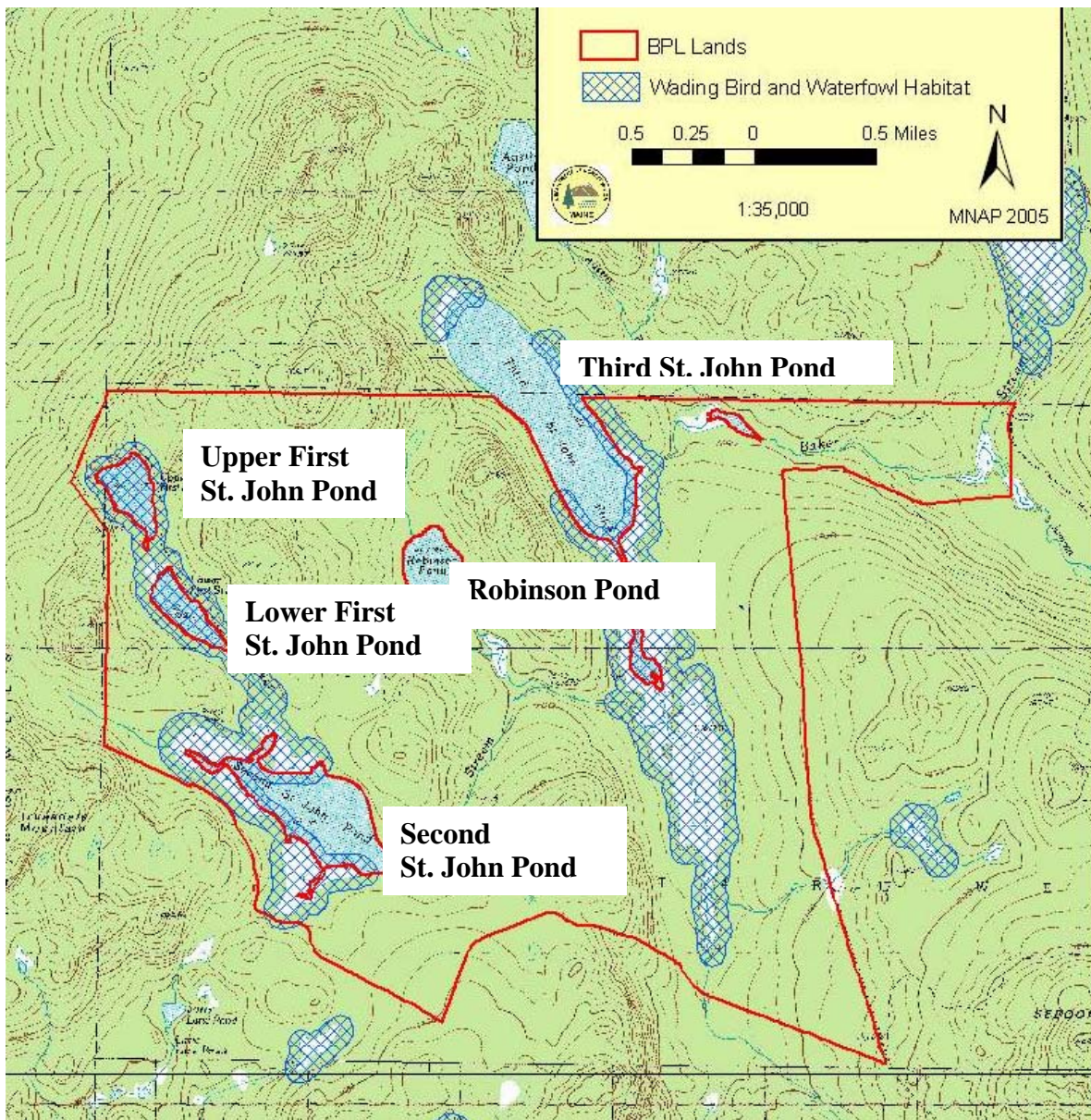
Gated Roads on the Parcel: The previous owner had installed three gates on the woods management road that branches off the South Seboomook Road at the Seven-Mile Hill area, leading into the Socatean Ponds, and looping back to the South Seboomook Road. These gates were installed to comply with the restricted access requirement imposed under the LURC zoning ordinance for the Socatean Ponds which are designated as Remote Ponds. Access restrictions limit motorized access other than snowmobiles to not closer than one-half mile. The gate nearest the Seven-Mile Hill entrance is not required to comply with the LURC restrictions, and the Bureau has removed this gate.

North Maine Woods and Gated Access: The Seboomook Unit presently lies within the North Maine Woods system. Management of the Unit as part of that system has been the topic of discussion and negotiation between the Bureau and North Maine Woods since the start of the planning process in 2004. The Bureau values its relationship with North Maine Woods very highly, and is seeking to develop a partnership with North Maine Woods that would enable it to manage the Seboomook lands in accordance with the Bureau’s mission and statutory mandates, and continue to be part of the North Maine Woods system. The existing arrangement, however, imposes relatively high fees on visitors to Seboomook's public lands. Discussions with NMW have been far-ranging, and several specific proposals have been reviewed in which the Bureau has offered to secure NMW's income from operations at the Unit, in return for flexibility with regard to fees. Specifically, the Bureau sought to cover the costs of the NMW gate system for visitors to the Seboomook Unit with revenues it receives from timber management, as it does on its other public reserved lands. Unfortunately, despite these good faith discussions and considerable detailed work, the North Maine Woods Board voted, in its March 2006 annual meeting, not to accept the proposal the Bureau had worked out with the NMW Administrative Committee, but instead, to continue the status quo, and to have its Executive Committee and a representative from Wagner Paper work directly with the Bureau to arrive at a resolution that addresses their concerns. The Bureau is now examining alternatives, including withdrawing from the NMW system if necessary to achieve the flexibility it needs to fulfill its mission and mandates. The Bureau will continue discussions with NMW as it considers these options.

## *St. John Ponds Parcel*

### **Character of the Land Base**

The St. John Ponds parcel includes an assemblage of small ponds that form the headwaters of the St. John River (Figure 11). Most of the unit has been harvested heavily in the recent past, and many of the interesting natural features on the unit occur on or near its numerous ponds. Several unmaintained logging roads traverse the parcel. Vehicular access to the parcel is limited by a gate installed on the Gulliver Brook Road just off the Golden Road. The entire 3,890 acre parcel was acquired with a stipulation that it be managed as an Ecological Reserve.



*Figure 11: The St. John Ponds Parcel*

## Natural Resources

Geology and Soils: The St. John headwaters are hillier than elsewhere on the unit, with exception of Big Spencer Mountain, and reach elevation of about 2,000 feet. This part of unit is almost entirely underlain by the Frontenac formation, a bedrock unit that consists of coarse-grained sedimentary rocks. Glacial till deposited during Maine's last glaciation 11,000 years ago tops this sedimentary rock. Soils at St. John Ponds have not been mapped.

Hydrology and Water Quality: Upper First St. John Pond is 30 acres in extent. Lower First St. John Pond is 29 acres and Secchi disc visibility extends to a depth of 1.6 feet (0.5 meters). Robinson Pond 34 acres and Secchi disc visibility extends to a depth of 2.6 feet (0.8 meters). Second St. John Pond is 105 acres, and Secchi disc visibility extends to a depth of 3.3 to 3.8 feet (1.0-1.15 meters). Third St. John Pond is 190 acres and Secchi disc visibility extends to a depth of 6.6 to 7.0 feet (2.0-2.15 meters). Small streams connect these ponds that collectively form the headwaters of the St. John River.

Wetlands: The St. John Ponds unit has a total of 532 acres of wetlands; 199 of these acres are forested, while 333 acres are open wetlands (Map 8). The unit has 600 acres of wading bird habitat. The 252 acre wetland south of Third St. John Pond comprises the bulk of the wetland acreage on the unit.

Ecological Processes: The wetland south of the Third St. John Pond shows evidence of fluctuating water levels such as old stumps and dead cedar trees in the marshy areas. No direct evidence was observed, but changing water levels often point to the presence of beavers.

Rare Plant and Animal Species: Rare plants on the unit include blue-beaked sedge (*Carex rostrata*), ranked S2, found by Second St. John Pond, Third St. John Pond, Robinson Pond, and in a drainage by an old logging road. Blue-beaked sedge tends to grow in open, sunny, saturated or inundated areas and reaches the southern limit of its range in northern New England. Wiegand's sedge (*Carex wiegandii*), ranked S3, was also found by Third St. John Pond in a transition zone between a Spruce – Fir – Cinnamon Fern Forest and an Alder Thicket. No rare animals are known from the St. John Ponds parcel.



*Wetlands below Third St. John Pond – MNAP photo*

Natural Communities: Though the upland forests on the St. John Pond unit have been harvested heavily in the recent past, many interesting wetlands adjacent to the ponds remain intact. In contrast to upland forests on the unit, forested wetlands have not been recently harvested.

Third St. John Pond: Only a portion of the 190-acre Third St. John Pond is within the state-owned parcel. Significant natural communities include:

- a 252-acre exemplary streamshore ecosystem - a wetland that includes both forested and non-forested natural community types.
  - The southeastern part of the wetland contains a middle-aged spruce – larch forested bog with 70% canopy closure. The canopy is dominated by red spruce (*Picea mariana*) and balsam fir, with a small amount of mountain paper birch (*Betula cordifolia*). The trees are mostly 6 to 10 inches in diameter, and there is evidence of a historic cut 40 or more years ago.
  - closer to Third St. John Pond an extensive shrub marsh that flanks both sides of the inlet stream - a sweet gale mixed shrub fen with an abundant amount of old, dead trees and stumps. The shrub layer is made up of speckled alder (*Alnus incana*) and northern white cedar. There is a narrow band of northern white cedar woodland fen with stunted cedar (about 20 feet tall) adjacent to the upland on both sides. The water level in this area was historically higher in this area probably as a result of an old beaver dam.
- A remnant patch of mature beech-birch-maple forest on a steep slope (~50%) west of the Third St. John Pond wetland that runs along Baker Stream. The ledges are seepy and well shaded, but many large trees were removed in a harvest likely during the late 1990s.

Second St. John Pond: The most southwesterly of the ponds, 106-acre Second St. John Pond, is slightly less than a mile long and approximately ¼ mile wide at its widest point. Natural communities include:

- a 30-acre beaver-influenced peatland surrounding the inlet on the south side;
- a sweet gale – mixed shrub fen to the north;
- a leatherleaf boggy fen north of the sweet gale – mixed shrub fen toward the pond's edge;
- a wet sheep laurel – dwarf shrub bog community type with approximately 65% shrub cover towards the interior of the peatland, away from the open water and in a slightly raised area.

Robinson Pond: The 34 acre Robinson Pond is a more or less circular pond, approximately ¼ of a mile in diameter. Significant natural communities include:

- a ten meter wide band of mature cedar – spruce seepage forest surrounding the north and west sides by. Most of the cedar is in the 14 to 28 inch diameter range, but some trees are as large as 35 inches in diameter. Within this buffer, there is evidence of selective cutting approximately 80 or more years ago. Areas upslope of the buffer were harvested within the last ten years.
- This cedar seepage transitions into a leatherleaf boggy fen in the area surrounding the inlet stream on the north side of the pond.

- a remnant patch (a few acres) of a mature beech-birch-maple forest west of the pond, just on the other side of an old logging road. There is 90% canopy closure with sugar maple (*Acer saccharum*) as the dominant species. The trees range from 8 to 16 inches in diameter, and there is evidence of a selective cut 40 or more years ago

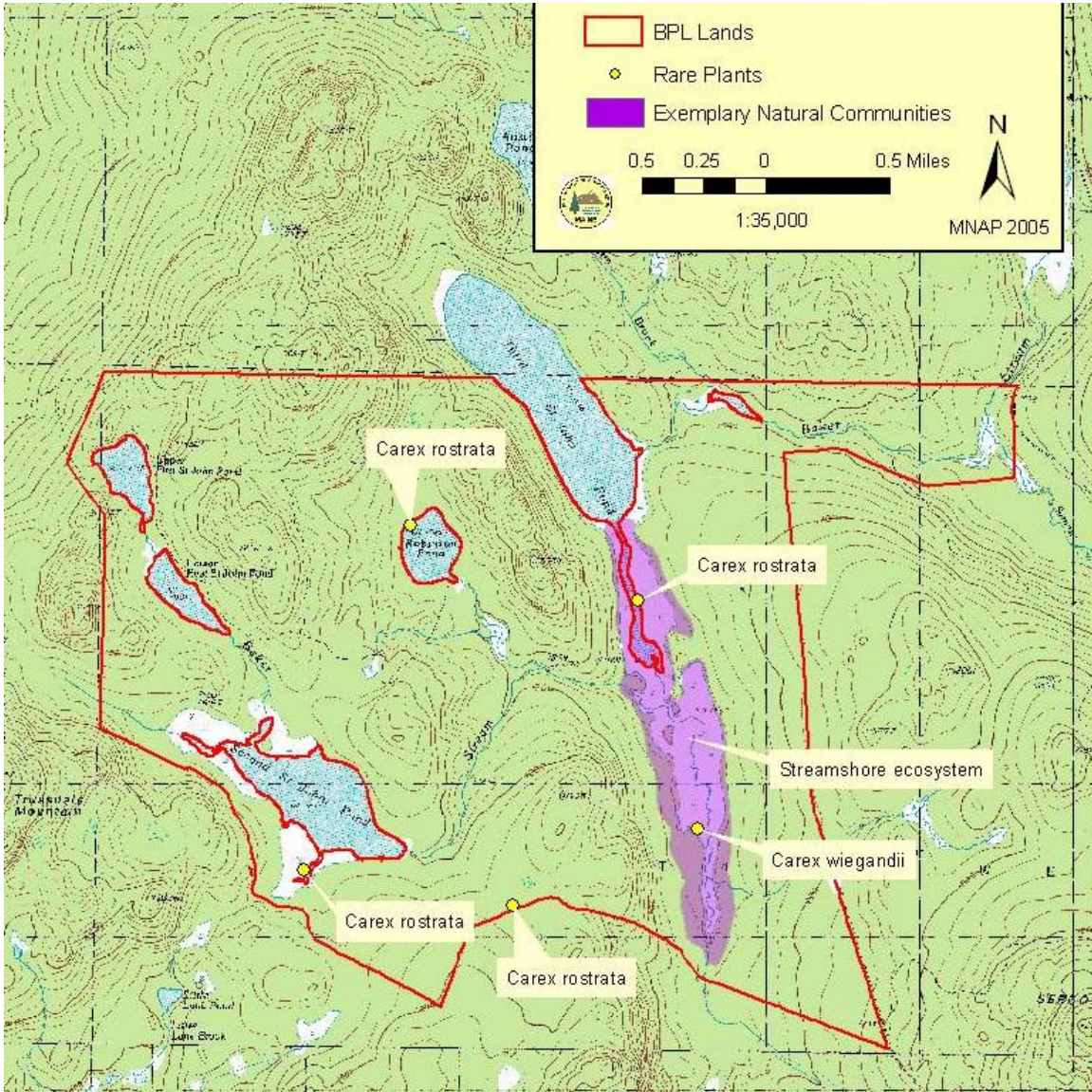


Figure 12: Rare Plants and Exemplary Ecosystems

## **Fisheries and Wildlife Resources**

**Fisheries Resources:** Though wildlife species have not been surveyed on the unit, all the ponds have been surveyed for fish species. Most ponds have brook trout (except Robinson) and an assortment of shiners, dace, chubs and yellow perch. There have been no identified endangered or threatened animal species found on this parcel.

**Wildlife Resources:** The outstanding feature of this parcel is the extensive wetlands which occur between the 5 small ponds and off the parcel. The uplands have been heavily harvested and roaded but the significance of the wetlands resulted in the entire parcel being designated as an ecological reserve in 2003 prior to state ownership.

The recent harvesting provides abundant early successional habitat for pine siskin, dark-eyed junco, magnolia warbler, Nashville warbler, ruby and golden crowned kinglets and yellow-bellied flycatcher.

This parcel is within the region that has the highest moose densities in the state. A lack of dense softwood shelter limits deer populations and other softwood dependent species such as pine marten, snowshoe hare and spruce grouse. Coyote, red fox, porcupine and weasels are residents of this habitat. Other mammals associated with the wetlands include beaver, mink and muskrat. Bird species found around wetlands include great blue heron, black duck, common snipe, tree swallow and red-winged blackbird.

## **Historic and Cultural Resources:**

The St. John Ponds were named after the date that the St. John River was discovered by Samuel de Champlain in 1604. It was St. John the Baptist's Day. Little is known about the historical or pre-historical use of this area. An archaeological investigation completed in 2006 by the Maine Historic Preservation Commission for the Land for Maine's Future Board and Forest Society of Maine found no evidence of prehistoric use of the lakeshore landscape, although the dense young tree growth inhibited the investigation. The remains of an old dam at the outlet of Third St. John Pond dated this dam at the late nineteenth century or early 20<sup>th</sup> century.

## **Recreation Resources:**

This parcel has traditionally been used for hunting and fishing. Vehicular access to the parcel is now limited by a gate on the Gulliver Brook Road at its junction with the Golden Road, approximately 5 miles from the parcel. The gate was installed by Wagner Forest Management Company in order to meet existing land use regulatory requirements for the protection of remote ponds and to provide a remote recreation area. The St. John Ponds, except for Robinson Pond, are zoned as Remote Ponds under LURC zoning, which limits road access to not closer than one-half mile of the ponds. The Bureau, under the terms of the access easement it holds with the landowner, Merriweather LLC, for public use of this road, may request the landowner to remove the gate, subject to a plan that addresses any land use regulations and that will not allow access through into T5R17 or interfere with timber harvest operations in the area. This provision would allow the Bureau to relocate the gate to a point on the Gulliver Brook Road closer to the state



lands, provided the Bureau installs and maintains the replacement gate, and subject to prior approval of the landowner, Merriweather LLC.

**Timber Resources:**

The St. John Ponds parcel was acquired by the state in 2004 from Merriweather, LLC. Prior to acquisition by Merriweather in the 1990s, the land was part of the vast Great Northern Paper holdings. Because of its ecological reserve status, timber management will not be an option.

Under Merriweather ownership, the land was managed by Wagner Forest Management LLC. The unit received heavy, extensive harvesting in the 1990s, and parts of the unit appear to have been repeatedly herbicided.. Current regeneration consists of seedling- and sapling-sized softwood stands and young hardwood stands that were harvested by overstory removal.



*Typical road and forest conditions in the St. John Pond parcel  
MNAP photo*

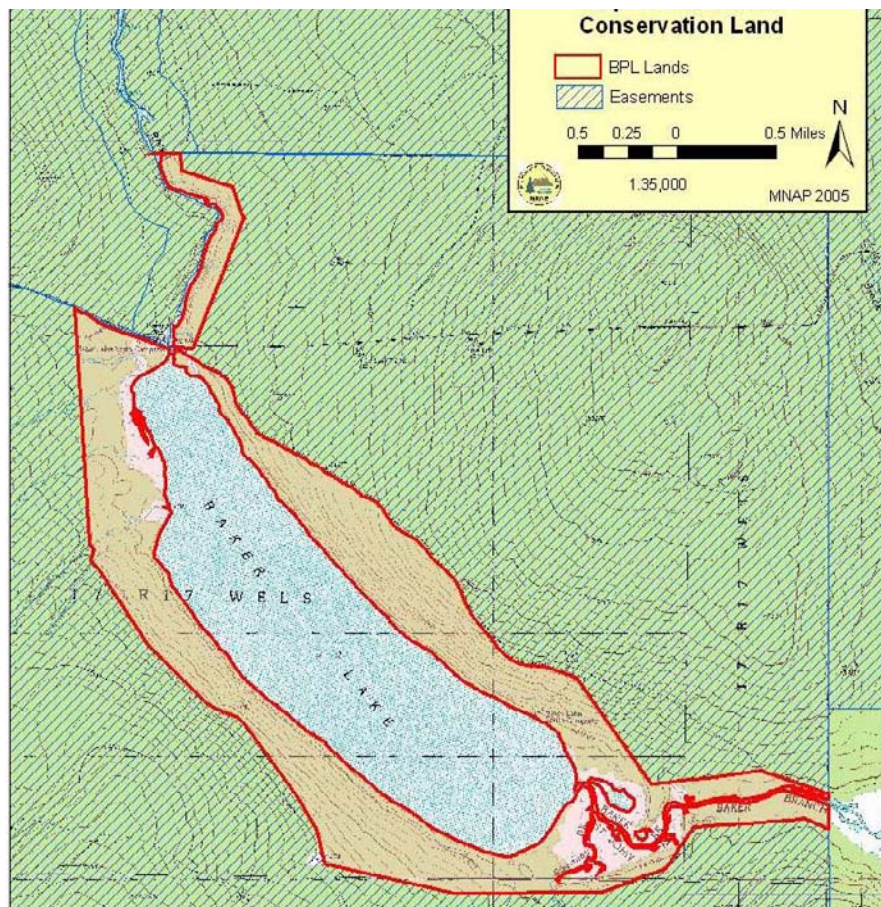
The stocking is 65% hardwoods, some due to preferential cutting of spruce and fir but mostly because of site characteristics. The most abundant species by far is sugar maple at 30%. Spruce is second at 19%, yellow birch is third with 12% and red maple and fir each make up 10%.

The area east of 3<sup>rd</sup> Pond and its outlet were heavily cut or clear-cut 10-20 years ago, and appear to hold mostly softwood saplings, possibly having been herbicided. The rest of the tract is mostly tolerant hardwood stands grading to mixedwood along ponds and brooks. Essentially all acres were partially harvested, some cut heavily, during the same years as the land to the east.

## *Baker Lake Parcel*

### **Character of the Land Base**

Baker Lake lies in the upper portion of the St. John River waterway in the northern region of Somerset County and is a popular starting point for trips down the St. John River. The Baker Lake parcel was acquired by the state in 2003 from Merriweather, LLC. Under Merriweather's ownership, the land was managed by Wagner Forest Management Company. Prior to that it was part of Great Northern Paper Company's vast holdings. The state's 1,620 acre Baker Lake ownership consists of a narrow buffer around the lake (500 – 2000 feet) and its associated wetlands, and a roughly 550 –foot buffer along the east side of Baker Brook extending to the town line between T7R17 WELS and T8R17 WELS. Funds provided by The Nature Conservancy (TNC) assisted in the purchase of this unit, subject to an agreement with TNC that the acreage "be managed as Public Reserve land for remote recreation and in a manner that preserves its important conservation and scenic values."



*Figure 13 - Baker Lake Parcel*

## **Natural Resources**

**Geology and Soils:** Baker Lake is underlain by a single geologic unit known as the Northeast Carry Formation. This formation is primarily slate and fine sandstone and dates to around 400 million years ago, when two of the earth's plates were separating (or rifting).

The surficial geology of the southern half of the lake is defined as a stagnation moraine, while the northern half of the lake is till deposits, both related to the last glaciation of the state 11,000 years ago. Along the inflow and outflow of Baker Lake is stream alluvium. Soils have only been mapped for the southern half of Baker Lake. The dominant soil type in this area is the Daigle-Aurelie association. These deep, silty soils are derived from dense glacial till and often include slivers of rock. The soils that are part of the southeastern wetland on the lake are considered histosols, soils rich in organic matter.



*Wetland south of Baker Lake – MNAP photo*

**Hydrology and Water Quality:** Baker Lake is 1,231 acres in size and forms part of the headwaters to the St. John River. Secchi disc visibility extends to a depth of 9.2 to 9.8 feet (2.8 to 3.0 meters), and pH levels for the lake range between 6.82 and 7.14. The lake has some very shallow areas that can catch unsuspecting motor boats, though it does reach a maximum depth of 30 feet. Lake levels fluctuate seasonally with spring runoff.

Wetlands: The Baker Lake parcel includes a total of 436 acres of wetlands. Forested wetlands comprise 172 acres, while the remaining 263 acres are non-forested. Most of open wetlands are located around the edge of the lake, with the open wetland at the lake inflow comprising the bulk of the open wetland acreage. The wetlands at Baker Lake support 427 acres of inland wading bird habitat.

Ecological Processes: The naturally fluctuating water levels of Baker Lake help maintain the natural communities that surround the lake. In particular, spring flooding accompanied by ice scour (chunks of ice dragging across the soil, often uprooting, damaging, or killing fragile seedlings) allows communities such as sedge meadows to flourish where trees could not survive. In the surrounding uplands, spruce budworm infestations have likely damaged forests. By preferentially choosing balsam fir as its host, spruce budworm alters forest composition, reducing the fir component of the canopy.

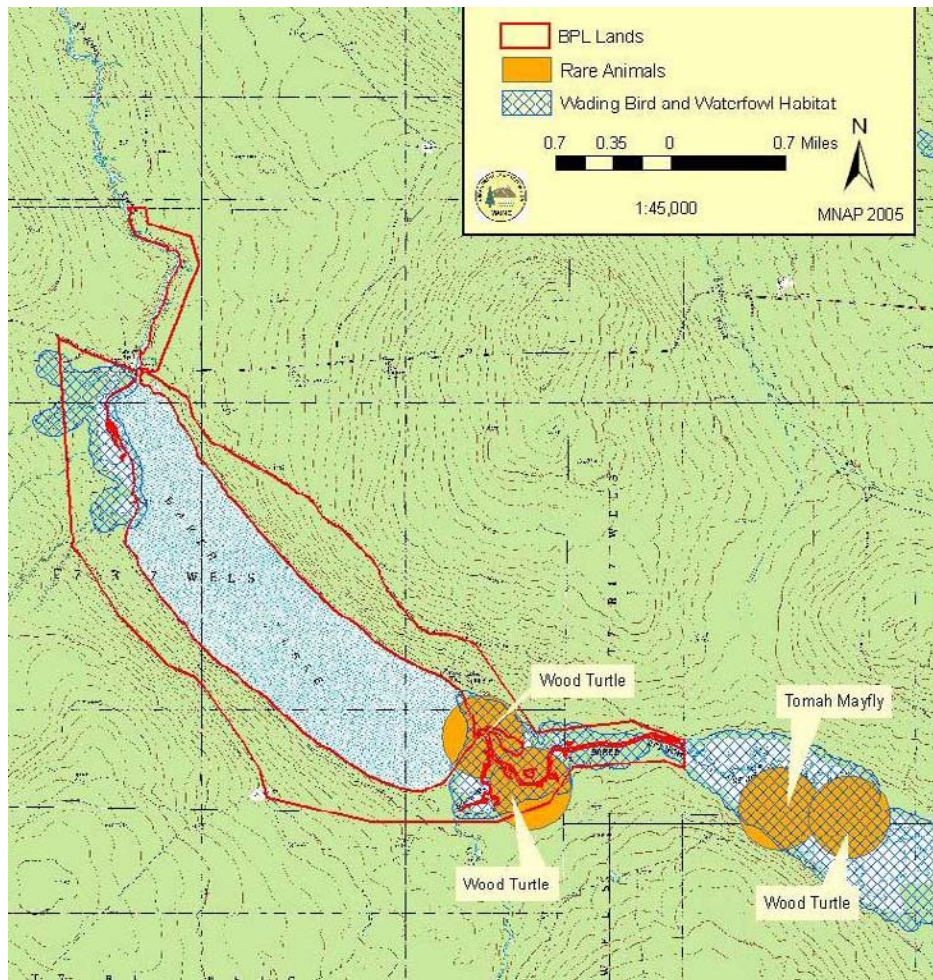


Rare, Threatened or Endangered Animal Species: There are no identified endangered or threatened wildlife species found on this parcel. Rare animal species found on this parcel include the wood turtle (ranked S4) and Tomah mayfly (ranked S2). Both species occur in aquatic and riparian habitats that currently receive regulatory protection.

The wetland complex on the south end of Baker Lake is home to wood turtles. Wood turtles are declining throughout their range, with Maine harboring some of the largest and most viable populations in the U.S. This species of special concern spends most of its time in or near streams

or rivers, while becoming increasingly terrestrial during the summer months when it frequents adjacent forests, fields and wetlands. Wood turtle population growth is constrained by the short growing seasons and cold winters of Maine. Combined with human disturbance, these constraints could jeopardize the viability of wood turtle populations throughout the state. One of the greatest threats to Maine's wood turtle populations is illegal collection for the pet trade; collectors can decimate local populations in a short amount of time.

Tomah mayflies (ranked S2) have been located just upstream of the wetland complex on the St. John River inlet to Baker Lake, and suitable habitat exists within the Baker Lake parcel. Though they occur in sedge meadows, a common wetland type, Tomah mayflies are globally rare and are currently known almost entirely from Maine. They depend on highly productive, seasonally flooded sedge meadows along large streams or rivers to complete their life cycle, which includes feeding on decaying plant matter in the meadow as larvae in the spring, emerging from the water as adults when spring floodwater recedes, laying eggs in the stream channel nine days later, hatching in December, and growing slowly as nymphs under the ice until spring flooding. The majority of this wetland is mapped by MDIFW as wading bird and waterfowl habitat.



*Figure 14: Rare Animal Species, and Wading Bird and Waterfowl Habitat*

Natural Communities: Significant natural communities include:

- a small (a few acres) bulrush bed, a lakeshore community type, located immediately south of the northern Baker Lake campsite near the outlet of the St. John River. It extends southward along the shore for approximately 100 meters and is dominated by tall rushes and other graminoid species and has various aquatic plants intermixed in the standing water.
- A complex of wetland communities comprising a 270-acre exemplary streamshore ecosystem is found where the St. John River enters Baker Lake (at the southeastern end of the lake). Low, sandy beaches at the lake's edge grade into alder shrub thickets in drier areas. In wetter areas closer to the inlet stream and associated pools, a mixed graminoid shrub marsh dominates. Soils in these areas range from silty to mucky.

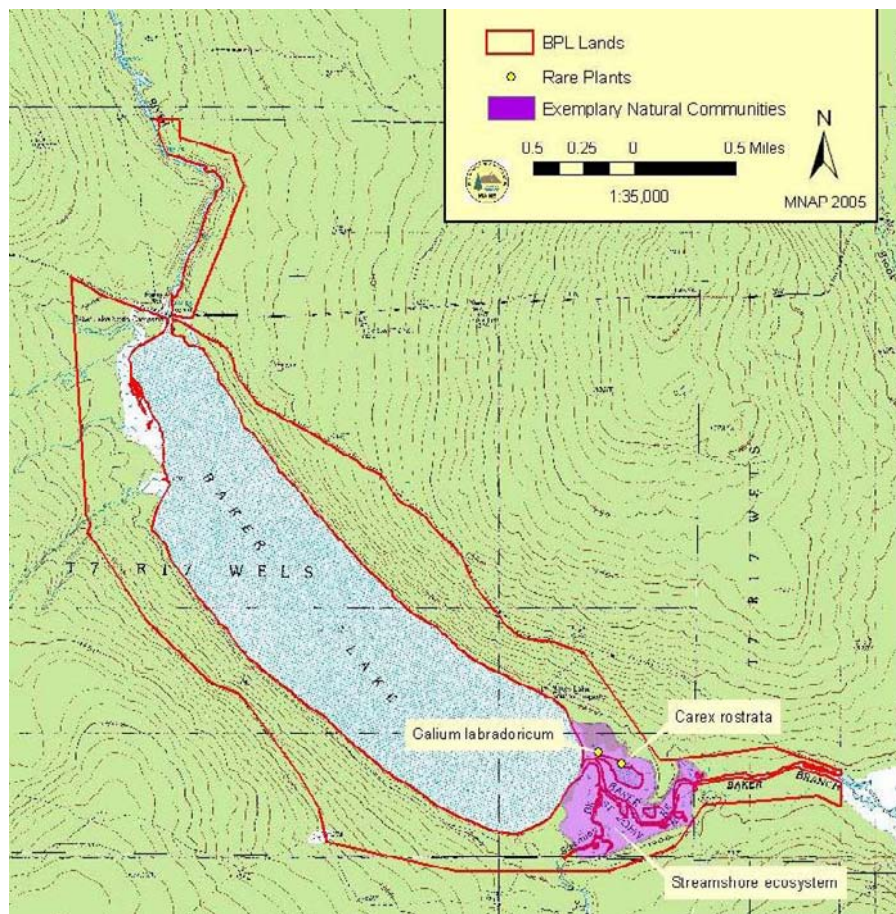


Figure 15: Baker Lake Rare Plants and Exemplary Natural Communities

Two rare plants were found within the stream shore community at the south end of the lake on the north side of the inlet: bog bedstraw (*Galium labradoricum*) and blue-leaved sedge (*Carex rostrata*). Both species tend to be found in wet sedge meadows.

Fisheries Resources: Fish found in Baker Lake include: blacknose dace, blacknose shiner, brook trout, common shiner, cusk, fallfish, golden shiner, lake chub, landlocked salmon, longnose sucker, muskellunge (“muskie”), pearl dace, rainbow smelt, white sucker, and yellow perch. The introduction of muskies in Lac Frontiere by the Quebec government in the 1960s enabled the non-native fish to migrate into Maine waters lying within the St. John River watershed. Muskies first appeared in Baker Lake in 1984 and have since established populations in other areas within the watershed. They are valued as sport fish for their large size and aggressive fighting. However, as large, fast-growing predators, they also feed on whatever is available, including native trout and salmon populations. The lake receives moderate fishing pressure in the spring.

Wildlife Resources: The uplands that surround Baker Lake likely support a typical mix of wildlife for the region. Moose in this region are abundant and deer are scarce. Black bear are common and coyote, red fox, snowshoe hare, American marten, porcupine, beaver, muskrat, mink, weasels and river otter also occur in this region.

The uplands support songbird species associated with mature softwood types and riparian zones such as sharp-shinned hawk, Spruce grouse, black-backed woodpecker, gray jay, red-breasted nuthatch. Wetlands provide habitat for great blue heron, black duck, common snipe, tree swallow and red-winged blackbird.

A territorial common loon pair has been documented on Baker Lake during recent surveys but successful breeding could not be determined. Common and red-breasted mergansers utilize the lake for breeding and brood rearing.



*Muskie fishing in northern Maine – photo courtesy of Ross Lake Camps, Clayton Lake*

The riparian zone and wetland habitats support reptiles and amphibians such as wood turtle, spotted, blue spotted salamanders and red spotted newt. American toads, green frog and mink frog should also be found here.

### **Historic and Cultural Resources:**

Archeological artifacts discovered at Baker Lake indicates use of this area by Native Americans at least in the Ceramic Period, between 800 AD and 1300 A.D. or later. As today, this headwaters area probably was part of a canoe route following the St. John River, and connecting (via Big Bog) to the North Branch of the Penobscot River. A significant find of Kineo rhyolite artifacts suggests this was part of trade route for this valued stone (Speiss and Putnam, 2006). The large wetland at the inlet end of the lake was likely part of the lake at one time, and could have been attractive for prehistoric settlement, according to Spiess (2004).

The Baker family settled in the area in 1773 and had many descendants for whom Baker Mountain, Lake, Stream, etc. were all named. Moscow Township was originally called Bakerstown.

### **Recreational Resources:**

A portion of the lands adjacent to Baker Stream (250 feet from the stream beginning 400 feet downstream of the Baker Lake outlet) lies within the area subject to a LURC approved Resource Protection Plan for the St. John River. The Plan prohibits commercial and residential development, subdivisions, water impoundments or utility projects; and provides for the continued management of non-intensive public recreational activities. There are no campsites in this part of the Baker Lake parcel.

A camping area and unimproved boat launch are located at the outflow of Baker Lake, and this launch is often used as a starting point for canoeing trips down the St. John River. The camping area appears to be used heavily, and much of the vegetation in and around the campsite is trampled. Another campsite is located on the south end of Baker Lake. The Nature Conservancy owns a private camp immediately across the lake's outlet in addition to land north of the unit.

Sport fishing has become popular on the lake, especially since the unauthorized introduction of muskellunge, resulting in motorized boats being common despite the lake's shallow areas.



***Baker Brook** – Bill Silliker Photo  
courtesy of the Forest Society of Maine*



### **Timber Resources:**

The 1,625 acre parcel surrounds Baker Lake and both sides of the Baker Branch running into the lake. Although the waterside strip width is 1,000 feet or a bit more, the Baker Lake lands will be difficult to manage efficiently for timber. This is mainly lowland and mid-slope acres, most of which have received heavy cutting since 1980. A 2001 timber appraisal conducted by Wagner estimated the stocking at 10 cords per acre, evenly split between hardwoods and softwoods. Prior to the most recent harvests, this land was almost certainly much heavier to softwoods, more in line with the Canada Falls tract, which is over 70% softwood by volume. Spruce and fir share 43% of the volume, spruce predominant, while sugar maple and yellow birch combine for another 28%, indicating that some of the land is more fertile mixedwood/hardwood site. Red maple, white birch, and cedar share another 23% of tract volume. Given the low volumes, even if this parcel is designated for timber management, it is unlikely that any harvest activities would be indicated during this Plan interval.

### **Administrative Resources:**

The Maine Department of Inland Fisheries and Wildlife, Warden Service, has a cabin on the eastern shore near Baker Brook, which was constructed as a base of operations for work in this area, under an agreement with Great Northern Paper Company. The Bureau assumed, when it took title to the lands around Baker Lake, that such administrative structures would continue under a lease agreement with the Bureau.



*Baker Lake, looking south – BP&L photo*

## **Big Spencer Mountain**

### **Character of the Land Base**

Big Spencer Mountain juts incongruously from the surrounding landscape and presides over the surrounding gently rolling hills. The hardwood forests near the mountain itself appear not to have been harvested in thirty or more years, though portions of the tract closer to its boundaries experienced heavy clearcutting in the 1980s and 1990s. The plant communities of Big Spencer form a good representation of montane forests progressing along an elevational gradient, and two exemplary natural communities were found on the parcel.

Big Spencer Mountain was acquired by The Forest Society of Maine from Great North Woods, LLC in 2001, and subsequently transferred it to the State with the stipulation that it be managed as an Ecological Reserve. The land had been managed by Wagner Forest Management Company. A small parcel (2.3 acres) at the summit was excluded from the acquisition. The in-holding contains some structures, including an unattended fire tower, two large banks of solar panels, a small communications building, and a wood helipad platform.

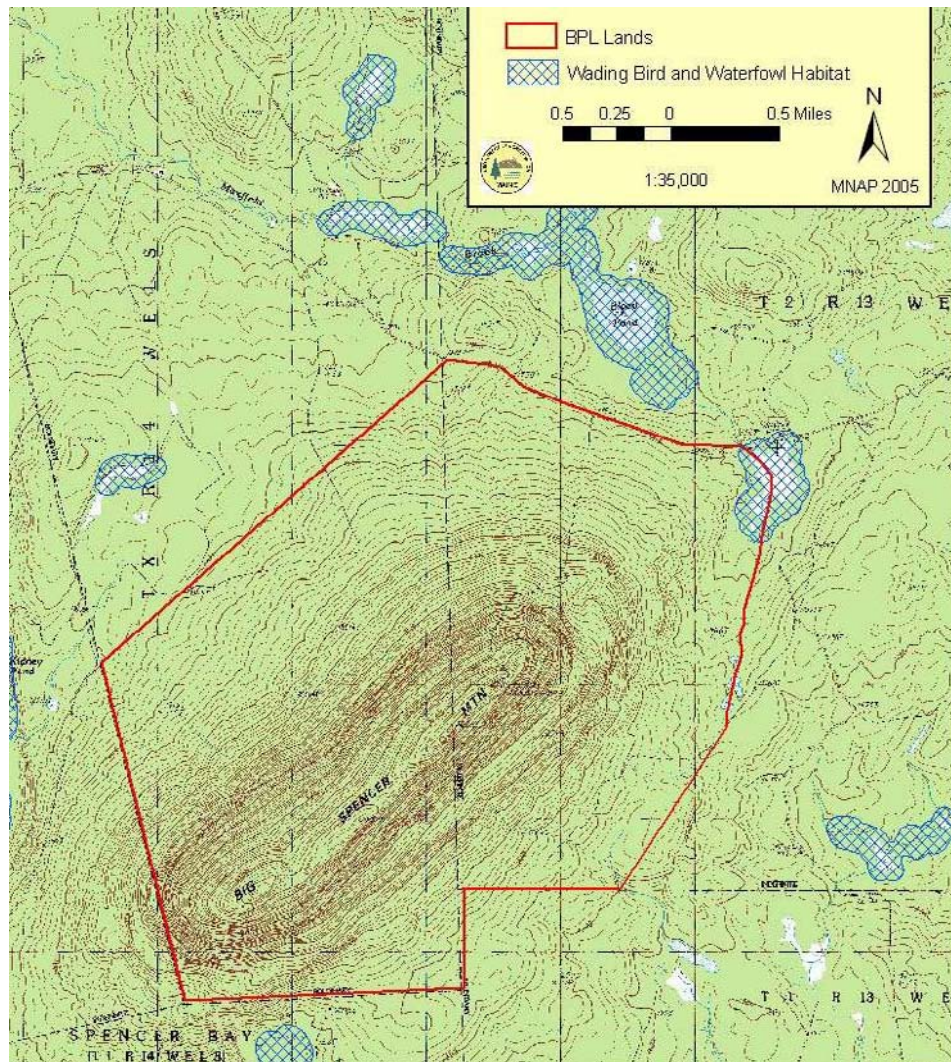


*Big Spencer Mountain – MNAP photo*

## **Natural Resources**

**Geology and Soils:** Big Spencer Mountain is capped by quartz-rich volcanic rocks that resist weathering. The volcanic bedrock was deposited in an ocean basin as North America collided with a microcontinent in the Acadian orogeny 400 million years ago. Surrounding and underneath this volcanic cap is a formation comprised of dark sandstone, siltstone, and slate – sediments that were part of the ancient ocean basin. This sedimentary rock weathers easily compared with the volcanic rock and is one of the constituents of the rolling landscape that is prevalent in the area.

The top of Big Spencer Mountain has no surficial geology deposits and is simply defined as bedrock. The sides and base of the mountain are coated in a layer of till deposited during the last glaciation. Soils on Big Spencer have not been mapped.



***Figure 16: Big Spencer Mountain Parcel***

Wetlands: Big Spencer’s sparse wetlands all occur at the periphery of the unit, mostly along the eastern boundary. There are a total of 41 acres of wetlands, 15 of which are forested and 26 of which are open. Thirty acres on the unit are considered wading bird habitat.

Ecological Processes: Ice, wind, and cold temperatures at the top of Big Spencer Mountain limit the number of species that can successfully live there. “Krummholz” (meaning “crooked wood”) is the term used to describe the balsam fir, black spruce, and heart-leaf paper birch that populate this harsh environment. As the name implies, the growth form of these species under these conditions tend to be low, dense, and shrub-like. Often one tree will have multiple leaders that have died back, and much of its summer growth may be stripped by the ice and winds of winter. As anyone who has ever tried to bushwhack through such a community can attest, these dense growth forms create a virtually impenetrable, dwarfed forest of trees up to ten feet tall.

Spruce budworm damage is evident along the ridge of Big Spencer Mountain. Since balsam fir is the preferred food of the budworm, a krummholz community dominated by fir is an easy target for the pest. The most recent outbreak occurred in the 1980s, though budworm damage is difficult to assess against the backdrop of krummholz wind and ice damage.

The hardwood communities on the unit show evidence of typical small gap disturbances from ice, windthrow, or natural tree mortality. These gaps increase to complexity of forest structure and add to the diversity of microhabitats in the forest for plants and animals.

Natural Communities:

- Ten to twenty acres of the summit is krummholz – stunted balsam fir and black spruce (up to ten feet tall) and extremely dense, in most areas underlain by a thick carpet of mosses. An open area at the summit contains a number of structures for communications. In addition, an area of about ¼ acre has been severely trampled by hikers.
- The remainder of the lands above 2,000 feet is best characterized as a fir – heartleaved birch – sub-alpine forest natural community along the spine of the mountain. This upper elevation forest has little to no evidence of past harvesting but frequent evidence of natural disturbance, including past insect damage and wind/ice damage. Balsam fir, red spruce, and heartleaved birch dominate the canopy. The slope is bouldery and ranges from 30% to 45% in grade.



*The Spruce – Northern Hardwoods Forest on Big Spencer, MNAP photo*

- Around 2000 feet elevation, a band of heart-leaved paper birch (*Betula cordifolia*) runs along the north side of the mountain.
- Below this band, a spruce – northern hardwoods forest characterizes the transition zone from the subalpine forest to the mixed-wood and hardwood dominated middle and lower slopes. The eastern side of the mountain drops off steeply to the southeast, with numerous sparsely vegetated cliffs – the largest roughly 200 feet tall. Some areas of the lower slopes show signs of past harvesting (i.e., within the past three decades). Heavier past harvest levels are evident within about ½ mile of the road network. On the north side of the mountain, past harvest signs become minimal above 1,700 feet, and on the east side, harvest signs are minimal above 1,900 feet. One cedar tree was measured to be 36 inches in diameter, and a few spruce trees on these lower and intermediate slopes were aged to be over 200 years old. Sugar maple (*Acer saccharum*), beech (*Fagus grandifolia*), and yellow birch (*Betula alleghaniensis*) dominate the canopy with red spruce and heartleaved birch found scattered towards the upper edges of the community.

The most botanically interesting features of these lower hardwood and mixed-wood slopes are seasonal drainages – one following the T2 R13/TX R14 town boundary on the north side of the mountain and several others on the lower western slopes. These seasonal drainages support several uncommon rich woods species.

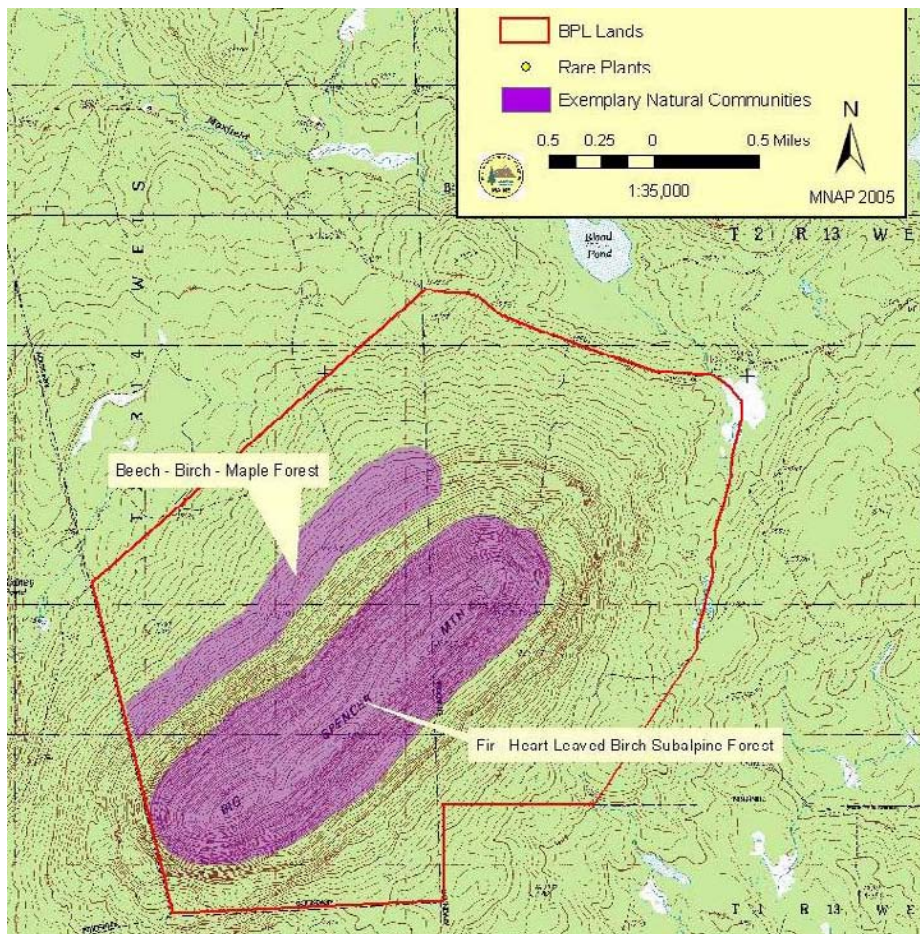


Figure 17: Exemplary Natural Communities

**Wildlife Resources:** Beyond the typical mix of wildlife species found in this area of the state, Big Spencer Mountain is known to harbor some uncommon species that require large, unfragmented blocks of forest land. The extensive, mature hardwood forest on the northwest slope of the mountain provide suitable habitat for a suite of forest interior warblers including black-throated blue, black-throated green, black and white and northern parula. While the black-throated blue warbler, which depends on mature deciduous forests, has a healthy population in Maine, about 20% of the global population of this species breeds in Maine, making habitat conservation in Maine important for the health of the whole species.

Extensive high elevation krummholz forest on Big Spencer Mountain provides optimum habitat for Bicknell's thrush, a species of special concern due to restricted habitat. Bicknell's have been documented at this location for the last 5 years through annual surveys. MDIFW recently included Big Spencer among the handful of sites in Maine providing habitat for this species of special concern. Cliffs on the southeast side of the unit could provide nesting sites for ravens.



*Bicknell's Thrush (photo by Yves Aubrey, Canadian Wildlife Service)*

Point counts on Big Spencer in 2001, 2003, and 2004 conducted by Vermont Institute of Natural Science (VINS) detecting the following bird species: Bicknell's thrush, Swainson's thrush, blackpoll warbler, winter wren, white throated sparrow, American robin, black-capped chickadee, boreal chickadee, brown creeper, black throated green warbler, cedar waxwing, golden crowned kinglet, hermit thrush, magnolia warbler, myrtle warbler, Nashville warbler, ovenbird, purple finch, rose breasted grosbeak, ruby crowned kinglet, slate colored junco, yellow bellied flycatcher, yellowbellied sapsucker, and yellow shafted flicker.

There are limited wetlands along the eastern border of the property and no ponds on the property. Amphibian species are limited by a lack of suitable habitat. Reptile species found in this type of habitat are northern redbelly snake.

### **Recreational Resources:**

Current uses include hiking, bird watching tours, snowmobiling, and hunting. The state has received requests for bear-baiting sites on the reserve, but none have been granted. An established trail (an old jeep trail that was constructed to serve the now abandoned warden's cabin at about elevation 2,000) leads up the east slope of the mountain. The trail to this point is used by both hikers and snowmobilers. It is not a groomed trail, and is quite steep in places. The trail is also eroding in places. The hiking trail continues on from the cabin and terminates at the mountain's east summit. The summit, though it contains a number of structures, affords panoramic views of Mt. Katahdin and many of the region's larger lakes.

## **Historic and Cultural Resources:**

Big Spencer Mountain was an important fire lookout tower station for the Moosehead region, and held the State record as the longest continually operated fire tower, from 1906 to 1991, nearly 85 years of service. It was discontinued when the Forest Service replaced staffed towers with a program using periodic air reconnaissance flights. The fire warden's cabin remains on the mountain, in deteriorated condition. The tower itself is located on lands retained by Northwoods, LLC at the top of the mountain.

*Warden's Cabin (BP&L photo)*  
*Fire Tower (Al Hutchinson photo)*



## **Timber Resources:**

This 4,242 acre parcel was gifted to the State with the provision that it be designated as an ecological reserve. Thus timber management will not be an option on this tract.

The inventory done by Wagner in 2000 covered 3,198 forested acres and estimates the stocking to be 25 cords per acre. Nearly all of the other 1,044 acres is exposed ledge or noncommercial forest land on Big Spencer itself. Perhaps half of the commercial (inventoried) forest land is a mix of types at the lower elevations of the tract, especially east of the peak. These areas have received light to moderate cutting over the past 20 years, and have moderate to full stocking. In between those two broad land types lies a mature northern hardwood stand (synonymous with tolerant hardwoods for this document) that has had little or no harvesting during the past 30+ years. This stand probably would not meet the definitions of old growth, perhaps not even the current threshold for "late successional", but does have significant volumes in large stems.

On the inventoried acres as a whole, hardwoods are dominant (85% of total volume) and sugar maple is the most common species, making up 49% of the volume. Beech, spruce, and yellow birch are next, each holding 10-11% of tract cords.

## **Administrative Management Concerns:**

**Structures:** In addition to the warden's cabin, there are two "squatter's" cabins located on the southern edge of the parcel. These buildings, which are simple tar papered woods camp buildings, are to be removed. The outbuilding at the warden's cabin also contains cans of old paint and possibly other hazardous materials that need to be removed and disposed of properly.

**Roads:** Two woods management roads appear to lead into the parcel on the northwest side and eastern boundary. These could be access points for unauthorized motorized use (such as ATVs) and should be blocked and monitored.

## **V. A Vision for the Seboomook Unit**

### **General Principles:**

The Seboomook Unit Management Plan is a commitment to the public that the Unit lands will be managed in accordance with the Bureau's mission and goals, and within prescribed mandates.

#### **Multiple Use Management**

1. Management of the Seboomook Unit is based on the principle of multiple use to produce a sustained yield of products and services, and sound planning (Title 12, Section 1847);
2. The Unit provides a demonstration of exemplary land management practices, including silvicultural, wildlife, and recreation management practices (Title 12, Section 1847).

#### **Recreational Uses**

3. The Unit provides a wide range of outdoor recreational and educational opportunities (IRP); including provision of remote, undeveloped areas (Title 12, Section 1847).
4. There is full and free public access to the Unit together with the right to reasonable use of those lands, except reasonable fees are charged to defray the cost of constructing and maintaining overnight campsites and other camping and recreation facilities. Restrictions on free and reasonable public access are imposed where appropriate to ensure the optimum value of the Unit as a public trust. (Title 12 Section 1846).

### **Specific to the Seboomook Unit:**

#### **Overall Vision**

5. The Seboomook Unit provides a "back woods" experience in a relatively accessible portion of Maine's vast undeveloped northern forest region.
6. Management of the Unit provides a high quality recreational experience, demonstrates exemplary multiple use and sustainable forestry, advances understanding of the value of special protected resources; and models partnerships with private landowners, businesses, and organized user-groups.
7. The spectrum of available recreation experiences ranges from "remote" (not accessed by road, with use characterized as low-intensity, low-impact, and primarily non-motorized) to "primitive, vehicle-accessible" including hunting, lake and river boat based fishing, bank fishing, trapping, flatwater and whitewater boating, hiking, primitive camping, wildlife viewing, nature study, bicycling, mountain biking, horseback riding, snowshoeing, back-country skiing, winter camping, and snowmobiling. ATV touring occurs through cooperative arrangements with adjacent landowners, as part of a significant extended ATV trail system.
8. Visitors to the Seboomook Unit can easily and conveniently obtain information about the recreational facilities and opportunities on the Unit, the Penobscot River Corridor, and the surrounding North Maine Woods lands. The Seboomook and Canada Falls parcels are managed with an active yet unobtrusive ranger presence.



### **Remote Recreation Experience**

9. The recreational experience on Seboomook, Canada Falls, and Baker lakes is one of being in a remote, undeveloped area. Lakeside camping opportunities include drive-to primitive sites, walk-to remote sites, and remote water access sites.
  - The lakes are used primarily for fishing, kayak and canoe touring, or pleasure boating in small watercraft. Boat access facilities are either carry-in or suitable for small-motored boats. Personal water craft are not allowed.
  - Areas are designated around the lakes, suitably buffered from deer yards, snowmobile trails and private camps, for remote winter camping, snowshoeing, and back-country skiing.
10. The St. John Ponds area remains a remote area with no road access. Roads on the parcel are allowed to revert to forest, except for any road determined to be needed for fire control. Over time the forest regenerates into an undisturbed mature forest. The area offers dispersed backcountry, non-motorized recreational opportunities including wild brook trout fishing, hunting, camping and orienteering. No trails or facilities are developed. Motors are prohibited on the lakes.
11. The mature forest, hiking trail and spectacular summit views of Big Spencer Mountain provide opportunities for backcountry hiking, snowshoeing, wildlife and bird watching, camping and hunting.

### **Recreational Trails and Facilities**

12. The recreation and wildlife values of the unit are maintained with a minimum of trails, roads or improvements, such as parking areas. Any recreational improvements are located in proximity to existing roads and facilities, or in areas that minimize impacts to wildlife and other sensitive resources.
13. Nature trails are developed along sections of the rivers and at other selected areas that offer unusual wildlife or scenic viewing opportunities.
14. Equestrian, bicycling, mountain biking, and ATV trails are designated or developed to provide a high quality back woods trail experience, and to minimize adverse impacts on wildlife, other users, and adjacent landowners, and are managed through a collaboration involving the state and local clubs or businesses, and surrounding landowners.
15. The existing popular snowmobile ITS Connector trails that are part of the “Moosehead Loop” trail continue to be provided through partnerships with snowmobile clubs, and are improved or relocated as necessary to avoid conflicts with timber management or other uses, while providing a quality snowmobiling experience and contributing to a regional winter tourism opportunity.

## **Forest and Wildlife Management**

16. The quality of the forests on the Seboomook, Canada Falls, and Baker Lake parcels is improved, and a multi-aged forest is being regenerated that supports a high quality recreation experience, enhances wildlife habitat, and, on those portions of the parcels actively managed for timber, produces high value products through the growth of large trees.
17. A significant portion of the Seboomook parcel is managed cooperatively with the Maine Department of Inland Fisheries and Wildlife for deer yards and other wildlife habitat, including special protection areas around eagle and loon nests.
18. Timber management, where allowed, is conducted with a minimum of roads. Existing timber management roads have been systematically evaluated to determine which should be retired and which are needed for forest or recreation management objectives. A core system of roads is available for public vehicular use (public use roads); and forest management roads are designated, when not being actively used for forest management, either for vehicular access, or for hiking, hunting, snowshoeing, back-country skiing, equestrian uses, or mountain biking.



*View from Big Spencer Mountain -Al Hutchinson Photo*

## VI. Resource Allocations

### *Summary of the Resource Allocation System*

The Resource Allocation System is a land management-planning tool first developed in the 1980's, and formalized in a document entitled *Integrated Resource Policy (IRP)*. The IRP was further refined through a public process that produced the current version, adopted December 18, 2000. The Resource Allocation System, which is used to designate appropriate management based on resource characteristics and values, is based on a *hierarchy* of natural and cultural resource attributes found on the land base. The hierarchy ranks resources along a scale from those that are scarce and/or most sensitive to management activities, to those that are less so. The resource attributes are aggregated into seven categories or "allocations," including (from most sensitive to least) special protection, backcountry recreation, wildlife management, remote recreation, visual consideration, developed recreation, and timber management.

This hierarchy defines the type of management that will be applied where these resource attributes are found, with *dominant* and *secondary* use or management designations as appropriate to achieve an integrated, multi-use management.

The following is a description of the Resource Allocation System categories applied in this Plan, the management direction defined for each category in the Bureau's Integrated Resource Policy planning document, and the application of these allocations within the Unit.

#### Overview of Allocations for the Seboomook Unit

Resource Allocation	Dominant Allocations (acres)	Secondary Allocations (acres)
<b>Special Protection</b>		
<b>Ecological Reserves</b>	<b>8,159</b>	
<b>Significant Natural Areas*</b>	<b>825</b>	
<b>Wildlife Management</b>	<b>10,670</b>	<b>31,580</b>
<b>Remote Recreation</b>	<b>4,850</b>	<b>10,482</b>
<b>Developed Recreation</b>	<b>100</b>	
<b>Timber Management</b>	<b>26,630</b>	<b>15,520</b>
<b>TOTAL ACRES</b>	<b>51,245</b>	

\* Not including wetlands and wildlife habitat such as den trees, snags, and other habitats that will be delineated for protection in the course of any timber inventory and prescription process.

## SPECIAL PROTECTION AREAS

### *Designation Criteria*

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

### *Management Direction*

In general, uses allowed in Special Protection areas are carefully managed and limited to protect the significant resources and values that qualify for this allocation. Because of their sensitivity, these areas can seldom accommodate active manipulation or intensive use of the resource. Secondary recreation use is allowed with emphasis on non-motorized dispersed recreation. For the two Ecological Reserves that are part of this Unit, Remote Recreation is designated as a secondary allocation. Other direction provided in the IRP includes:

Vegetative Management on Ecological Reserves, including salvage harvesting is also considered incompatible. Commercial timber harvesting is not allowed on either Ecological Reserves or Special Protection natural areas.

Wildlife management within these areas must not manipulate vegetation or waters to create or enhance wildlife habitat.

Management or public use roads are allowed under special circumstances, if the impact on the protected resources is minimal. For the St. John Ponds and Big Spencer Mountain Ecological Reserves, existing roads will be discontinued except as needed for fire control.

Trails for non-motorized activities must be well designed and constructed, be situated in safe locations, and have minimal adverse impact on the values for which the area is being protected. *Trail facilities and primitive campsites* must be rustic in design and accessible only by foot from trailheads located adjacent to public use roads, or by water. For the St. John Ponds area, no trails or facilities will be constructed.

Carry-in boat access sites are allowed on water bodies where boating activity does not negatively impact the purposes for which the Special Protection Area was established.

Hunting, fishing, and trapping are allowed where they do not conflict with the management of historic or cultural areas or the safety of other users.

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

### ***Special Protection Areas Designated for the Seboomook Unit***

For the Seboomook Unit, Special Protection areas defined include areas officially designated as Ecological Reserves, and significant natural communities as defined by the Maine Natural Areas Program and Bureau staff specialists through field assessments. This allocation includes a total of approximately 9,000 acres over all the parcels included in the Seboomook Unit (further detailed in the parcel by parcel discussion which follows). Overall, Special Protection allocations include:

- Carry Bog Wetland Complex, Seboomook parcel – 215 acres
- Mud Cover Appalachian-Acadian Basin Swamp Ecosystem , Seboomook Parcel – 240 acres
- Mature Oak community, Seboomook parcel – roughly 100 acres
- Streamshore Ecosystem, St. John River inlet to Baker Lake – 270 acres
- St. John Ponds Ecological Reserve – 3,917 acres
- Big Spencer Mountain Ecological Reserve – 4,242 acres



*The exemplary Streamshore Ecosystem on the south end of Baker Lake – MNAP photo*

## WILDLIFE MANAGEMENT AREAS

### *Designation Criteria*

- 1. Essential habitats** are those regulated by law and currently consist of bald eagle, piping plover, and least tern nest sites (usually be categorized as Special Protection as well as Wildlife Dominant Areas).
- 2. Significant habitats**, defined by Maine’s Natural Resource Protection Act, include habitat for endangered and threatened species; deer wintering areas; seabird nesting islands; vernal pools; waterfowl and wading bird habitats; shorebird nesting, feeding, and staging areas; and Atlantic salmon habitat.
- 3. Specialized habitat areas and features** include rare natural communities; riparian areas; aquatic areas; wetlands; wildlife trees such as mast producing hardwood stands (oak and beech), snags and dead trees, den trees (live trees with cavities), large woody debris on the ground, apple trees, and raptor nest trees; seeps; old fields/grasslands; alpine areas; folist sites (a thick organic layer on sloping ground); and forest openings.

### *Management Direction*

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

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

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

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

### ***Wildlife Management Areas Designated for the Seboomook Unit***

Wildlife dominant areas on the Seboomook Unit include LURC designated deer yards, IF&W cooperative landowner designated deer yards (continuation of areas designated by previous owner), and riparian shoreline areas along the lakes and major rivers (330-foot zone from edge of water), and along minor streams (75-foot zone from edge of water). Included within the riparian zone are two known bald eagle nest sites. Additional areas may be defined through detailed field work related to forest management – these areas could include vernal pools and other wetlands, snags and den trees, for example.

This allocation, as a dominant category, includes a total of approximately 10,670 acres over all the parcels included in the Seboomook Unit (further detailed in the parcel by parcel discussion which follows). In addition, managing to enhance wildlife habitat is a significant component of the Bureau’s approach to timber management, and hence it is a significant secondary use within the Timber Management areas (26,730 acres), and even the Remote Recreation Areas where timber harvesting occurs (4,850 acres). Overall, Wildlife Management allocations include:

Wildlife Management– Dominant Use  
Seboomook / Canada Falls – 10,200 acres  
Baker Lake– 470 acres

Wildlife Management– Secondary Use  
Seboomook / Canada Falls – 30,680 acres  
Baker Lake – 900 acres



*Young bull moose on Canada Falls Road – Photo courtesy of Jim Clark, TRC*

## REMOTE RECREATION AREAS

### *Designation Criteria*

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

### *Management Direction*

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

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

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

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

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

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



***Remote Recreation Areas Designated for the Seboomook Unit***

Remote Recreation areas are being designated around Seboomook Lake, Canada Falls Lake and Baker Lake. In addition, the Wildlife Dominant riparian areas surrounding these lakes will be designated Remote Recreation as a secondary allocation (further detailed in the parcel by parcel discussion which follows). The total acreage in Remote Recreation – dominant areas for all parcels in the Seboomook Unit is 4,850 acres; Remote Recreation as a secondary use accounts for another 10,482 acres; as detailed below.

Remote Recreation – Dominant Use

Seboomook Lake – 3,950 acres

Baker Lake – 900 acres

Remote Recreation – Secondary Use

Seboomook Lake – 1,591 acres

Canada Falls Lake – 523 acres

Baker Lake – 209 acres

St. John Ponds – 3,917 acres

Big Spencer Mountain – 4,242 acres



*Remote Winter Camping Near Pittston Farm–  
courtesy of the Conovers, Winterwalk 2005*

## VISUAL CONSIDERATION AREAS

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

### *Designation Criteria*

**Visual Class I.** Areas where the foreground views of natural features that may directly affect enjoyment of the viewer. Applied throughout the system to all shorelines, trails, public use roads, and management roads open to public vehicular traffic.

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

### ***Visual Class I Management Direction:***

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

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

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

Branches, tops, and other slash will be pulled well back from any trails.

Scenic vistas may be provided.

### ***Visual Class II Management Direction:***

Managed to avoid any obvious alterations to the landscape.

Openings will be of a size and orientation as to not draw undue attention.

### *Visual Consideration Areas Designated for the Seboomook Unit*

For the Seboomook Unit, where the topography is relatively gentle and most public use will occur along roads or on the water, Visual Class designations will be layered over other allocations so that any timber harvest in the Visual Consideration areas will be subject to the additional Visual Consideration management guidelines.

Visual Class I areas will be defined on the ground for areas adjacent to public use roads, lake and river shorelines, areas around Developed Recreation sites, and designated trails (including snowmobile trails). These are detailed for each parcel in the following section.

Visual Class II areas will be defined as areas beyond the immediate foreground, such as distant hills, viewed from public use roads or from the lakes (as seen from a boat, or from a shoreline viewing the opposite shoreline).



*The North Branch of the Penobscot River - BP&P photo*

## DEVELOPED RECREATION AREAS

### *Designation Criteria*

*Developed Class I* areas are low to medium density developed recreation areas, while *Developed Class II* areas have medium to high density facilities and use such as campgrounds with modern sanitary facilities. In the Seboomook Unit, there are no Class II Developed Recreation areas being proposed.

### *Class I Developed Recreation Areas*

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

### *Management Direction*

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

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

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

Visual consideration areas (see below) are often designated in a buffer area surrounding the Developed Recreation area.

### *Developed Recreation Areas Designated for the Seboomook Unit*

Class I Developed Recreation areas allocated for the Seboomook Unit include existing primitive drive-to and water access campsites, and public use roads. Boat access sites at Canada Falls and Seboomook Lake are part of the Brookfield Power LLC hydropower project and are not on Bureau lands; however, the existing unimproved boat access on the West Branch at Roll Dam and at Baker Lake are on Bureau lands and are designated as Developed Recreation Class I areas.

Some additional areas are proposed for this allocation if it is determined that additional facilities are needed and appropriate. In most cases, these areas are anticipated expansions to existing drive-to facilities (see Management Recommendations Section for details). The Plan recommends some new water access campsites on Canada Falls Lake, Seboomook Lake, and potentially Baker Lake, although the number and exact location of these is yet to be determined.

This allocation, including existing and proposed Developed Recreation Class I areas, but excluding roads, totals less than 100 acres over all the parcels in the Seboomook Unit. These are further detailed in the parcel by parcel discussion which follows.



*Roll Dam Campsite, West Branch Penobscot River – BP&L Photo*

## TIMBER MANAGEMENT AREAS

### *Designation Criteria*

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

### *Management Direction*

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

Overall Objectives: The Bureau's overall timber management objectives are to demonstrate exemplary management on a large ownership, sustaining a forest rich in late successional character and producing high value products (chiefly sawlogs and veneer) that contribute to the local economy and support management of Public Reserved lands, while maintaining or enhancing non-timber values (secondary uses), including wildlife habitat and recreation.

Forest Certification: Timber management practices (whether as a dominant or secondary use) meet the sustainable forestry certification requirements of the Sustainable Forestry Initiative, and the Forest Stewardship Council.

Roads: Public use, management, and service roads are allowed. However, the Bureau, in practice, seeks to minimize the number of roads to that needed for reasonable public vehicular access or timber harvesting.

Recreational Use: Most recreational uses are allowed but may be subject to temporary disruptions during management or harvesting operations. The Bureau has latitude within this allocation category to manage its timber lands with considerable deference to recreational opportunities. It may, through its decisions related to roads, provide varying recreational experiences. Opportunities for hiking, snowshoeing, back-country skiing, horseback riding, bicycling, vehicle touring and sightseeing, and ATV riding all are possible within a timber management area, but may or may not be supported or feasible, depending on decisions related to creation of new trails, or management of existing roads and their accessibility to the public.

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

Site Suitability. The Bureau will manage to achieve a composition of timber types that best utilize each site.

Diversity: For both silvicultural and ecological purposes, the Bureau will maintain or enhance conditions of diversity on both a stand and wide-area (landscape) basis. The Bureau will manage for the full range of successional stages as well as forest types and tree species. The objective will be to provide good growing conditions, retain or enhance

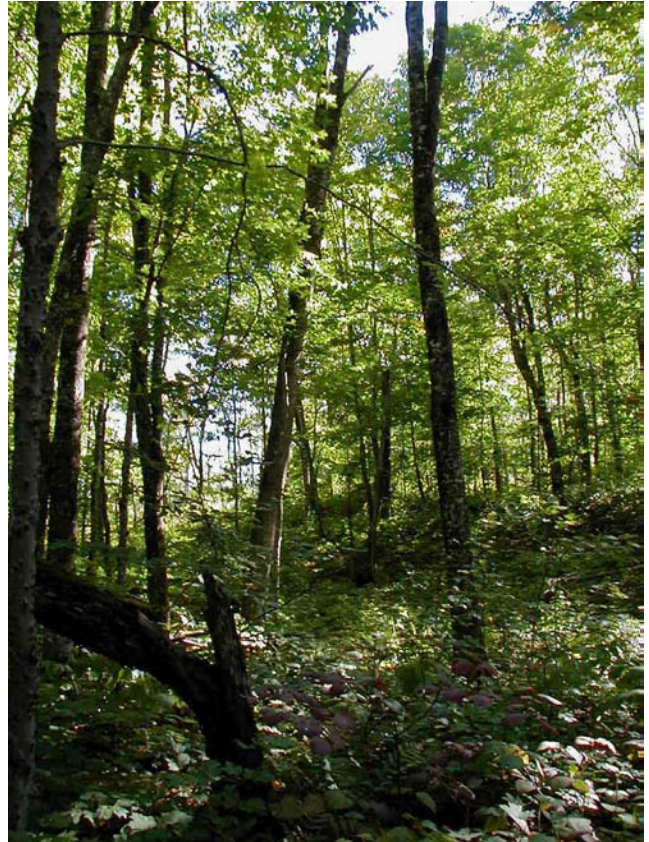
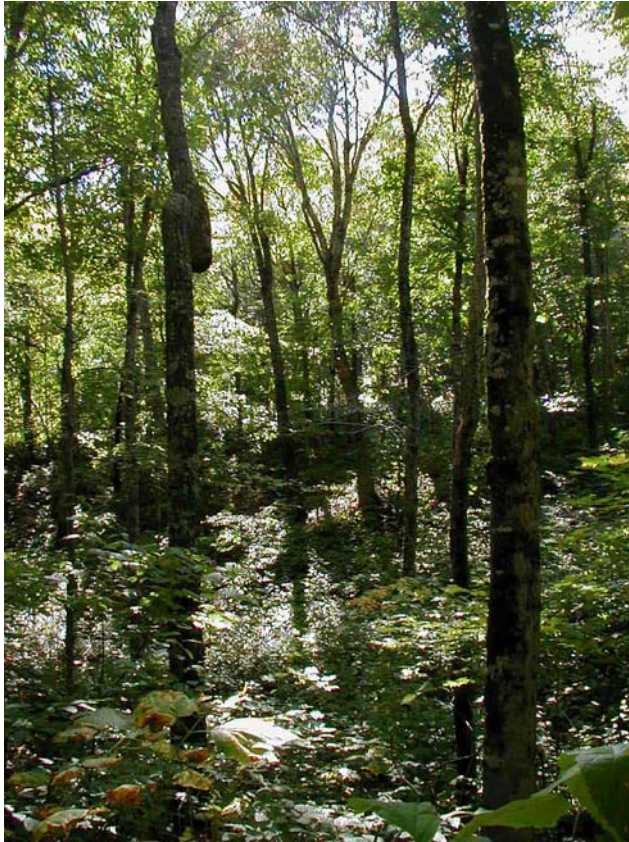
structural complexity, maintain connectivity of wildlife habitats, and create a vigorous forest more resistant to damage from insects and disease.

*Silvicultural Systems:* A stand will be considered single-aged when its tree ages are all relatively close together or it has a single canopy layer. Stands containing two or more age classes and multiple canopy layers will be considered multi-aged. The Bureau will manage both single- and multi-aged stands consistent with the objectives stated above for Diversity; and on most acres will maintain a component of tall trees at all times. Silvicultural strategy will favor the least disturbing method appropriate, and will usually work through multi-aged management.

*Location and Maintenance of Log Landings:* Log landings will be set back from all roads designated as public use roads. All yard locations and sizes will be approved by Bureau staff prior to construction, with the intention of keeping the area dedicated to log landings as small as feasible. At the conclusion of operations, all log landings where there has been major soil disturbance will be seeded to herbaceous growth to stabilize soil, provide wildlife benefits, and retain sites for future management needs.

### ***Timber Management Areas Designated for the Seboomook Unit***

Within the Seboomook Unit, Timber Management as a dominant use is designated only on the Seboomook Parcel. It includes all areas that are not designated for Special Protection, Wildlife, Remote Recreation, or Developed Recreation. The total area in this allocation is 26,630 acres.



*Example of Bureau Multiple Use Forest Management at Little Moose Unit, Greenville – BP&L photos*

## ***Allocations for the Seboomook Lake Parcel***

***Special Protection as Dominant Use.*** Two areas have been identified by the Maine Natural Areas Program as significant areas deserving special protection: the 240 acre Mud Cove Bog between Moosehead Lake and Seboomook Lake (ancient outlet of Moosehead Lake); and the 215 acre Carry Bog complex running west to east along Carry Brook, south of the east end of Seboomook Lake. Note that the Bureau will review areas adjacent to the Mud Cove Bog special protection area with MNAP during the harvest prescription process for these lands to determine if additions to the special protection area are warranted, since the boundaries of this area were defined by an acquisition survey and not from the on-the-ground evaluation that MNAP conducted for this area. In addition, there is a population of mature oaks in southern half of the West Middlesex Canal Grant that is unusual in this region, has high value for mast production, and is therefore proposed for designation as a special protection area.

***Secondary uses within the Special Protection Area.*** These areas are primarily wetlands. Recreational use of this area may include hiking, snowshoeing, backcountry skiing, hunting, fishing and trapping. There are no existing roads or trails within these areas, and no new facilities are proposed. Because these areas are protected due to botanical values, motorized uses and horseback riding would not be allowed.

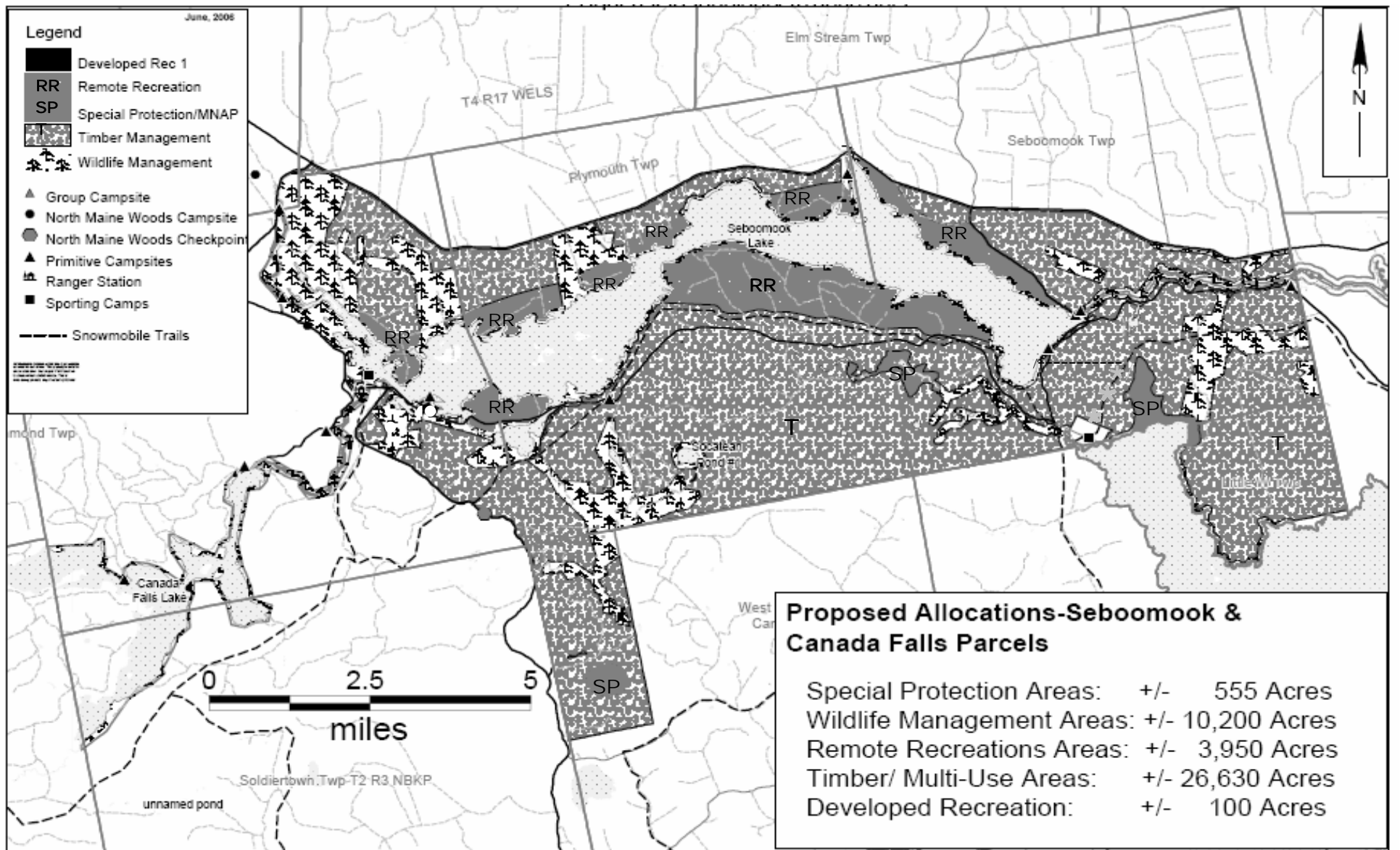
***Wildlife Management as Dominant Use.*** This parcel contains approximately 9,350 acres of lands that will be allocated for Wildlife Management as the Dominant Use, including LURC designated deer yards, deer yards per landowner agreement (expanding upon LURC designations) and riparian areas (within 330 feet of major water bodies or 75 feet of minor streams).

***Remote Recreation as a Secondary Allocation within the Wildlife Dominant Area.*** Remote Recreation will be allocated as a secondary use for Wildlife Dominant riparian areas within 330 feet of Seboomook Lake (excepting the area along the eastern shore near the dam, and the Kings High Landing peninsula), as well as a 330-foot buffer along the North Branch of the Penobscot River (excepting existing drive-to camping areas). Allowed uses may include fishing, hunting, trapping, camping, hiking, and nature walks/sightseeing. Some areas may be off limits to hiking or camping to protect nesting waterfowl (especially loons) or disturbance to nesting eagles or other sensitive species. In the winter, camping, snowshoeing and back-country skiing would be permitted uses, except in areas that coincide with deer management areas. Existing snowmobile trails that cross these areas are allowed but would be relocated where feasible to improve the quality of the remote recreation experience. Any future motorized recreation trails would be sited to avoid these areas.

Other Wildlife Dominant areas on this parcel would have recreation as a secondary use, with limitations as needed to protect wildlife values.

Timber management would also be a secondary use in these areas, subject to modifications to enhance wildlife habitat, or restrictions that could limit the timing or nature of the harvests to avoid impacts to wildlife, and subject to any Visual Class I and II requirements.





***Remote Recreation as the Dominant Use.*** A *Remote Recreation* designation will be applied to a band of land surrounding Seboomook Lake, of variable width, ranging from two hundred (200) to five hundred (500 ) feet on the north side of the lake to as much as a mile wide on the south side of the lake. These areas are largely defined in relation to existing gravel and woods roads, deer yards, and the east-west snowmobile trail that transects the unit on the south side of Seboomook Lake. This Remote Recreation area is associated with and supports the current and largely non-motorized remote experience that prevails when paddling or boating on Seboomook Lake, and will also provide areas suitable for non-motorized winter recreation activities. It includes the following areas:

- Approximately 950 acres surrounding the western bay of Seboomook Lake, subject to re-evaluation relative to potential for additional deer yard areas.
- Approximately 3,000 acres surrounding the eastern bay of Seboomook Lake, defined primarily as the area between the lake and public use roads or the existing or alternate snowmobile trails.

*Secondary Uses within the Remote Recreation Areas.* Timber management is allowed in this allocation, subject to restrictions that could limit the timing or nature of the harvests to avoid impacts to recreational uses, and subject to any Visual Class I and II requirements. Wildlife management is also an allowed secondary use.

***Developed Recreation Class I as the Dominant Use.*** Developed Recreation Class I sites include existing primitive drive-to campsites, located on Seboomook Lake at Kings High Landing (6 sites west end of the lake near Pittston Farm), and Seboomook Ledge (3 sites, east end of the lake, southeast shoreline); along the West Branch at Roll Dam (5 sites), and Burbank (2 sites at the very edge of the parcel); along the North Branch at Leadbetter Falls (4 sites, nearest the Golden Road) and North Branch (1 site); and one site on the South Seboomook Road at Seven Mile Hill. For this allocation, areas in the vicinity of these existing drive-to campsites will be evaluated for possible development of additional drive-to campsites. Snowmobile trails on the Seboomook parcel are also Developed Recreation Class I.

There are also 3 campsites at Seboomook Dam that are not on state ownership, which are part of the GLHA license, and two boat launch areas, also on GLHA property. These in-holdings would otherwise be classified as Developed Recreation I sites.

This allocation also includes the following roads which are designated public use roads (for vehicular access):

- Seboomook Road (junction of 20-Mile/Rockwood Road to Seboomook Dam)
- Seboomook Dam Road (connector from Seboomook Dam to Golden Road)
- Roll-Dam/Burbank Road (from Seboomook dam to Northeast Carry Township)
- Carry Brook Road (also called the Campground Road; from Seboomook Road to property line for Seboomook Campground)

*Uses Secondary to Developed Recreation I Areas.* Timber management that is sensitive to visual, wildlife and user safety considerations is allowed as a secondary use in Developed Recreation areas.

### ***Visual Consideration Areas***

***Visual Class I (Foreground)***: The standard for Visual Class I is the appearance of an essentially undisturbed forest. These standards for forest management will apply

- (1) to the shorelines of
  - Seboomook Lake,
  - Moosehead Lake,
  - Beaver Brook Pond,
  - the Socatean Ponds,
  - the North Branch, and
  - the West Branch,
- (2) along all public use roads located within or on the periphery of the parcel; and
- (3) along any designated hiking, nature, snowmobile, horseback, bicycle, or ATV trails.

***Visual Class II (Background)***: A ***Visual Class II designation*** requires that forest openings be of a size and orientation so as not to draw undue attention. This standard for forest management will apply to background hillsides viewed from public use vantage points including water, shorelines, boat access sites, public use roads, trails, or campsites.

***Timber Management Areas***. Areas not designated as Special Protection, Wildlife Management, Remote Recreation, or Visual Consideration areas will be managed for sustainable timber values, meeting third party forestry certification standards, while providing high value wildlife habitat and opportunities for a spectrum of back woods recreation uses. See the attached map for locations of this allocation.

### ***Allocations for the Canada Falls –South Branch Parcel***

***Wildlife Management as the Dominant Use***. Except for the campsite areas near the Canada Falls dam and at the Warden Site on the South Branch (midway down the river), the Forest Service lease site at adjacent to the bridge over the South Branch, and an area proposed for a whitewater put-in about 1,000 feet below the dam, the entire shoreland strip that comprises this parcel will be allocated for Wildlife Management as a Dominant use. The ownership varies in width from approximately one hundred (100) to six (600) hundred feet, with the majority between two hundred fifty (250) and three hundred fifty (350) feet. It includes one active eagle's nest on Canada Falls Lake, and protection of loon nesting areas with restrictions on new recreation facilities in proximity to active loon nests.

***Remote Recreation as a Secondary Allocation within the Wildlife Dominant Area***. The shoreland strip at Canada Falls Lake and along the South Branch of the Penobscot River will be designated for Remote Recreation as a secondary use. Allowed uses may include fishing, hunting, trapping, canoeing, boating, camping, hiking, and nature walks/sightseeing. Some areas may be off limits to hiking or camping to protect nesting waterfowl (especially loons) or disturbance to nesting eagles or other sensitive species. In the winter, camping, snowshoeing and back-country skiing would be permitted uses, except in areas that coincide with deer management areas. Groomed

snowmobile trails will not be allowed in this area, in order to provide a remote, quiet zone for snowshoeing, back-country skiing, and winter camping.

*Timber Management as a Secondary Use:* Timber management is allowed as a secondary use, but due to the narrow strip of land, may not be feasible or appropriate except to enhance wildlife and recreation. For example, a blow-down area along the South Branch presently is an impediment to development of a trail along the river.

*Developed Recreation Class I as the Dominant Use:* Two areas on this parcel have drive-to primitive campsites, which are defined as Developed Recreation Class I: an area around the dam on Canada Falls Lake, and the campsite midway down the South Branch, known as the Warden campsite. In addition, there are two new facilities for whitewater boating – a put in below the dam, and a take-out on the Forest Service lease site near the bridge, constructed in 2006 using a grant received from Great Lakes Hydro America, LLC.

There are also several recreational facilities at the Canada Falls Dam area that are on properties not owned by the state, including a boat launch on Great Lakes Hydro America LLC property, and a number of campsites that are on Merriweather LLC property.

*Visual Consideration Areas.* Visual Class I (foreground) and II (background) forest management standards will apply to the entire parcel.

### ***Allocations for the Baker Lake Parcel***

*Special Protection as Dominant Use.* The extensive wetland complex at the south end of the Lake, including the associated lands adjacent to the inlet stream, has rare plant and animal species and is part of a more extensive wetland draining into the lake, beyond the state ownership. This area will be designated as a Special Protection area.

*Secondary uses within the Special Protection Area.* This area is primarily an open wetland. Allowed recreational uses of this area may include canoeing on the river, hunting, fishing and trapping.

*Wildlife Management as the Dominant Use.* The riparian zone extending 330 feet from the shoreland of the lake, and including the adjacent wetlands located at the north end of the lake, as well as the full width of the state ownership adjacent to the east side of the outlet, are designated as wildlife dominant. An exception to this is the area adjacent to the road at the outlet, which will be designated *Developed Recreation I* (see below). This allocation includes the portion of lands adjacent to Baker Brook outlet that are included in the St. John River Resource Protection Plan. Management as wildlife dominant with remote recreation as a secondary allocation meets or exceeds the protections defined in the Resource Protection Plan.

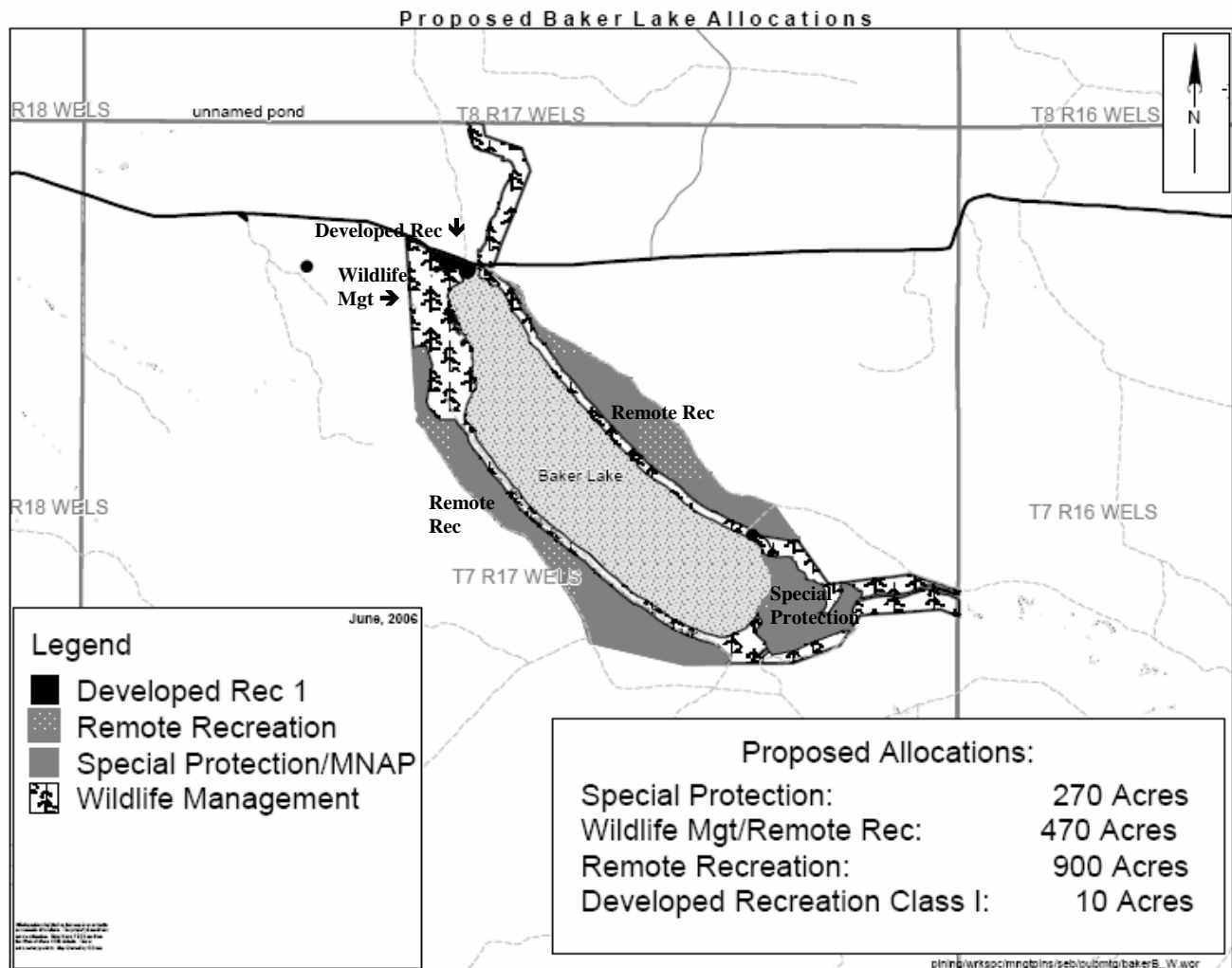
*Remote Recreation as a Secondary Allocation within the Wildlife Dominant Area.* The shorelands and riparian areas within this allocation are generally suitable for recreation uses allowed in Remote Recreation areas. There may be seasonal requirements to avoid potential conflicts with wildlife such as limited camping or harvesting during critical nesting periods.

*Timber Harvesting as a Secondary Use within the Wildlife Dominant Area.* Timber harvesting will be allowed in the wildlife dominant zone, subject to wildlife management and recreation needs.

*Remote Recreation as Dominant Use* will be applied to the remainder of the Baker Lake parcel, excepting the area adjacent to the road at the outlet. Timber management and wildlife management are allowed secondary uses in this area, subject to restrictions (see previous discussion).

*Developed Recreation I* will be applied to the area adjacent to the road at the outlet, which is presently used for boat access and camping. The area includes room for expansion to the camping area, improvements to the boat launch, and provision of a parking area.

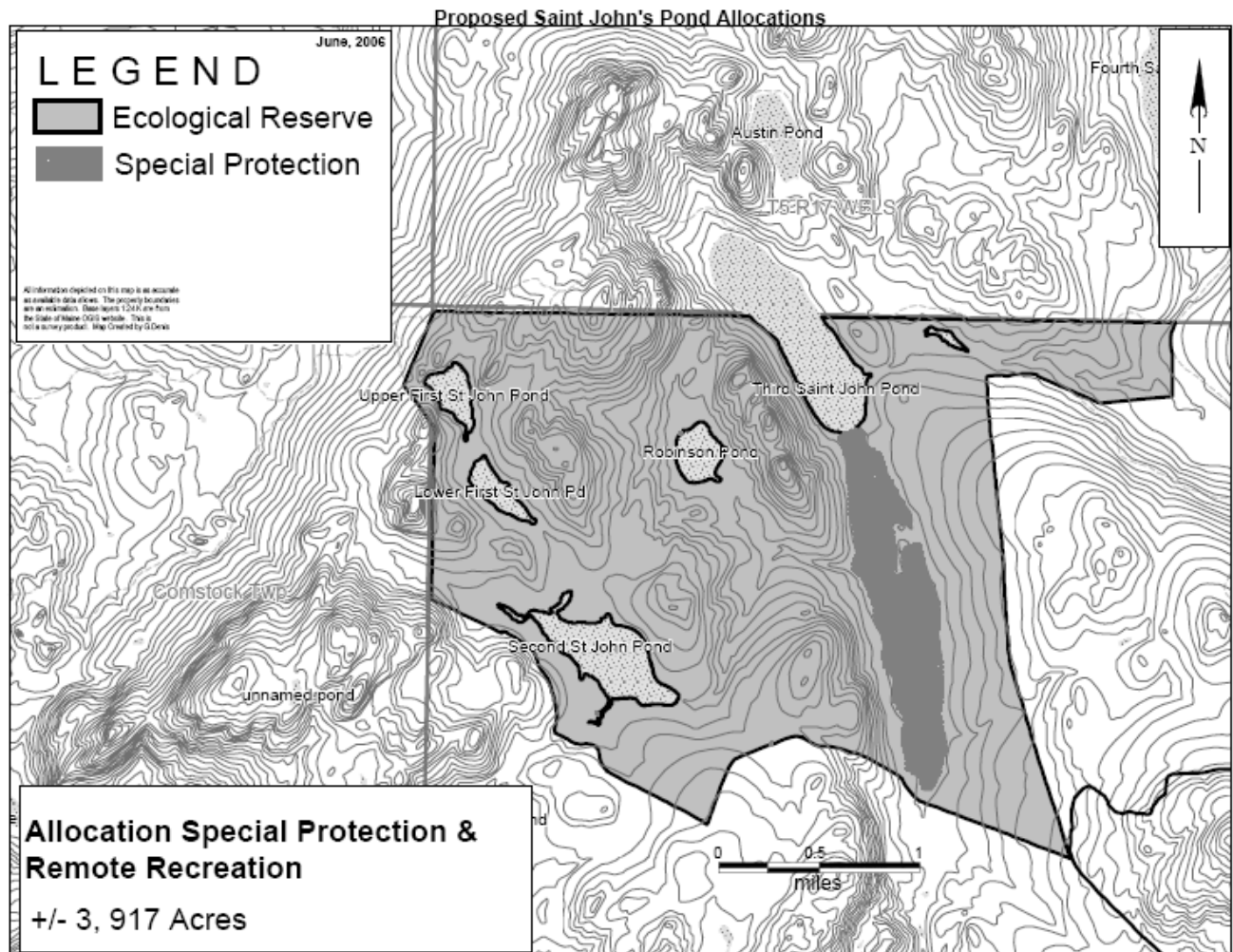
*Visual Consideration Areas.* A Visual Class I designation will apply to lands adjacent to public use roads and all shorelines. Visual Class II will apply to background hillsides viewed from the water and public use roads.



## *Allocations for the St. John Ponds Parcel*

***Special Protection as Dominant Use.*** The entirety of the St. John Ponds parcel is designated as an Ecological Reserve and as such is a Special Protection area. There will be no interference with natural processes (except wildfires will be controlled and management needed for the protection of endangered species found on the parcel will also be allowed).

***Remote Recreation as Secondary Allocation.*** This parcel is being designated for non-motorized remote recreation, including fishing, hunting, trapping, hiking, back-country skiing, and primitive camping. Vehicular access is currently controlled via a gate at the Golden Road.

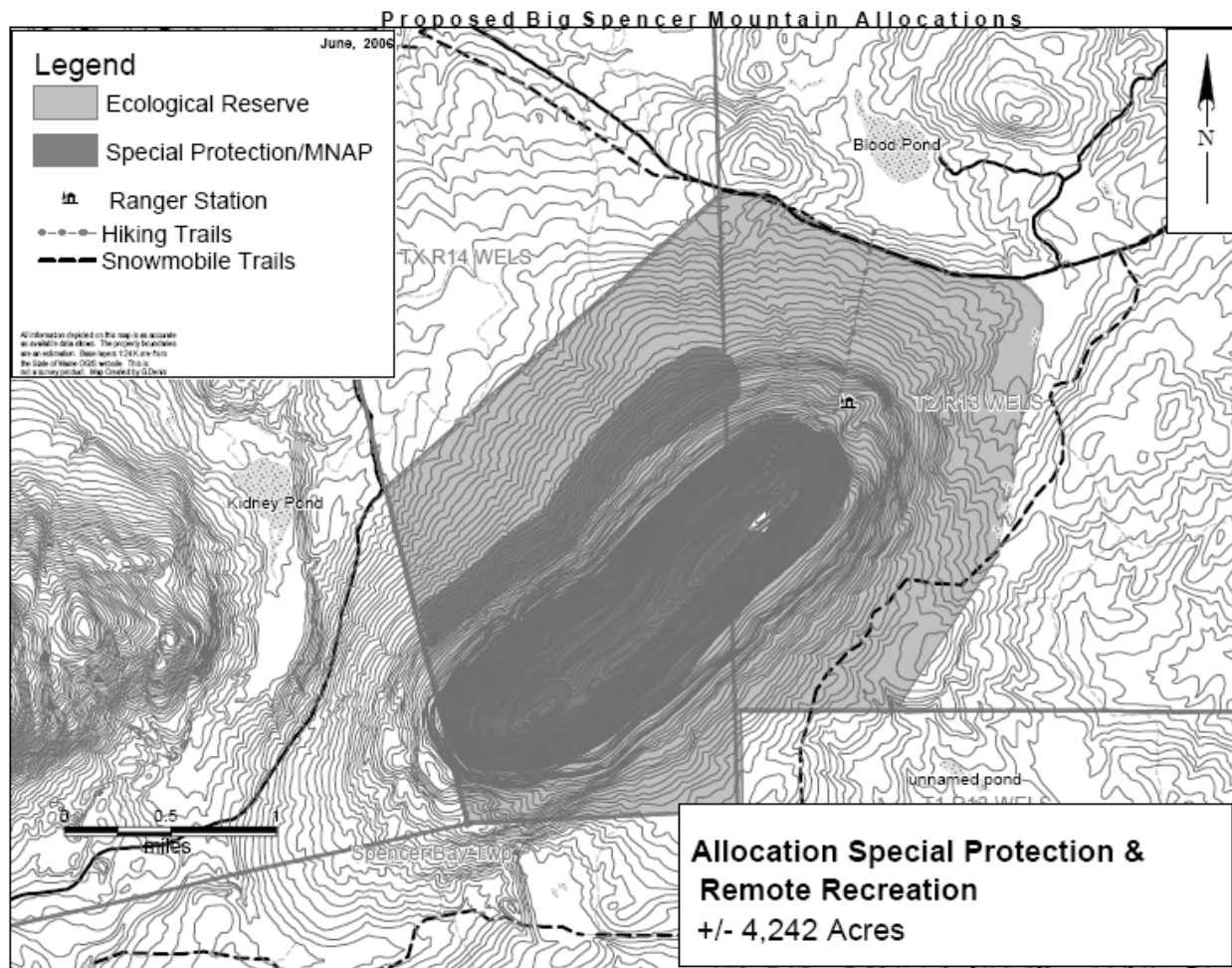


## *Allocations for the Big Spencer Mountain Parcel*

**Special Protection as Dominant Use.** The entirety of the Big Spencer Mountain parcel is designated as an Ecological Reserve and as such is a Special Protection area. There will be no interference with natural processes (except wildfires will be controlled and management needed for the protection of endangered species found on the parcel will also be allowed).

**Remote Recreation Secondary Allocation.** This parcel, as an Ecological Reserve, allows non-motorized uses including hunting, trapping, hiking, back-country skiing, and primitive camping; but restricts motorized uses (see discussion in the previous section, Summary of the Resource Allocation System, under Remote Recreation).

Timber management is not an allowed use except in connection with fire-fighting; a prescribed burn is allowed if necessary to replicate natural processes that maintain specific natural communities or rare species populations.



## ***VII. Management Recommendations***

### ***Seboomook and Canada Falls Parcels***

#### ***Special Protection Areas***

##### Protection of habitat of documented rare, threatened, endangered, and special concern species

- For protection of wood turtle habitat, within a 330-foot riparian zone along the entire length of the North Branch and the West Branch 1, timber harvest should be managed in accordance with the MDIFW “Threatened and Endangered Species in Forests of Maine: A Guide to Assist with Forestry Activities.” This recommends that 25 feet of the riparian zone nearest the waterway remain unharvested; the rest of the riparian zone be managed with single tree or small group selection cuts that maintain 60-70% cover; and construction of roads and log landings within the riparian management zone be avoided or minimized.
- For protection of the broad-tailed shadowdragon and extra-striped snaketail, located along the West Branch below Seboomook Dam, and for creepers, a small mussel documented in Carry Brook, MDIFW also recommends avoiding use of broad-spectrum insecticides within a ¼ mile buffer of the stream for 0.6 mi. (1 km) upstream and 0.6 mi. (1 km) downstream from the occurrence.
- Bald eagle nesting sites are considered Essential Habitat and should be managed in consultation with MDIFW’s regional biologist. Some activities within 1320 feet of the nest are regulated by the Essential Habitat law administered by MDIFW.

##### Protection of documented rare plant populations and exemplary natural communities

- Invasive species are always a concern at boat launches. Pursue ways to educate boaters at boat launches about the threat of spreading invasive aquatic plants into these lakes and rivers.
- Management activities should avoid the use of herbicides that target grasses and sedges and avoid excavation in areas where Orono sedge (*Carex oronensis*) is found (near the intersection of the 20-Mile Road and the South Seboomook Road).
- Avoid locating hiking trails or horse riding trails in the vicinity of the outlet of Socatean Pond #1 to protect the Northern Fir-moss (*Huperzia selago*).

#### ***Wildlife Management***

- Review the current deer yard designations and expand these areas where appropriate. Designate areas that are re-allocated from Remote Recreation to Wildlife Dominant (from the 950 acres of Remote Recreation lands surrounding the western bay of Seboomook Lake that are located adjacent to deer yards) for Remote Recreation as a secondary use.
- Manage some areas for blocks of young softwoods to serve the complementary needs of Canada lynx and deer.



- Continue existing bear baiting sites pending review for consistency with Bureau policy and development of a woods road use management plan identifying vehicular access roads. Limit the number of sites to not more than the current number (11).
- Examine the potential for other species habitat management opportunities that could be implemented on other areas of the parcel, for example, for grouse and woodcock (also see discussion under Timber Dominant areas below).
- Retain oak and beech stands for mast production.
- Monitor/evaluate areas where additional protections are required to reduce impacts to wildlife habitat (see management recommendations for protected species above under “Special Protection Areas”).
- Observe special protections defined by deed for loon nest sites, including:
  - (1) No new non-forestry improvements (other than replacements of non-forestry improvements existing at the time of acquisition of the property by the State) within 1,000 feet of a loon nest site.
  - (2) No forest management activities within 250 feet of a loon nest site during the loon nesting season (from May 1 to July 31<sup>st</sup>).
  - (3) All forest management within 250 feet of a loon nest site shall be conducted in a manner that protects the integrity of the loon nest site.
- Continue to monitor loon populations and nesting on Seboomook and Canada Falls Lakes after the conclusion of the USFWS sponsored studies.

## ***Recreation***

### General

- Extend the Penobscot River Corridor to include the water-based campsites on Canada Falls, the South Branch, the North Branch, and Seboomook Lake. Coordinate the management of the Penobscot River Corridor and the Seboomook Unit Reserved Lands.
- Develop and make available to the public a combined PRC/Seboomook Unit brochure and information packet.
- Provide an information kiosk at all trailheads and parking areas displaying maps showing the recreation areas defined by the allocations, and posting Bureau policies for recreational uses. Provide brochures at these locations.
- Explore possible options for a Parks and Lands Ranger/Information station.
- Conduct a visual consideration analysis to determine Class I and Class II areas on the parcels.
- Evaluate the natural spring near the Seboomook Ledges campsite; if potable, manage to prevent contamination of the site.

### Remote Recreation

- Maintain a “remote recreation” zone adjacent to Seboomook Lake, Canada Falls Lake, and the North Branch, the South Branch, and the West Branch, subject, in some areas, to wildlife management concerns (see Management Allocations – Wildlife Dominant with Remote Recreation Secondary).
- Designate these “remote” areas for water access or hike-to camping, and non-motorized winter camping, skiing, and snowshoeing.

- Work cooperatively with the local snowmobile clubs to locate groomed snowmobile trails away from designated remote areas, and to stop grooming the Canada Falls Road.
- Utilize the new whitewater boating take-out parking area near the bridge over the South Branch as a trailhead for any nature trails, cross country ski or snowshoe trails along the South Branch, and provide signage and information at this site for winter remote recreation.
- Protect the remote waters character on Seboomook Lake by pursuing a ban on personal watercraft and limits on boat motor size.
- Protect the remote waters character on Canada Falls Lake by pursuing a ban on personal watercraft and limits on boat motor size if other major landowners are in agreement (Passamaquoddy Tribe and Cassidy Timberlands).
- Allocate any easements obtained from Great Lakes Hydro America LLC on the islands in Seboomook Lake as Wildlife Dominant with Remote Recreation as a secondary use.
- Evaluate the condition and adequacy of the existing water access campsites on Canada Falls Lake; upgrade as needed to meet Bureau standards.
- Develop additional water access campsites on the North Branch, West Branch and Seboomook Lake. Any new facilities must not be closer than 1,000 feet from any known loon nest, and must be approved by the US Fish and Wildlife Service if within 2,000 feet of a loon nest. Relocate campsites if conflicts arise later with loon nest sites.
- Evaluate the suitability and need for additional water access campsites on Canada Falls, and Moosehead lakes, subject to loon protection restrictions. Construct new sites as resources allow.
- Evaluate the suitability and need for remote hike-to campsites within the Remote recreation allocation on Seboomook Lake, subject to loon protection restrictions. Implement as resources allow. Construct new sites as resources allow.

#### Water Access

- Work cooperatively with Brookfield Power Company to maintain boat access facilities appropriate for a remote waters experience on Seboomook and Canada Falls Lakes, and the West Branch.
- Re-establish the historic Carry Brook canoe portage, including a campsite if a suitable site can be located. Consult with the Northern Forest Canoe Trail organization and the local snowmobile club, which has a trail through this area, in developing this portage and campsite.
- Investigate possible locations for a motorized boat launch facility on the western shore of Moosehead Lake via Carry Brook or through a public-private partnership at Seboomook Campground; implement as resources allow.
- Explore creating a new carry-in boat access to the North Branch below the ledges at the bridge crossing near Leadbetter Falls. Pursue agreements with Wagner/Merriweather to create a portage trail around the ledges in the North Branch at the bridge site. Implement as resources allow.
- Participate cooperatively with Great Lakes Hydro America in developing appropriate put-in and take-out facilities for whitewater boaters on the South Branch and West Branch, including signage, an alternate put-in with parking downstream from the Canada Falls dam put-in site, and a take-out with parking in the vicinity of the bridge over the South Branch near the Forest Ranger station (accomplished in 2006).

- Monitor boating and rafting use on the South Branch and West Branch. If conflicts arise, pursue alternatives to regulate uses through MDIF&W's whitewater boating regulation authority; and the Department's authority to regulate rafting access points on its lands.

#### Drive-to Campsites

- Evaluate the condition and adequacy of the existing campsite facilities; upgrade as needed to meet Bureau standards.
- Work with Great Lakes Hydro America to upgrade and reconfigure the campsite at Seboomook dam to accommodate more campsites.
- Investigate the suitability and need for additional drive-to campsites in the general vicinity of existing drive-to campsites. Construct new sites as resources allow.
- Reconfigure the group campsite at Roll Dam to provide a day use/lunch spot for whitewater boaters that will not conflict with the campsite use.
- Investigate the need for and feasibility of one or more designated group camping areas. Construct as resources allow.
- Evaluate whether the existing campsite in the Nulhedus gravel pit should be upgraded or relocated.
- Pursue a cooperative agreement with Great Lakes Hydro America regarding the maintenance and management of the existing drive-to campsites located on the Seboomook dam parcel; and designation of these sites as part of the PRC.
- Pursue a cooperative agreement with Merriweather LLC regarding the maintenance of the existing drive-to campsites on Canada Falls Lake and the South Branch. Acquire these sites if possible.

#### Recreational Trails

- Evaluate the feasibility and cost of a nature trail along the West Branch, and pursue as resources allow.
- Work cooperatively with Great Lakes Hydro America through its FERC license to ensure that the canoe portage/ angler access trail on the north side of the West Branch is in keeping with the remote character of the Unit and meets the needs of the recreating public.
- Evaluate the feasibility and cost of developing a trail along the South Branch to serve as a hiking/nature trail, and to allow paddlers on the South Branch to easily circumvent difficult sections of the river, and pursue as resources allow.
- Locate possible sites for trailheads and parking areas needed to serve any nature trails developed along the West Branch and South Branch, and pursue as resources allow.
- Explore a possible ATV trail route (in common with the snowmobile trail, if possible) and consider establishing one or more dedicated camping areas for ATV users outside of designated Remote Recreation areas, when a regional ATV trail system extends to the Seboomook Unit, to provide a multi-day extended ATV touring opportunity. Develop as resources allow.
- In coordination with the Off-Road Vehicle Program and snowmobile clubs, and as resources allow, discontinue use of the Seboomook and Roll Dam Roads as the primary snowmobile trail; evaluate the suitability of the off-road (now alternate) snowmobile trail that parallels the existing trail to serve as the permanent snowmobile trail; improve or relocate as needed to address safety or environmental issues, and conflicts with

designated Remote Recreation areas. Designate the Seboomook and Roll Dam Roads as back-up snowmobile trails for low snowfall seasons, provided this does not conflict with Bureau timber management activities.

- Evaluate the need or desirability for improvements to the snowmobile trail to better serve the snowmobiling public. Pursue in coordination with the Off-Road Vehicle Program and snowmobile clubs, as resources allow.
- Collaborate with Pittston Farm to develop and maintain trails suitable for horseback riding that may also be used for other purposes such as back-country skiing and snowshoeing.
- In consultation with the Management Plan Advisory Committee, within two years of adoption of this Plan,
  - (1) identify which management or woods roads should be made available as multi-use trails (including, if appropriate, those suitable for motorized vehicular or mechanized uses such as bicycles), and which should be designated for pedestrian uses, with the overall goal of establishing a core of roads available for public vehicular access with significant areas set aside for back woods pedestrian uses (as secondary uses subject to timber operations) including hiking, snowshoeing, back-country skiing, hunting, trapping, wildlife viewing, etc.;
  - (2) review and evaluate any proposals from Pittston Farm proprietors for improvement and use of existing woods roads and trails for horseback riding as an extension of trails on the Pittston Farm property;
  - (3) consider options for a potential ATV trail that would connect to a regional ATV touring trail.

### ***Timber Management***

- Evaluate the condition of the forest over the next two to five years, and manage the timber in accordance with standards for Sustainable Forestry Initiative and Forest Stewardship Council third party certification; and subject to limitations imposed by the Wildlife Riparian, Remote Recreation, and Visual Class I and Visual Class II allocations.
- Determine which forest areas among those that are available for timber management are most in need of timely timber harvest or other treatment. This includes areas where significant delay would cause loss of timber value, loss of opportunity for improving stand quality, or loss of wildlife habitat enhancement opportunity. One area identified in this category is the mature/over-mature aspen in the Carry Brook drainage. Opportunities to recover timber value and to establish ruffed grouse management areas will decline rapidly as these stands pass beyond maturity.
- Within 2 years of Plan adoption
  - (1) evaluate the condition of the existing woods road network and any environmental issues that need to be addressed.
  - (2) determine, in consultation with the Maine Forest Service, which roads are needed for fire control.
  - (3) identify management roads that will be needed in the near term for timber management; that will be needed in the future for timber management; and that should be closed as management roads.

- (4) evaluate whether the Cut-off Road should be restored (as funds allow) to serve as a public vehicular access road or as a woods management road with specified uses allowed when it is not being actively used for timber management.

### ***Administrative Concerns***

#### **Public (Vehicular) Use Roads**

- Improve and maintain public use roads to Bureau standards.
- Pursue a cooperative agreement with Merriweather LLC regarding the maintenance of the vehicular access road to Canada Falls Dam and the 20-Mile or Rockwood Road.
- Pursue a cooperative agreement with Plum Creek regarding the use and maintenance of the 20-Mile or Rockwood Road through Soldiertown Township.

#### **Public Access Fees and Use Limitations**

- Examine alternatives to the present arrangement with North Maine Woods that will enable the Bureau to manage these parcels in accordance with its mission and statutory mandates for its reserved lands. Throughout this process, continue discussions with North Maine Woods.

### ***St. John Ponds***

- Manage as an Ecological Reserve.
- Designate this area for dispersed remote recreation with no developed trails or facilities.
- Allow existing roads that are not needed for fire control to revert to forest; address any environmental issues associated with these roads.
- Investigate the feasibility of moving the gate on the Gulliver Brook Road and providing a parking area on or closer to the parcel boundary. Implement as resources allow.
- Investigate the need and feasibility of establishing one or more parking areas serving potential walk-in access routes to the parcel.

### ***Baker Lake***

#### ***Special Protection Areas***

- Follow recommended guidelines for protection of wood turtle habitat at the south end of Baker Lake as listed above under the Seboomook parcel.
- Work with North Maine Woods to educate the motorized boating public about the threat of spreading invasive aquatic plants into the area lakes, including Baker Lake, which, because of its Muskie fishery, is attracting more motor boat fishing use.
- Avoid siting any new campsites in proximity to the shoreland wetland complexes.
- Coordinate with the Maine Historic Preservation Commission to protect sensitive archaeological sites on the parcel.

### ***Wildlife Management***

- Pursue a ban on personal watercraft for Baker Lake to protect loons.
- Observe special protections defined by deed for loon nest sites, including:
  - (1) No new non-forestry improvements (other than replacements of non-forestry improvements existing at the time of acquisition of the property by the State) within 1,000 feet of a loon nest site.
  - (2) No forest management activities within 250 feet of a loon nest site during the loon nesting season (from May 1 to July 31<sup>st</sup>).
  - (3) All forest management within 250 feet of a loon nest site shall be conducted in a manner that protects the integrity of the loon nest site.
- Continue to monitor loon populations and nesting on Baker Lake after the conclusion of the USFWS sponsored studies, as resources allow.

### ***Recreation***

- Investigate the possibility of a group campsite that could be water access or remote walk-in access from an established road and trailhead, subject to loon protection restrictions.
- Stabilize erosion issues at the existing camping area on the west shore near the outlet; relocate this campsite if needed.
- Manage the southern campsite as a water access campsite.
- Determine the extent of the Visual Class I and Visual Class II areas surrounding the lake and river.

### ***Timber Management***

- Evaluate the condition of the forest over the next two to five years, and manage the timber in accordance with standards for Sustainable Forestry Initiative and Forest Stewardship Council third party certification; and subject to limitations imposed by the Wildlife Riparian, Remote Recreation, and Visual Class I and Visual Class II allocations.

### ***Administrative Issues***

- Develop a lease agreement with IF&W for the warden's cabin near the outlet.

## ***Big Spencer Mountain***

- Manage as an Ecological Reserve and for remote recreation.
- Within two years of Plan adoption, discontinue the existing snowmobile trail.
- Pursue an aggressive effort to establish an alternate high vista destination snowmobile trail in the same general vicinity as Big Spencer Mountain as a replacement to the existing primitive snowmobile trail that follows the old jeep trail to the abandoned warden's cabin. This replacement trail is a high priority for the Bureau; the goal is have an alternate trail in place within two years, or soon as practicable.
- Stabilize the existing erosion and drainage problems on the jeep trail to the warden's cabin. Rehabilitate and improve the trail for hiking and other pedestrian uses, if suitable; otherwise discontinue use of the trail and design an alternate hiking trail to the cabin site.
- Within two years of Plan adoption, remove the warden's cabin and associated structures; maintain the area as a scenic vista serving the hiking trail. Provide the Forest Society of Maine the option to relocate the cabin to a site off the ecological reserve, within that two year period.
- Develop a parking area off the Spencer Mountain Road to serve the trailhead for the hiking trail.
- Develop an interpretive panel commemorating the long service of the fire warden's post on Big Spencer, and place it at the trailhead or at the scenic vista to be retained at the cabin site.
- Discontinue the existing woods management roads on the northwestern and southeastern sides of the parcel.
- Evaluate whether the existing section of the local snowmobile trail that crosses the southeastern area of the parcel can be reasonably relocated outside of the reserve.
- Pursue the removal of unauthorized structures on the southern edge of the parcel.

## ***VIII. Monitoring and Evaluation***

Monitoring and evaluation are needed to track progress in achieving the management vision, goals and objectives for the Unit, and effectiveness of particular approaches to resource management. Monitoring and evaluation will be conducted on wildlife, ecological, timber, and recreational management efforts in the Seboomook Unit.

### ***Implementation of Plan Recommendations***

The Bureau will develop, within 2 years of plan adoption, a process for implementing, accomplishing, and tracking the management recommendations put forth in the Plan. This will include a framework of recommendations with priority levels assigned and targeted timeframes established by priority level. This framework will be utilized to determine work priorities and budgets on an annual basis. The Bureau will document, on an annual basis, its progress in implementing the recommendations, its plans for the coming year, and adjustments to the target timeframes as needed.

### ***Recreation***

Data on recreational use is helpful in allocating staff and monetary resources for management of the Unit, and generally determining the public's response to the opportunities being provided. It also provides a measure of the effectiveness of any efforts to publicize these opportunities. Use data for the Seboomook Unit, except for the Spencer Mountain parcel, has been gathered in the past by North Maine Woods as part of its management of the lands for the prior owner. As long as the Unit is part of the North Maine Woods system, this data will continue to be collected at the North Maine Woods gate. If the Unit is withdrawn for the North Maine Woods system, the Bureau will develop a process for collecting data on use. If a gate is maintained by the Bureau, this could include a registration procedure at the gate. It could also include periodic user surveys. For the water-based campsites on the Seboomook and Canada Falls parcels, the Bureau could utilize measures presently used to monitor use of the Penobscot River Corridor.

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

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



## ***Wildlife***

The Bureau, through its Wildlife Biologist and Technician, routinely conduct a variety of species monitoring activities statewide. The following are monitoring activities that are ongoing or anticipated for the Seboomook Unit.

- (1) Two important wildlife populations are being actively monitored on the Unit. Bald eagles are regularly monitored by the MDIF&W non-game species research program. Loons, a species of special interest in this plan as federal loon mitigation funds were used in part to purchase the property; are being monitored on the Unit lakes by the US Fish and Wildlife Service; these studies are expected to continue for at least another year. The Bureau will develop, in consultation with the USFWS, an ongoing program to monitor loon populations and nesting areas on the Unit's lakes.
- (2) The Bureau will establish and run a Bicknell's thrush monitoring survey route annually on Big Spencer Mountain, in cooperation with the Vermont Institute of Natural Science.
- (3) The Bureau cooperates with MDIF&W monitoring of game species, including, for this Unit, deer, moose, grouse, and black bear. Of particular interest are the extensive deer wintering areas on the Unit, since there is a need for this habitat in the region. As staff and budgets allow, the Bureau will coordinate with MDIF&W on aerial and ground surveys of these deer wintering areas to determine the distribution and use related to habitat quality and quantity. These surveys will be conducted during winter under snow conditions that restrict deer mobility.
- (4) The Bureau will identify and map significant wildlife habitat such as vernal pools and den trees in the process of developing its detailed forest management prescriptions. The boundaries of any sensitive natural communities will also be delineated on the ground at this time. Any significant natural areas or wildlife habitat will then be subject to appropriate protections.

## ***Ecological Reserves***

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

There are two Ecological Reserves in this Unit: the St. John Ponds parcel, and Big Spencer Mountain. The MNAP conducted natural resource inventories on these lands in 2004 as part of the reserved lands management planning process. MNAP is also monitoring these lands as part

of its long term monitoring of Ecological Reserves to monitor ecological change within Ecological Reserves and to compare Ecological Reserves to areas under different management regimes. Baseline data will be collected using permanent plots in the St. John Ponds and Big Spencer Mountain Ecological Reserves in summer 2006. These areas will be re-inventoried once every ten years.

### ***Timber Management***

Since timber harvesting is both the source of the majority of Lands Division revenue and potentially the most widespread source of ecological disturbance on the landbase, its monitoring is important and is done throughout the Bureau's process. The local work plans, called prescriptions, are prepared by professional foresters according to Bureau policies, with input from staff specialists, then are peer-reviewed prior to approval. Preparation and layout of all timber sales include having field staff look at essentially every acre to be treated before it is to be harvested, with individual tree marking done on the majority of harvest acres. Regional field staff are on site checking on harvest practice and progress frequently, and senior staff visit these sites on a less frequent basis to obtain the overall picture of what is taking place in the forest. After the harvest is completed, roads, trails, and water crossings are put to bed as appropriate, and any changes in stand type are recorded so that the Bureau's GIS system can be updated.

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

Third party monitoring is done mainly through the forest certification programs of the Forest Stewardship Council (FSC) and the Sustainable Forestry Initiative (SFI). Each program conducts rigorous investigations of both our planning and on-ground practices. A full FSC audit was completed for all Bureau lands in 2006. The Seboomook Unit was part of that audit, with completion of this Plan required to maintain FSC certification.