

# **Kennebec Highlands Interim Management Plan**

*Final Draft*



Watson Pond from Sanders Hill Trail

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

**August 2007**

## Table of Contents

	<i>Acknowledgements</i> .....	iii
<b>I.</b>	<b>Introduction</b> .....	1
<b>II.</b>	<b>The Planning Context</b> .....	6
	<i>Introduction</i> .....	6
	<i>Character of the Region</i> .....	6
	<i>Public Recreation Opportunities in the Region</i> .....	9
	<i>Recreational Tourism in the Region</i> .....	11
	<i>General Trends in Recreational Use</i> .....	11
	<i>Accessibility for Public Use</i> .....	12
	<i>Status of the Kennebec Highlands Project</i> .....	12
	<i>Management of the Highlands to Date</i> .....	14
<b>III.</b>	<b>Character and Resources of Kennebec Highlands</b> .....	16
	<i>Character of the Land Base</i> .....	16
	<i>Natural Resources</i> .....	16
	<i>Historic and Cultural Resources</i> .....	26
	<i>Recreation Resources</i> .....	31
	<i>Timber Resources</i> .....	35
<b>IV.</b>	<b>Management Issues</b> .....	39
	<i>Administrative and Management Challenges</i> .....	39
	<i>Access</i> .....	39
	<i>Recreation</i> .....	41
	<i>Resource Protection and Management</i> .....	44
<b>V.</b>	<b>A Vision for the Kennebec Highlands</b> .....	46
<b>VI.</b>	<b>Resource Allocations</b> .....	48
	<i>Summary of the Resource Allocation System</i> .....	48
	<i>Overview of Allocations for the Kennebec Highlands</i> .....	48
	<i>Special Protection Areas</i> .....	49
	<i>Wildlife Dominant Areas</i> .....	50
	<i>Remote Recreation Areas</i> .....	51
	<i>Visual Consideration Areas</i> .....	52
	<i>Developed Recreation Areas</i> .....	53
<b>VII.</b>	<b>Management Recommendations</b> .....	57
	<i>General</i> .....	57
	<i>Special Protection Areas</i> .....	57
	<i>Wildlife Dominant Areas</i> .....	57
	<i>Recreation Areas</i> .....	58
	<i>Timber Management</i> .....	59
	<i>Administration</i> .....	59
<b>VIII.</b>	<b>Monitoring and Evaluation (preliminary)</b> .....	61
<b>IX.</b>	<b>Appendices (to be completed)</b> .....	63
	A. Natural Resource Inventory (under separate cover) .....	
	B. State Recreation Lands in the Kennebec Highlands Region .....	64
	C. Summary of Public Access Rights in the Kennebec Highlands (to be completed) ...	
	D. Summary of Municipal Ordinances Related to the Kennebec Highlands (to be completed) .....	

E. Summary of Written Public Comments (to be completed).....	68
F. Guiding Statutes.....	70
G. Rules for the Use of Public Reserved Lands.....	72
H. Glossary.....	79
I. References (to be completed).....	

### **List of Maps**

Kennebec Highlands Location Map.....	3
Kennebec Highlands Region.....	7
Kennebec Highlands Project.....	13
Kennebec Highlands Wetlands and Hydrology.....	23
Kennebec Highlands Wildlife Features.....	24
Kennebec Highlands MNAP [Exemplary Natural] Features.....	25
Kennebec Highlands Historic Sites.....	30
Kennebec Highlands Regional ATV Trails.....	32
Kennebec Highlands Regional Snowmobile Trails.....	32
Kennebec Highlands Trails.....	33
Kennebec Highlands Timber Types.....	38
Kennebec Highlands Allocation Map1: Special Protection and Wildlife.....	55
Kennebec Highlands Allocation Map 2: Recreation Allocations.....	56

## *Acknowledgements*

The Kennebec Highlands Management Plan was prepared as a collaborative effort among the following Bureau of Parks and Lands staff:

Will Harris	Director, Bureau of Parks and Lands
Cindy Bastey	Plan Coordinator
Brian Bronson	ATV Coordinator
Tom Charles	Chief of Silviculture
Steve Curtis	Manager, Southern Parks Region
Gena Denis	GIS Coordinator
Tom Desjardin	Historic Site Specialist
Tom Dinsmore	Property Records Specialist
Bill Haslam	Forest Technician, Western Lands Region
Joe Higgins	Snowmobile Coordinator
Scott Ramsay	Director, Off-road Vehicle Program
Pete Smith	Manager, Western Lands Region
John Titus	Senior Planner
Joe Wiley	Wildlife Biologist

Frank O'Hara and Antje Kablitz of Planning Decisions, Inc. provided meeting facilitation, research and writing support to the bureau.

The Maine Natural Areas Program prepared the natural resources inventory for the Highlands, which addresses geology, soils, hydrology, water quality, natural communities, wetlands, ecological processes, and rare plant and animal species. The inventory report, written by ecologist Brooke Wilkerson, is included in the Plan (under separate cover) as Appendix A, Natural Resource Inventory of the Bureau of Parks and Lands Kennebec Highlands Unit.

The Kennebec Highlands Phase I Archaeological Survey, prepared for the Land for Maine's Future Board by Maine Historic Preservation Commission for the Kennebec Highlands acquisition project, provides the information about archaeological and historical resources on the unit.

Brian Alexander of the Belgrade Regional Conservation Alliance guided field trips and shared his extensive personal knowledge of the Highlands property.

The Bureau acknowledges the time and thoughtful contributions of members of the Kennebec Highlands Management Plan Advisory Committee, listed below, and the many members of the public who participated in meetings and sent comments to the bureau during the preparation of the plan.

**Kennebec Highlands Management Plan Advisory Committee**

Brian Alexander, Rome  
Roy Bouchard, Belgrade  
Sue Burns, Vienna  
Stan Caban, Rome  
Chris Currier, Mount Vernon  
Gary Keilty, Readfield  
Pete Hersom, Gardiner  
Rep. Deane Jones, Mount Vernon; Maine House Dist 83  
John K. Jones, Mount Vernon  
Dave Macleay, Rome  
Michael Saharic, Belgrade Lakes  
George Smith, Mount Vernon  
Bill Swan, Belgrade Lakes  
Roger Wing, Vienna  
Hank Washburn, New Sharon

# I. Introduction

## *About This Document*

This document is an interim management plan for the Kennebec Highlands unit of public reserved lands, managed by the Maine Department of Conservation, Bureau of Parks and Lands. It is intended to guide management of the Kennebec Highlands over the next two years. Ordinarily, a management plan would be prepared for a 15-year period, with Advisory Committee consultation at 5-year intervals. However, critical information about rights of public access over existing roads to and on the property is missing at this point. These rights will determine the bureau's ability to guide access and use of the property. Additional legal research and consultation with municipalities is necessary before the bureau can undertake more detailed planning for the unit, particularly for recreational use.

The plan authors are satisfied that there is sufficient information to make permanent resource allocations and management recommendations for Special Protection areas, Wildlife Dominant areas, and Developed Recreation Class I areas at the Sanders and Round Top Trailheads and at the Dolley property. These largely reflect existing conditions. The bureau recommends that the remainder of the property be designated a Developed Recreation Class I area for the next two years, allowing recreational use to continue and more detailed planning for future recreation to proceed as information about the public access rights on the roads becomes clear. The bureau has further identified an area that it would propose for allocation as Remote Recreation in the future.

During the interim plan period the Advisory Committee will remain an active committee. The committee will review reports from the bureau about the status of roads and assist in the development of a final plan to succeed the interim plan. Advisory Committee meetings will be open to the public. At the end of two years, a final, 15-year management plan will be presented at public meeting and a full comment period provided. Consistent with practices for this plan, meeting notices, minutes and plan documents will be posted on the bureau's website.

This plan is for the Kennebec Highlands unit as it exists today. Management of lands added to the unit will be determined through a subsequent public planning process.

The plan includes background information about the planning process and the regional setting of the Highlands, but the core of the plan is a description of the resources on the unit, the management issues as understood from Bureau analysis and public input, a vision for the future of the unit, and management recommendations.

One objective of the plan is to provide a balanced spectrum of opportunities across the unit, in keeping with the opportunities and resources available in the broader surrounding region. In developing management recommendations for the Highlands, the bureau has been mindful of this broader perspective.

The plan is a commitment to the public that the land will be managed in accordance with the bureau’s mission and goals and within prescribed mandates. Revisions to the plan will occur only after providing opportunities for public comment. The management plan will also provide guidance to bureau staff, giving clear management objectives while affording some flexibility in achieving those objectives. It is not, however, a plan of operations.

An important aspect of the management of public lands is monitoring and evaluating management activities relative to overall objectives. The plan describes monitoring and evaluation procedures for management of recreation, wildlife, protected resources, and timber.

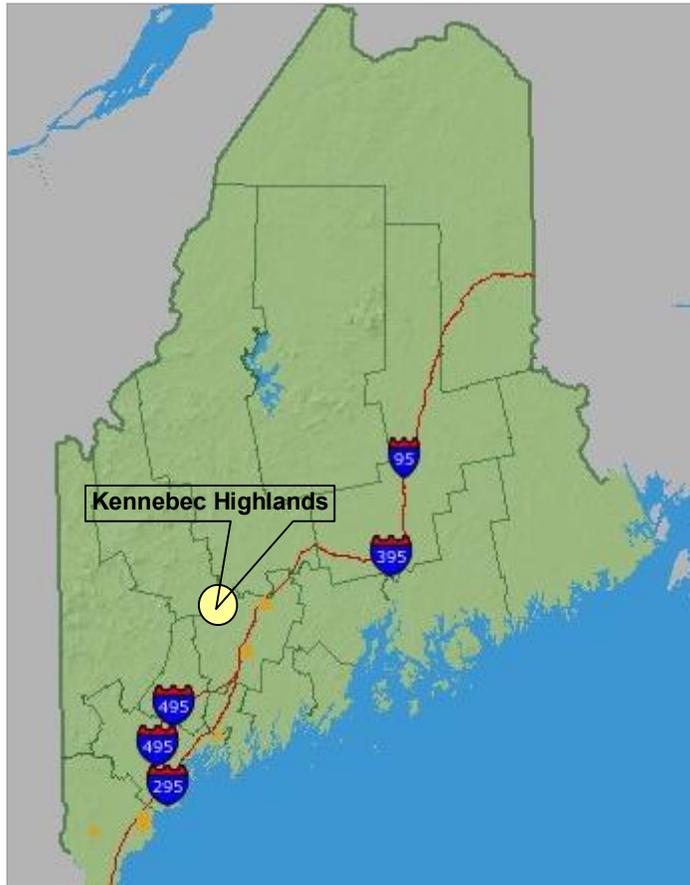
At a minimum of five-year intervals during the 15-year final plan period, the bureau will report management accomplishments to the Advisory Committee. At the end of the plan period, the entire document will be updated. The bureau recognizes that some resources and management issues will undergo change over time and require interim attention, and that several of the stated objectives will require longer than the plan period to achieve.

***What is the Kennebec Highlands?***

The Kennebec Highlands is comprised of about 5,500 acres of land in northwest Kennebec County and southeastern Franklin County. It includes Kennebec County’s highest elevations – McGaffey and Vienna mountains, numerous streams and wetlands, and five undeveloped ponds. The lands are located within 15 miles of Augusta, Farmington and Waterville and roughly 90 minutes from Portland and Bangor. This large undeveloped tract of land is important to the area both in terms of wildlife and natural resource conservation and as a public recreation area. These lands offer a spectrum of high quality natural resources and recreational opportunities, including:

<b>Natural Resources</b>	<b>Recreational Opportunities</b>	
Mixed-wood forests	Hiking	Nature study
Lake and mountain view sheds	Mountain biking	Berry picking
Fish and wildlife habitats	Horseback riding	Fishing
Rare plants/exemplary natural communities	Cross-country skiing	Hunting and trapping
Undeveloped ponds	Snowmobiling	Canoeing/kayaking
Blueberry fields	ATV riding	Remote camping
Highest summits in the region	Wildlife observation	Picnicking

## ***Kennebec Highlands Location Map***



### ***Statutory and Policy Guidance***

Multiple use management plans are required for public reserved lands pursuant to Title 12 MRSA § 1847 (2), and must be prepared in accordance with the guidelines of the *Integrated Resource Policy* 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 a variety of quality outdoor recreation experiences; and produces 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***

The development of management plans includes a series of steps, each involving interdisciplinary review and public comment, to achieve a plan that integrates various perspectives and needs while protecting and conserving the resources of bureau lands. There have been four public meetings held on this plan, which are listed below. The bureau maintained an open public comment policy

throughout preparation of the plan and provided a formal comment period on the final plan draft. Public comments received and bureau responses to them are contained in Appendix E.

*Resource Assessments:* The first phase of the planning process included a study of the resources and opportunities available on the Kennebec Highlands, including natural and geological, historic and cultural, fisheries and wildlife, recreation, and timber resources. Some of this information comes from formal inventories conducted by the Maine Natural Areas Program and the Maine Historic Preservation Commission, while other information was supplied by bureau staff with expertise in wildlife, recreation, timber management and mapping and by people who have personal knowledge of the property.

*Issue Identification/Discussion through Public Scoping Meetings:* A Public Scoping Meeting was held at the Mount Vernon Community Center on May 17, 2007 to identify hopes and concerns for the future of the Highlands and management issues that needed to be addressed in the plan from the perspective of the public.

*Preparation of Preliminary Plan:* The Bureau then documented the resources and management issues identified as described above and proposed a vision and management recommendations for the unit, including “resource allocations,” or areas designated for a specific type of management such as remote recreation, wildlife management, timber management, etc. These were assembled as a Preliminary Plan for discussion.

*Advisory Committee Formation and Review of Preliminary Plan:* At the same time, a public Advisory Committee was formed to review and discuss the Preliminary Plan on a more formal basis. Members of the committee were selected based on their knowledge in areas important to the management of this Unit and their interest in the property. An Advisory Committee meeting to review the Preliminary Plan, open to the public, was held at the Mount Vernon Community Center on June 28, 2007.

*Working Meeting on Trails:* A special meeting, open to the public, to improve trail location information and identify existing and potential trail routes for different uses was held at the Mount Vernon Community Center on July 10, 2007.

*Preparation of Draft Final Plan and Public Meeting:* Comments from the Advisory Committee and public on the Preliminary Draft, from the Working Meeting on Trails and comments submitted by the public were considered in developing a draft of the Final Plan. This draft plan was presented at a public meeting on September 6, 2007. Additional written comments on this draft were received until September 21, 2007.

*Commissioner’s Review of the Proposed Plan, and Plan Adoption:* Comments received on the final Draft Plan were considered in preparing a Final Management Plan for review by the Department of Conservation’s Commissioner, as recommended by the Director of the Bureau of Parks and Lands. After the Commissioner’s review and comment and any needed revisions to the Final Plan, the plan was formally adopted by the Commissioner on \_\_\_\_\_.

Plan Follow-up: Typically, following adoption of a management plan, the unit will be subdivided into geographic compartments to develop operational plans and implement management recommendations. The bureau annually reviews commitments made in the plan and determines what specific projects will be undertaken in the coming year, based on the resources available. At five-year intervals, the Bureau reports to the Advisory Committee on accomplishments and changing conditions that may warrant amendments to the plan.

## **II. The Planning Context**

### ***Introduction***

This section includes a summary of topics and issues that may influence the direction this plan will take and how the bureau will manage the Highlands over the next 15 years. Information is provided on:

- character and resources of the region;
- regional recreational opportunities;
- recreational tourism in the region;
- trends in recreational use;
- accessibility of the Highlands for public use
- status of the Kennebec Highlands Project; and
- management efforts to date

### ***Character of the Region***

To provide context, the plan describes a broader region within which the Highlands are located, a smaller area immediately around the property that includes four “Highlands towns” (Mount Vernon, New Sharon, Rome and Vienna) and ten “adjacent towns” (Belgrade, Chesterville, Farmington, Fayette, Industry, Manchester, Mercer, Readfield, Smithfield and Starks.)

Considered for regional context is an area generally within 25 miles of the unit – a comfortable driving distance for day use visits to the unit. This region spans portions of six counties in central Maine – Androscoggin, Franklin, Kennebec, Oxford, Somerset and Waldo, and a range of community types, from regional employment, trade and service centers – including the state capital of Augusta - to small rural towns. The population of the region in 2000 totaled nearly 217,000, over one-quarter of which lived in the largest communities of Augusta, Waterville, Skowhegan, Winslow and Farmington. The fourteen Highlands and adjacent towns include some of the smaller communities in the region: twelve towns had a 2000 population of less than 2,500, and six had populations ranging between 500 and 1000 (US Census 2000). Communities in the region share a history of farming and forestry followed by water-powered industrial development; tourism and seasonal home development centered on abundant lakes; and residential development of rural areas with associated commuter travel to service centers for work and trade. Major roads serving larger communities and destinations beyond the region include Interstate 95 and US Routes 201, 202, 2, 3 and 4. Within the Highlands and adjacent communities, US Routes 2 and 4 and State Route 27 are the primary travel corridors.

Both the region and the Highlands property include portions of the Kennebec and Androscoggin river basins. Part of the Central Interior biophysical region, the region characterized by flat to gently rolling terrain, although the relatively high elevations within the Highlands unit give the property much in common with the neighboring Western Foothills. The climate of the Central Interior is moderate. Summers are warm, and the frost-free season is about 120 days. Mean maximum July temperature is 80° F, and the mean minimum January temperature is 3° F. Average annual precipitation (45”) and snowfall (90”) are intermediate between southern and northern regions. The flora of this region reflect its relatively moderate climate (Wilkerson

2007). Over 75% of the Central Interior is forested (US Forest Service, 2003), and forest ecosystems reflect a transition from a northern Appalachian forest of oak, pine, and mixed hardwoods in southern Maine to the spruce, fir, northern hardwoods forests found in northern and eastern Maine Forests on the Highlands reflect this transition, with oak-dominated forests only present in small patches on warm, south-facing slopes (Wilkerson 2007)..

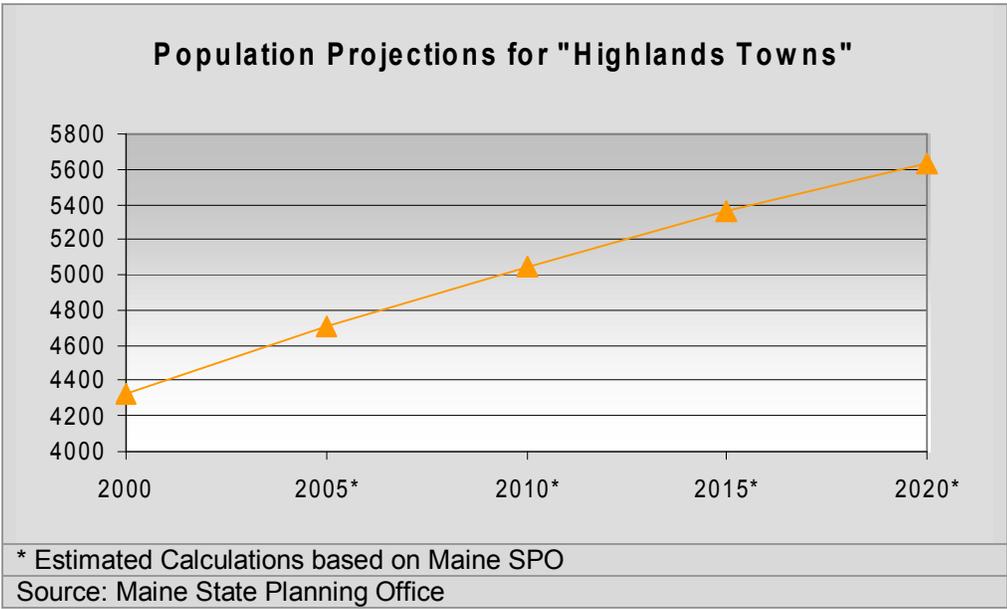


The fourteen Highlands and adjacent towns are small communities with sizeable tracts of undeveloped land. Historically rural farm, timber and mill communities, the four Highlands towns are today predominantly residential and seasonal recreation communities. The 2000 US census indicates that a quarter of the housing in the Highlands towns are vacant seasonally, indicating a large number of second family homes and camps and an expanded seasonal population. In adjacent towns and beyond this proportion decreases to roughly 11%, with the majority of year round residents (91%) commuting a mean of 28.8 minutes or more to their place of work. The Maine State Planning Office (SPO) estimates the 2005 population of the Highlands

and adjacent towns to be just over 26,000, with roughly 4,700 individuals living in Highlands towns. Population projections by the SPO forecast a steady increase over the next 15 years.

The average median age within the Highlands towns is 40.6, which is slightly older than the average for the adjacent towns (38.8) and the State as a whole (38.6). The median household income of Highlands towns households was \$ 38,047 in 2000, which is higher than both the State median of \$37,240 and the adjacent towns \$37,627. This may reflect the seasonal/second home characteristics of these communities (Kabnitz 2007).

<b>Highlands Towns and Adjacent Towns</b>					
<b>2005 Estimated Population</b>					
<b>Highlands Towns</b>			<b>Adjacent Towns</b>		
Cty	Town	Pop	Cty	Town	Pop
KE	Mount Vernon	1,684	KE	Fayette	1,137
FR	New Sharon	1,362	KE	Manchester	2,665
KE	Rome	1,087	FR	Chesterville	1,238
KE	Vienna	571	KE	Readfield	2,542
	<b>Total</b>	<b>4,704</b>	FR	Farmington	7,516
			KE	Belgrade	3,281
			SO	Mercer	696
			SO	Smithfield	984
			SO	Starks	610
			FR	Industry	842
				<b>Total</b>	<b>20,368</b>
<b>Total Population 26,223</b>					
Source: Maine State Planning Office, PDI					



## ***Public Recreation Opportunities in the Region***

There is a variety of public recreation opportunities in the broader region, and many are provided by municipalities, private individuals and business and nonprofit organizations. It is beyond the scope of this plan to inventory all of these. This section focuses on the major outdoor recreation areas and facilities provided by state agencies. Worth noting, however, is the expanding role of local land trusts in providing places for outdoor recreation. The Belgrade Regional Conservation Alliance played a pivotal role in establishing the Kennebec Highlands as public land and has conserved other important sites nearby, including The Mountain, French Mountain, and Phillip Mountain, all in Rome. The Small Woodlot Owners Association of Maine (SWOAM) holds the 200-acre Hammond Woodlot directly across Watson Pond Road from the Kennebec Highlands where it hopes to provide recreational and educational trails. The Kennebec Land Trust has conserved a number of properties (over 2700 acres) in the Kennebec River and lakes region that include many hiking and nature trails, the largest of which is the Mount Pisgah Conservation Area (730 acres) in Winthrop and Wayne.

Boating is a primary recreation activity in a region with many lakes. There are 61 state sponsored and assisted boat access sites on freshwater lakes, ponds and rivers across the region and another six sites on the tidal waters of the Kennebec River. These are managed by, or have received financial support from, the state departments of Conservation, Inland Fisheries and Wildlife or Transportation. Eighteen of the sites are located within Highlands and adjacent towns. Indicative of the level of boating activity around the Highlands are the number of area lakes marked with navigational aids by the state or lake associations, including Great, Long, Lovejoy and North ponds and Maranacook, Messalonskee, Salmon/McGrath, and Torsey lakes.

<b>State Sponsored and Assisted Boat Access Sites in Highlands and Adjacent Towns</b>			
<b>Town</b>	<b>Water Body</b>	<b>Type</b>	<b>Owner</b>
BELGRADE	GREAT PD	TR	DOC
BELGRADE	MESSALONSKEE LK	TR	DOC
BELGRADE	SALMON LK	TR	IFW
CHESTERVILLE	EGYPT PD	CI	DOC
CHESTERVILLE	L NORRIDGEWK STR	CI	IFW
FAYETTE	TILTON PD	CI	TOWN
INDUSTRY	CLEARWATER PD	TR	TOWN
MANCHESTER	JAMIES PD	CI	IFW
MANCHESTER	TYLER PD	CI	IFW
MANCHESTER	SILVER LK	TR	IFW
MT VERNON	DESERT PD	CI	IFW
MT VERNON	ECHO LK	TR	DOC
MT VERNON	FLYING PD	TR	DOT
MT VERNON	LONG PD	TR	DOC
MT VERNON	TAYLOR PD	TR	DOC
READFIELD	MARANACOOK LK	TR	DOC
READFIELD	TORSEY PD	TR	DOC
SMITHFIELD	NORTH PD	TR	DOC

TR = Trailerable access. CI = Carry-in Access. DOC = Department of Conservation.  
 IFW = Department of Inland Fisheries & Wildlife. DOT = Department of Transportation  
 Source: Maine Department of Conservation, Boating Facilities Division, 2007

The principal state park lands in the region include Mount Blue State Park (8,220 acres), a day use, camping and all-season trail park in Weld, Avon and Temple; Androscoggin River Lands (2262 acres), a multi-use trail property in Turner and Leeds; and the multi-use Jay-Farmington Rail Trail in Jay, Farmington and Wilton. Other state park lands in the region are managed by other agencies or towns, including two popular town-operated day use/swim parks: Woodbury Pond in Litchfield and Lake St. George Regional Park in Skowhegan and Canaan. The principal public reserved and nonreserved lands in the region include the recently acquired Tumbledown-Mount Blue project lands (22,585 fee and easement acres) in Franklin County that include a number of popular hiking trails, and the Kennebec Highlands. Highlands and adjacent towns include two small units of state park land: Blueberry Hill (70 acres), a popular scenic and picnic area in Rome, and a parcel on Long Pond, managed as a boat access site. The Kennebec Highlands is the Bureau's only unit of public reserved land and its largest property in Kennebec County.

<b>State Park and Public Reserved Lands in Highlands and Adjacent Towns</b>				
<b>Town</b>	<b>Type</b>	<b>Name</b>	<b>Acres</b>	<b>Recreation Uses</b>
Rome	Park land	Blueberry Hill	70	Scenic, picnic
Mt Vernon, Rome	Park land	Long Pond	63	Boat access
Mt Vernon, New Sharon, Rome, Vienna	Reserved Land	Kennebec Highlands	5,543	Trails
Maine Department of Conservation, Bureau of Parks and Lands, 2007				

Also in the region are a number of state-administered Wildlife Management Areas, where fishing, hunting, trapping and wildlife observation are the featured recreation. The largest of these is the 4-parcel Garcelon Wildlife Management Area (4343 acres) in Augusta, Windsor and Vassalboro and the Chesterville Wildlife Management (1340 acres) area in Chesterville. Jamies Pond Wildlife Management Area (550 acres) in Manchester and Hallowell, also includes a trail system maintained by local volunteers. Boat access sites in these areas are included in the above list.

In addition to these properties, the Bureau of Parks and Lands provides funding for the development of snowmobile and ATV trails across the broader region and in the Highlands and adjacent towns. Sixty-nine (69) snowmobile clubs and 27 ATV clubs operate within 25 miles of the Highlands and receive state assistance for trail development and maintenance, including 12 snowmobile clubs and two ATV clubs in Highlands and adjacent towns.

<b>Snowmobile Clubs in Highlands and Adjacent Towns</b>			
Belgrade	Belgrade Draggin' Masters	Mount Vernon	Minnehonk Ridge Riders
Chesterville	Chesterville Country Ramblers	New Sharon	New Sharon Snow Riders
Farmington	Shiretown Riders	Readfield	Readfield Blizzard Busters SC
Fayette	Rainbow Riders SC	Rome	Rome Ruff Riders
Industry	Northern Lites SC	Smithfield	Moonshiners
Manchester	Manchester Country Riders	Vienna	Vienna Mountaineers
Mercer	Mercer Bog Riders		
Source: Maine Department of Conservation, Bureau of Parks and Lands, Off Road Vehicle Division, 2007			

ATV Clubs in Highlands and Adjacent Towns			
Mt Vernon	Mountain View ATV Club	New Sharon	New Sharon Area Riders
Source: Maine Department of Conservation, Bureau of Parks and Lands, Off Road Vehicle Division, 2007			

Appendix B provides additional information about state recreation lands in the larger region.

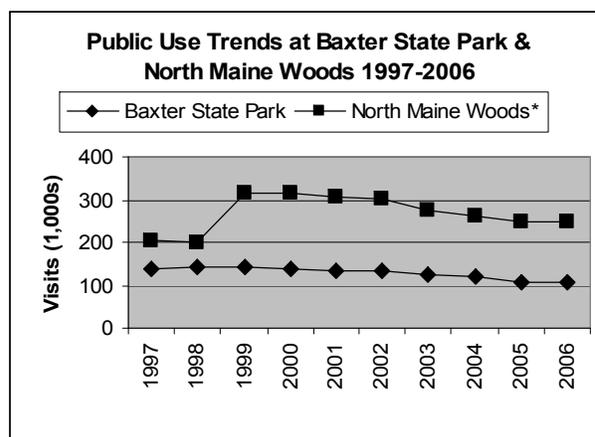
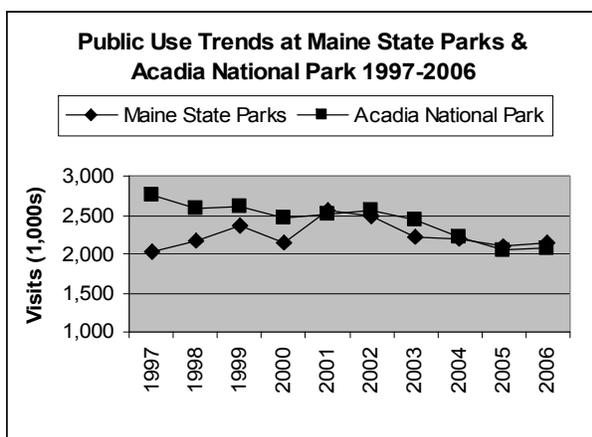
### *Recreational Tourism in the Region*

The Kennebec Highlands region lies within the tourist market area known as the Kennebec and Moose River Valleys and directly on the border of the Maine Lakes & Mountains Region. The Kennebec and Moose River Valleys Region stretches from the state capital to the snowmobiling center of Jackman and includes popular whitewater rafting destinations near The Forks. The Maine Lakes and Mountains Region includes many of Maine’s “big lakes” and high mountain peaks near the New Hampshire border. Both regions feature opportunities for hiking, bicycling, camping, boating, fishing, hunting, snowmobiling and sightseeing. The Belgrade Lakes Region is one of the top destinations in the Kennebec and Moose River Valleys tourism area and is marketed as a destination for boating, fishing, hiking and touring. Located near a primary route to the Maine Lakes and Mountains (state Route 27), The Kennebec Highlands may draw visitors from tourist initiatives geared toward that region, as well.

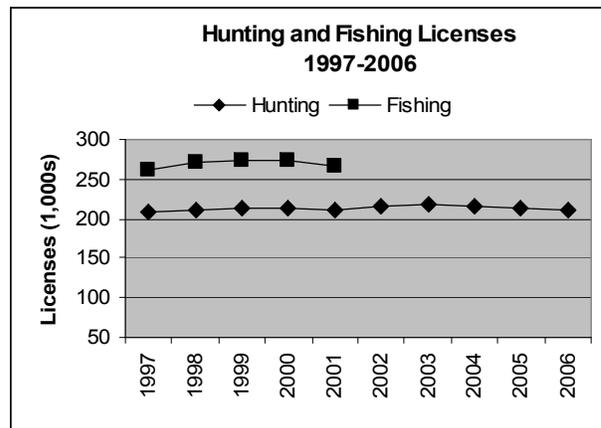
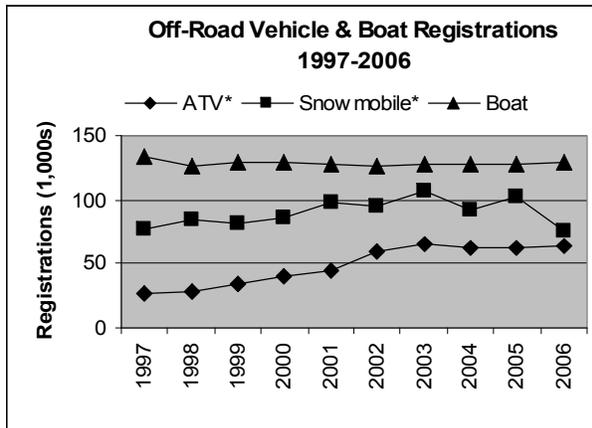
Tourism, and in particular outdoor recreation tourism, is a mainstay of Maine’s economy. The major tourist activities in 2005 included sightseeing by car or bus (34%) and outdoor-oriented activities – skiing, hiking, fishing, boating (21%). Both tourism regions are popular day and overnight travel destinations, with 1 in 5 visitors coming to the Lakes and Mountains region and 1 in 10 visiting River Valleys in 2003. A majority of visitors (80%) in both regions are day-trippers. (Kablitz 2007)

### *General Trends in Recreational Use*

Visits to Maine recreation areas where public use figures are kept show mixed trends over the last ten years. Recreation visits to Acadia National park declined, while visits to Maine state parks showed a slight increase. Visits to Baxter State Park declined, and while the North Maine Woods management area expanded, the visitation trend was still downward.



Trends in the sale of recreation licenses and registrations also show mixed trends. While the number of boat registrations remained relatively stable, the number of snowmobile registrations appears to have declined since 2003, while the number of ATV registrations continues to increase at a modest rate. The number of annual hunting licenses issued appears relatively stable, as does the number of fishing licenses, at least through 2001.



### *Accessibility for Public Use*

The Kennebec Highlands is generally accessible via State Routes 27 and 41, which lie beyond the property boundaries to the east and the west respectively, and from town and private roads in Rome, Vienna and New Sharon. The only paved public road that provides direct public access to the unit is the Watson Pond Road in Rome, where existing trailheads and parking areas are located. Roads to other parts of the property continue to be used informally, but these are in varied conditions and carry a mix of public and private access rights that require documentation. There is no designated public access to the property from the west (Vienna).

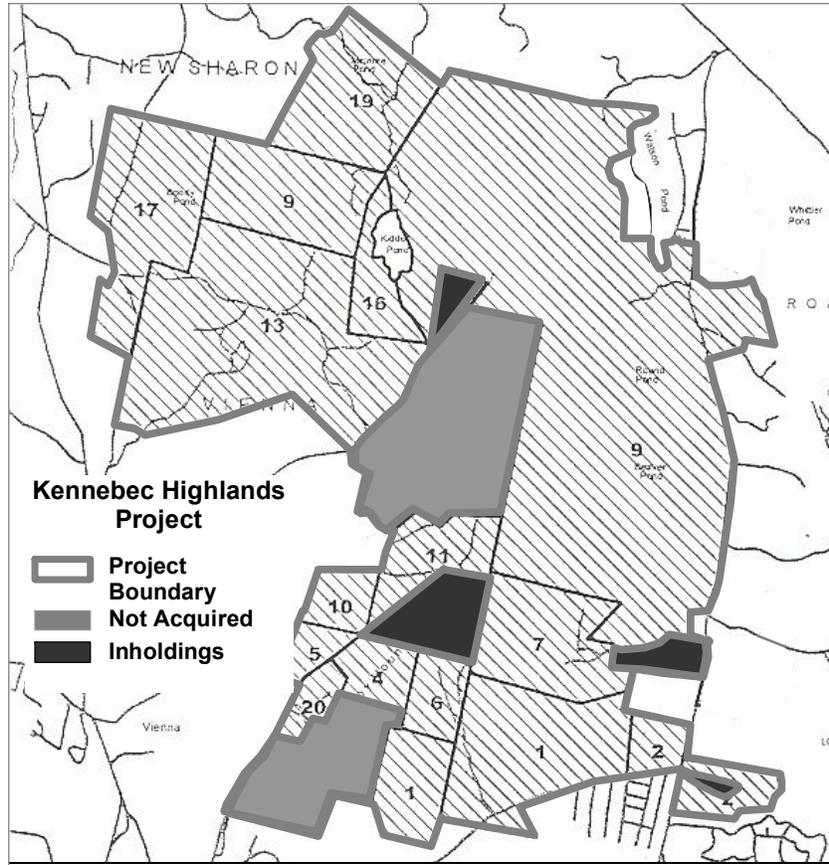
### *Status of the Kennebec Highlands Project*

The “Kennebec Highlands Project,” as proposed by the Belgrade Regional Conservation Alliance and endorsed by the Land’s for Maine’s Program, includes about 500 acres that have not been acquired, but which continue to be desirable as fee or conservation easement holdings. These includes a parcel on Vienna Mountain and a parcel on McGaffey Mountain. (See map below.) The Vienna Mountain land is particularly important: its open summit and blueberry fields are popular destinations, as well as being actively managed for commercial blueberry production; its private roads provide vehicle access to the interior of the unit; and it is surrounded and crossed by a number of Highlands recreational trails. It is a critical “hole in the doughnut” without which management of the surrounding state land is more difficult. The remaining McGaffey Mountain parcel includes the highest summit in Kennebec County, a key feature of the project.

*Inholdings*

There are four parcels within the originally proposed boundaries of the Kennebec Highlands Project that remain privately owned: one on Watson Pond Road opposite the state’s Blueberry Hill scenic area; and three on Vienna and McGaffey mountains. Because these inholdings are on the interior of the unit, communication with the owners about access and future use will be essential in managing the state property.

The former Dolley property (becoming known as “Monataka”) located between Watson Pond Road and Long Pond includes a fifth inholding deeded to the Belgrade Regional Conservation Alliance for conservation, education, recreation and related administrative purposes. The inholding includes road access from the Watson Pond Road and the remaining barn and surrounding grounds of the former farmstead. The Alliance hopes to use the parcel as an education center. The state has an oversight role to ensure the terms of the deed are observed. Management of the state and Alliance parcels will need to be closely coordinated.



The following table summarizes the history of land acquisitions that have become the Kennebec Highlands. Purchases and gifts of land between 2000 and 2004 total over 5,500 acres, 90% of which is in the towns of Rome and Vienna.

Kennebec Highlands Acquisition Summary					
County	Town	Grantor	Acres	Trans	Date
Kennebec	Mount Vernon	Quimby Robinson et al	118	Purchase	29-Nov-00
Kennebec	Mount Vernon	BRCA, Inc	59	Gift	29-Mar-04
<b>Subtotal Mount Vernon</b>			<b>177</b>		
Franklin	New Sharon	Blood Timberlands, LLC	363	Purchase	14-Dec-01
<b>Subtotal New Sharon</b>			<b>363</b>		
Kennebec	Rome	BRCA, Inc	1,872	Purchase	22-Mar-01
Kennebec	Rome	Barry Dolley Trust	77	Purchase	05-Jul-01
Kennebec	Rome	BRCA, Inc	221	Purchase	21-Sep-01
Kennebec	Rome	BRCA, Inc	456	Gift	29-Mar-04
Kennebec	Rome	DL & DJ May	186	Purchase	30-Jun-04
Kennebec	Rome	Thorndike & Sons, Inc.	114	Purchase	30-Jun-04

		<b>Subtotal Rome</b>	<b>2,926</b>		
Kennebec	Vienna	DG Pillsbury	68	Purchase	26-Jul-00
Kennebec	Vienna	DG Pillsbury	15	Purchase*	26-Jul-00
Kennebec	Vienna	FM & JF Webber	69	Purchase	26-Jul-00
Kennebec	Vienna	BRCA, Inc	300	Purchase	22-Mar-01
Kennebec	Vienna	Herbert C. Haynes, Inc	819	Purchase	11-Jun-01
Kennebec	Vienna	BRCA, Inc	142	Purchase	21-Sep-01
Kennebec	Vienna	BRCA, Inc	111	Purchase	21-Sep-01
Kennebec	Vienna	DL & J Marstaller	135	Purchase	21-Sep-01
Kennebec	Vienna	DL & VA Taylor et al.	170	Purchase	21-Sep-01
Kennebec	Vienna	RW & JJ Hall	38	Purchase	28-Aug-02
Kennebec	Vienna	BRCA, Inc	66	Gift	17-Mar-03
Kennebec	Vienna	HC Haynes, Inc	102	Purchase	27-Jun-03
Kennebec	Vienna	BRCA, Inc	42	Gift	29-Mar-04
		<b>Subtotal Vienna</b>	<b>2,077</b>		
		<b>Grand Total</b>	<b>5,543</b>		
*Cost included in other purchase.					

### ***Management of the Highlands to Date***

Management of the Kennebec Highlands to date has included the activities listed below. On-site work has been carried out primarily by the Belgrade Regional Conservation Alliance in consultation with the Bureau of Parks and Lands. Funds from the Land for Maine’s Future Program have supported most of these activities.

1) Parcel boundary and unit boundary survey: ongoing (LMF funded)

2) Access Improvements (LMF funded)

**Round Top Trail:** Trailhead parking area at intersection of the Wildflower Estates Rd and Watson Pond Rd. Round Top Trail improvements from Watson Pond Rd trailhead to Round Top summit and down to Snowmobile Trail (2.1 mi.)

**Sanders Hill Loop Trail:** Trailhead parking area at intersection of the Sanders Loop Trail and Watson Pond Rd. Sanders Hill Loop Trail Improvements (2.5 miles).

**McIntire Pond:** Vehicle barrier at intersection of Kennebec Highlands Trail and McIntire Pond Trail; water bars and ditching as necessary.

**Boody Pond:** Vehicle barrier at intersection of Kennebec Highlands Trail and York Hill Road extension; water bars and ditching as necessary.

**Removal of illegally dumped material:** from Sanders Hill Trailhead, Beaver Brook drainage, Dolley property, and Vienna Mountain Trailhead. (Included washing machines, refrigerators, couches, chair, car, truck, bulldozer, trailer, 4 tons misc. metal and refuse, 60 tires, etc.)

**Dolley Property:** Secured and improved Dolley road entrance on the Watson Pond Rd

**Saddle Camp:** Secured Saddle Camp between McGaffey and Round Top mountains from vandalism.

**Trail Signs:** Installed permanent trail signs and/or markings for planned trails and provide permanent, all-weather site map displays at improved trailheads.

3) Monitoring of trails, parking lots, etc. (Annual agreement/stipend with BRCA)

4) Snowmobile trail maintenance and improvements. (Annual agreement with snowmobile club)

### **III. Character and Resources of Kennebec Highlands**

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

The 5,500-acre Kennebec Highlands unit features remote ponds, streams, rolling uplands, several low mountains and two parcels with frontage on Long Pond in the Belgrade chain of lakes. Uplands are forested with early- to mid-successional growth, and most have a relatively recent history of timber harvest or other human intervention such that undisturbed upland settings are scarce. Several small, undeveloped ponds on the unit provide important native fish habitat. Other features include deer wintering areas, wading bird and waterfowl habitat, and an exemplary wetland ecosystem. At present, Kennebec Highlands' primary conservation values are as undeveloped open space, undeveloped ponds, and wildlife habitat.

The property has between one and two miles of paved public road frontage on Watson Pond Road in Rome, and additional public access over gravel roads and deeded rights-of-way. Vienna Mountain and the internal boundary of the unit are accessible over public and private roads, generally by two-wheel drive vehicles. There is an extensive interior network of field and woods roads in varying states of repair that provides a framework for trails and forest management roads.

Early land use of the unit was for farming and forestry. Surviving stonewalls, foundation remnants, old roads and the condition of the present forest all attest to these past uses. Succeeding recreational uses have included fishing, hunting, hiking, primitive camping, skiing, snowshoeing, horseback riding, cycling, scenic viewing, berry picking, snowmobiling, and ATV riding. Two or four-wheel drive vehicles have had access to much of the interior.

#### ***Natural Resources***

##### ***Geology and Soils***

A variety of metamorphic rocks and granite underlie the Vienna Mountain area west of Great and Long Ponds in Belgrade. The metamorphic rocks were originally heterogeneous units of sand and mud, with some limy layers, that were deposited in an ocean adjacent to North American about 435 million years ago. A collision between a microcontinent and the North American margin around 400 million years ago built the largest mountains ever to exist here and also consumed the ocean basin, contorting and metamorphosing the sedimentary materials. The thickening of continental crust that accompanies such collisions caused the lower crust to partially melt. The more buoyant magma then migrated upward to mid-crustal levels before cooling into granite. The heat that accompanied the granite intrusion additionally metamorphosed the rocks it contacted, creating metamorphic rock that is highly resistant to erosion. Nearly 400 million years of erosion followed, culminating with Nature's greatest agent of erosion – glacial ice – to expose the granite and metamorphic rocks at the surface of the Earth (Marvinney 2007).

The high ground of this tract of land is underlain with the more resistant metamorphic rocks, including quartzite, schist, and metamorphosed limy sediments called calc-silicate rock. A dark gray schist and metasandstone unit exposed just west of the summit of Roberts Hill and on the western slopes of McGaffey Mountain contains abundant sulfide minerals that produce a rusty weathering rind and often give rocks an orangey hue. Geologic forces contorted the original horizontal layering of these rocks such that it is now tilted on edge and aligned in a northeast-southwest direction. The distribution of these units and the orientation of layering is the primary control on topography in the area. On the east and northwest sides, the lower slopes of these hills are underlain with granite, which is less resistant to weathering and erosion. This granite is medium grained, with abundant quartz, orthoclase and plagioclase feldspars, and both biotite and muscovite micas. These so-called two-mica granites typically have substantial quantities of naturally occurring uranium (Marvinney 2007).

Sculpting by glaciers during the last 2 million years has rounded the hills, imparting a secondary northwest-oriented streamlining to some (particularly those underlain with granite). Thin, sandy glacial till drapes over most of the lower to intermediate slopes of the hills, with most of the summit areas having abundant rock exposures. Post-glacial swamp materials underlie the low-lying areas (Marvinney 2007).

Soils at Kennebec Highlands formed in glacial till and the underlying bedrock. The two most common soil types on the unit are Lyman loam and Berkshire very stony fine sandy loam. The Lyman series is characterized by shallow, somewhat excessively drained soils that developed in a thin mantle of glacial till and frost fractured rock fragments. The Berkshire series consists of very deep well drained soils on glaciated uplands.

### ***Hydrology and Water Quality***

Ponds in the Kennebec Highlands include McIntire Pond, Kidder Pond, and Boody Pond in the western half of the area, and the Round Pond – Beaver Pond complex in the eastern portion. The Kennebec Highlands unit borders Watson Pond, which has camps along its east side but is otherwise undeveloped. Long Pond, a major lake in the Belgrade Lakes chain, lies to the east. The western half of the unit is part of the Androscoggin River watershed, via Hopkins Stream and Androscoggin Lake. The eastern half of the unit is part of the Kennebec River watershed via Long Pond.

Several of the ponds at Kennebec Highlands have been selected by The Nature Conservancy as portfolio lakes, meaning they are high value waters that best represent the ecosystems, natural communities, and species characteristic of the region. Criteria used in evaluating lakes and ponds include water quality, dam impacts, presence of rare or noteworthy species, rarity, and remoteness. Portfolio lakes in the Kennebec Highlands unit include Beaver Pond, Round Pond, McIntire Pond, and Boody Pond.

## ***Wetlands***

The relatively steep, narrow drainages within the unit do not lend themselves to the creation of large wetlands. Kennebec Highlands has 337 acres of wetlands, only 97 of which are forested (Map 4). These wetlands tend to surround ponds or be in small, isolated pockets along drainages. The largest wetland in the unit is the exemplary Unpatterned Fen Ecosystem that surrounds Beaver and Round Ponds.

## ***Ecological Processes***

Human use has had a profound impact on the landscape and constitutes one of the major disturbances on the unit. Homesteads established in the late 1800s have left a lasting imprint on the landscape and clearing of areas for agriculture and pasture likely affected soil structure. Heavy harvests in recent times may mask other natural disturbance patterns such as blow-downs.

Portions of the forest on the unit were heavily damaged in the 1998 ice storm. Damage is worst on east and north-facing slopes and is less noticeable west of Vienna and McGaffey Mountains (Charles 2007).

Isolated lightning strikes have likely occurred on the unit, though no large-scale fires are known (Alexander 2007). Small fires, such as those caused by lightning strikes, open up patches of forest that are typically recolonized by fast growing, short lived species such as aspen and paper birch. This patchy disturbance contributes to an uneven and diverse forest canopy.

Beaver activity has been noted along many of the drainages in the unit. 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.

## ***Fisheries and Wildlife***

The Kennebec Highlands are a designated “Focus Area of Ecological Significance,” under the Beginning with Habitat (BWH) program administered by Department of Inland Fisheries and Wildlife. BWH provides information to support the retention of wildlife habitat needed to sustain Maine’s wildlife species. Many features qualify the Highlands as a focus area: undeveloped ponds; abundant riparian areas (transition zones between aquatic habitats and wetlands and dry or upland habitats); significant wildlife habitats (deer wintering areas and wading bird and waterfowl habitat); an exemplary natural community (unpatterned open-basin fen ecosystem); and a rare plant site (alpine club moss). However, most important is its size and lack of building development and permanent roads. Large blocks of land are important to species with large home ranges (e.g., bobcat) and other species that may have small home ranges, but will only be successful over the long term in larger habitat blocks (e.g., black-throated blue warbler.)

The unit has 516 acres of deer wintering area and 389 acres of inland wading bird and waterfowl (IWWB) habitat (Map \_). Though no systematic terrestrial wildlife surveys have been completed, wildlife or wildlife signs observed on the unit include: beaver, moose, deer, bear, bobcat, turkey, fisher, and porcupine (Alexander 2007). The unit also likely supports snowshoe hare, red fox and numerous other mammals common to the region (DeGraaf and Yamasaki 2001). The tables below list fish species for ponds that have been surveyed and birds one might encounter on the unit (PEARL 2007; Mairs 2007).

<b>Fish Species of the Kennebec Highlands</b>					
<b>Pond Name</b>	<b>Size (acres)</b>	<b>Total Drainage Area (sq. miles)</b>	<b>Mean Depth (feet)</b>	<b>Maximum Depth (feet)</b>	<b>Fish Species</b>
Beaver Pond	15	3.09	Not surveyed	Not surveyed	Not surveyed
Boody Pond	13	0.53	4	12	Brown bullhead, banded killifish, golden shiner, creek chub
Kidder Pond	31	0.27	8	26	Brown bullhead, white sucker, chain pickerel, smallmouth bass, golden shiner, brook trout
McIntire Pond	12	0.24	7	20	Golden shiner, northern redbelly dace, blacknose dace, brook trout, creek chub
Round Pond	10	1.64	Not surveyed	Not surveyed	Not surveyed
Watson Pond	69	1.02	12	24	Brown bullhead, American eel, chain pickerel, pumpkinseed, smallmouth bass, white perch, golden shiner, brook trout

<b>Bird Species of the Kennebec Highlands</b>				
<b>Expected Species</b>				<b>Species Probably Present</b>
Canada Goose	Herring Gull	Common Raven	Black-and-white Warbler	Mallard
Wood Duck	Mourning Dove	Tree Swallow	American Redstart	Common Goldeneye
American Black Duck	Black-billed Cuckoo	Black-capped Chickadee	Ovenbird	Green Heron
Green-winged Teal	Great Horned Owl	Tufted Titmouse	Northern Waterthrush	Merlin
Ring-necked Duck	Barred Owl	Red-breasted Nuthatch	Common Yellowthroat	Virginia Rail
Hooded Merganser	Northern Saw-whet Owl	White-breasted Nuthatch	Canada Warbler	Greater Yellowlegs
Common Merganser	Ruby-throated Hummingbird	Brown Creeper	Scarlet Tanager	Solitary Sandpiper
Ruffed Grouse	Belted Kingfisher	House Wren	Eastern Towhee	Rock Pigeon
Wild Turkey	Yellow-bellied Sapsucker	Winter Wren	American Tree Sparrow	Common Nighthawk
Common Loon	Downy Woodpecker	Eastern Bluebird	Chipping Sparrow	Brown Thrasher
American Bittern	Hairy Woodpecker	Veery	Savannah Sparrow	Tennessee Warbler
Great Blue Heron	Northern Flicker	Hermit Thrush	Fox Sparrow	Cape May Warbler
Osprey	Pileated Woodpecker	Wood Thrush	Song Sparrow	Palm Warbler
Bald Eagle	Olive-sided Flycatcher	American Robin	Swamp Sparrow	Mourning Warbler
Northern Harrier	Eastern Wood-Pewee	Gray Catbird	White-throated Sparrow	Wilson's Warbler
Sharp-shinned Hawk	Alder Flycatcher	European Starling	Dark-eyed Junco	Field Sparrow
Cooper's Hawk	Least Flycatcher	Cedar Waxwing	Rose-breasted Grosbeak	Lincoln's Sparrow
Northern Goshawk	Eastern Phoebe	Nashville Warbler	Red-winged Blackbird	White-crowned Sparrow
Red-shouldered Hawk	Great Crested Flycatcher	Northern Parula	Common Grackle	Northern Cardinal
Broad-winged Hawk	Eastern Kingbird	Yellow Warbler	Brown-headed Cowbird	Indigo Bunting
Red-tailed Hawk	Northern Shrike	Chestnut-sided Warbler	Baltimore Oriole	Pine Grosbeak
American Kestrel	Blue-headed Vireo	Magnolia Warbler	Purple Finch	Evening Grosbeak
Peregrine Falcon	Warbling Vireo	Black-throated Blue Warbler	Red Crossbill	
Sora	Red-eyed Vireo	Yellow-rumped Warbler	White-winged Crossbill	
Spotted Sandpiper	Blue Jay	Black-throated Green Warbler	Common Redpoll	
American Woodcock	American Crow	Blackburnian Warbler	Pine Siskin	
		Pine Warbler	American Goldfinch	

**Rare Plant and Animal Species**

A small population of alpine clubmoss (*Huperzia selago*), also known as northern firmoss, is located just south of the southern tip of Watson Pond adjacent to a trail. This rare (S2) plant is growing in a saturated area overlain by *Sphagnum* moss. Associated species include cinnamon fern (*Osmunda cinnamomea*), bunchberry (*Cornus canadensis*), and hemlock (*Tsuga canadensis*) and balsam fir (*Abies balsamea*) seedlings growing beneath a canopy of spruce and fir.



*Huperzia selago*

Illustration from Britton and Brown's Illustrated Flora of the United States and Canada, 2<sup>nd</sup> ed.

**Natural Communities**

As mentioned earlier, forests on the unit have an extensive history of human use including recent harvests. The forest is dominated by hardwood (59%) and mixed wood (34%), with small amounts of pine (5%), softwood (2%), and one small patch of oak (15 acres) on the south side of Round Top. Recent harvests combined with topography mean that 70% of the unit's forest has less than 66% canopy closure and 12% of the forest has less than 33% canopy closure.

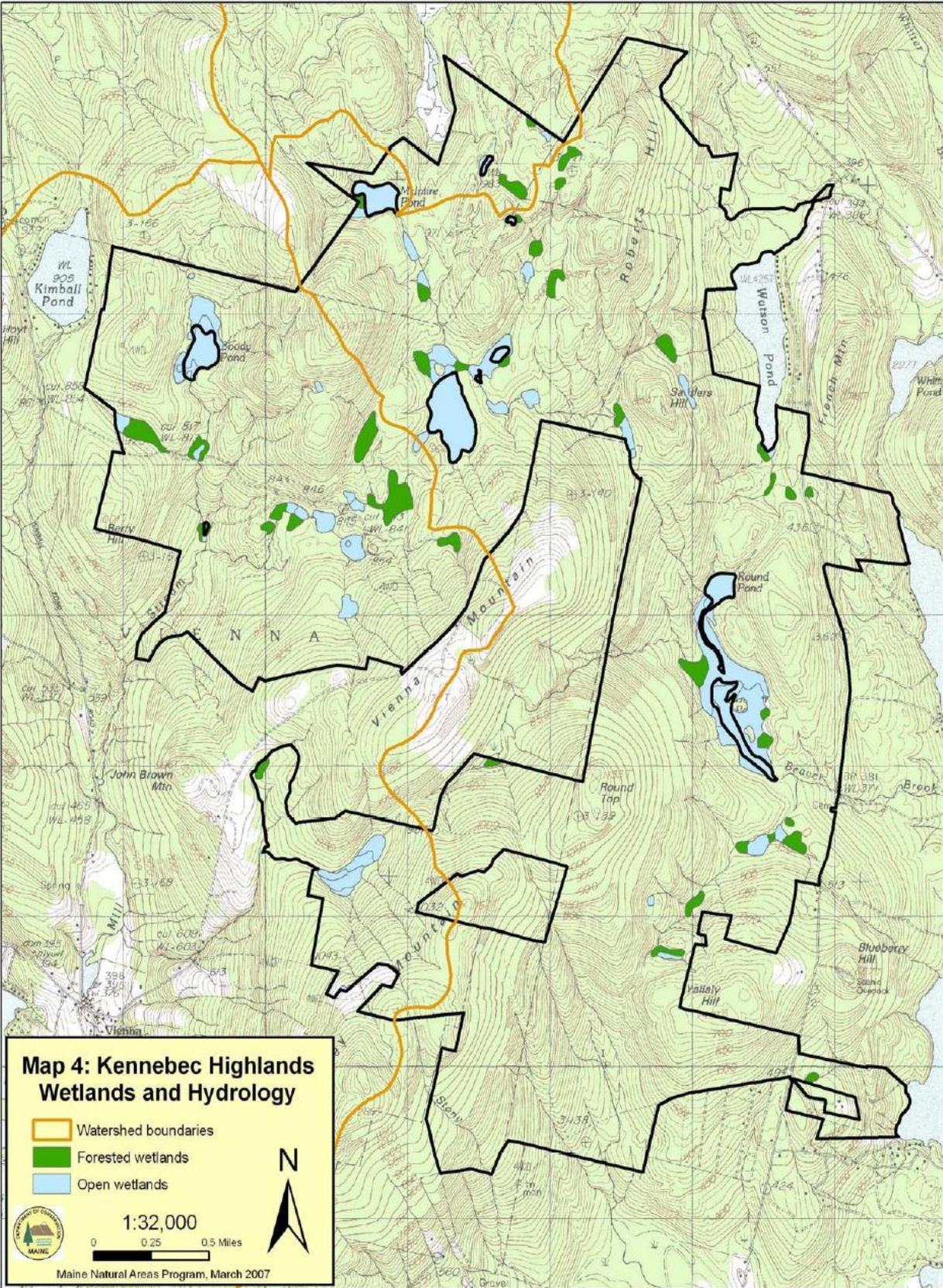
The Kennebec Highlands unit includes an exemplary Unpatterned Open Basin Fen Ecosystem surrounding Beaver and Round Ponds (Map 6). Unpatterned Fen Ecosystems are peatlands that form along a low gradient stream channel where flow is impeded such that peat can accumulate but where water still flows in and out of the system. These fens are well distributed throughout the state; however, the Kennebec Highlands fen is a good example of the smaller sized expression of this type of peatland. The peatland ecosystem is comprised of at least four vegetation types, which occur in different portions of the wetland and provide habitat diversity. The vegetation types are: Mixed Tall Sedge Fen, Sweetgale Mixed Shrub Fen, Leatherleaf Boggy Fen, and Mixed Graminoid – Shrub Marsh. In addition, the wetland is of interest because it represents the northern range limit of poison sumac (*Toxicodendron vernix*), a plant of southern affinities which is uncommon in Maine. There is also open water aquatic vegetation in Beaver Pond and its inlet, including Water lily – Macrophyte Aquatic Bed and Pickerelweed – Macrophyte Aquatic Bed vegetation. These are all common vegetation types statewide but form a high quality mosaic here.

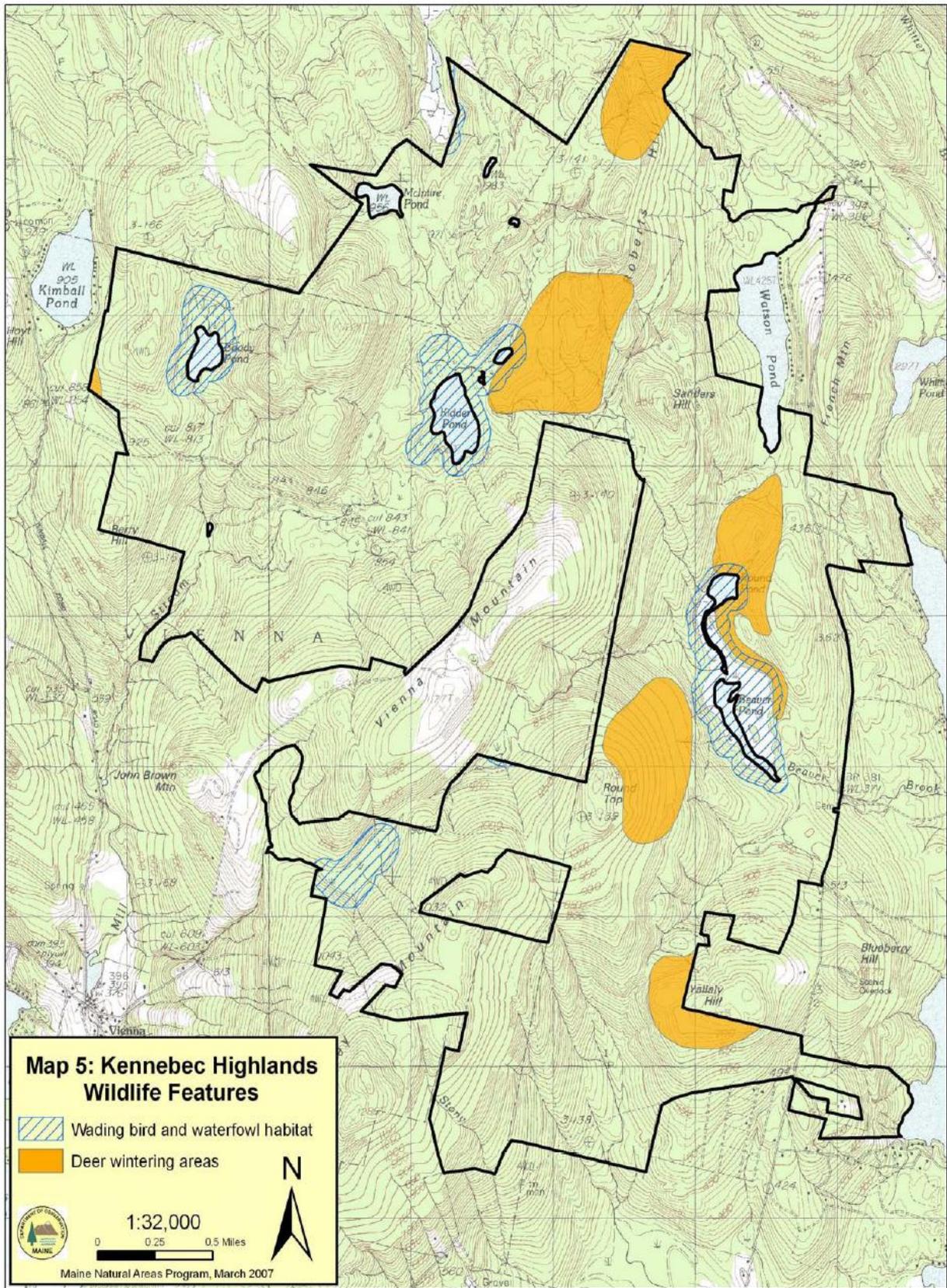
Exemplary Features of the Kennebec Highlands					
Feature Name	Location	S rank/ Gr ank	EO Rank	Last Obs.	Size (ac)
Alpine clubmoss ( <i>Huperzia selago</i> )	Watson Pond	S2/G5	C	2005	point
Unpatterned Fen Ecosystem	Round and Beaver Ponds	S4/GN R	B	2000	98

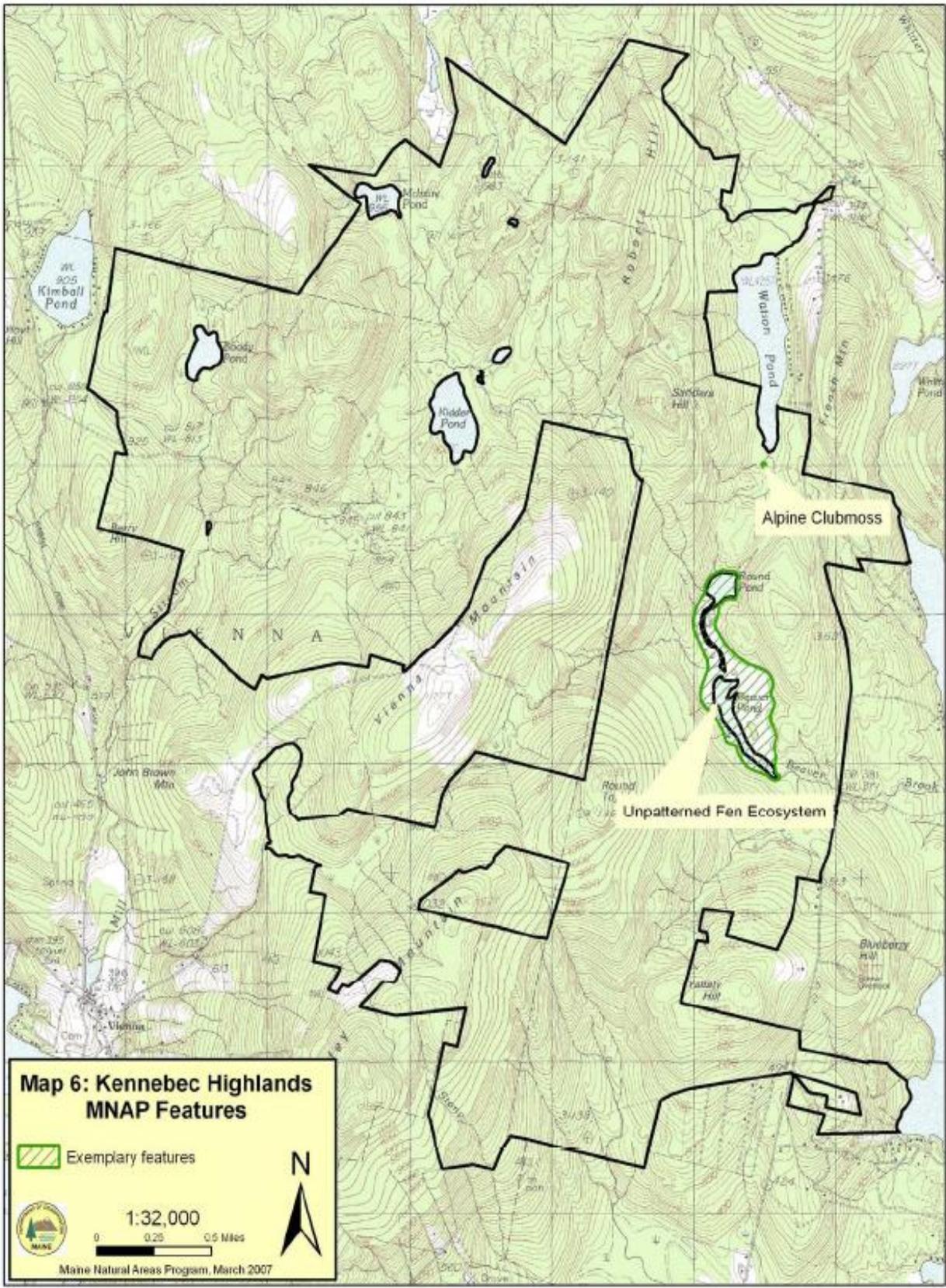
No exemplary natural communities were documented in upland areas surveyed by MNAP staff. All of the forest seen was mid successional or recently harvested, with some areas cut hard. Small bands of mature forest remain around most of the ponds and some of the wetlands, but

these forests are not extensive enough to be considered exemplary. They do, however, provide important buffer functions.

Given sufficient time to develop, some of the upland areas could become good representative natural forests. At present, Kennebec Highlands' primary conservation values are as undeveloped open space, undeveloped ponds, and large unfragmented habitat. Further fieldwork conducted in June 2007 has resulted in no changes or additions to the description of natural resources on the unit.







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

### ***Prehistory of the Belgrade Lakes Region***

There are no known prehistoric sites in Rome, Vienna or Mount Vernon, and only one in New Sharon. The Kennebec Highlands includes a number of small ponds and brooks, as well as limited frontage on Long Pond. Most of the small water bodies are not canoe-navigable, nor are they interconnected as might be expected of known Native American routes. Little is known about prehistoric settlement and subsistence in small watersheds.

Paleoindians, the first people to settle Maine, arrived at the end of the last ice age. These hunter-gatherers hunted a variety of game and apparently traveled great distances to obtain high-quality stone for making spear points and other tools. Paleoindian sites are rare statewide, but there are two known sites in or near the Belgrade Lakes region: the Dam site in Wayne (Spiess, Wilson and Bradley 1998), and a possible fluted-point site in Farmington. Each is situated on outwash or dune sands away from major rivers. Very few Paleoindian sites in the New England-Maritimes are situated on till soils like those found in the Kennebec Highlands.

The Archaic period (10,000 to 3000 years ago) is distinguished by the production and use of ground stone woodworking tools and the development of a burial tradition using red ocher. Settlement patterns in the period changed dramatically toward sites on canoe-navigable waters, and in combination new woodworking tools, suggest that boat travel became important. Major changes in subsistence also occurred: fishing apparently became important, and warmer, drier conditions may have encouraged expanded reptile populations, as snakes and turtles became fare. There are two Early or Middle Archaic sites in the Belgrade Lakes region, and four or five more nearby. The sites are located on both lakeshores and riverbanks. During the Late Archaic period (6000-3000 BP) there were several archaeological cultures in Maine, but only the Susquehanna and Laurentian traditions are represented at sites in the Belgrade Lakes region.

By around 3000 years ago, an essentially modern landscape and climate developed in Maine. Fired-clay pottery technology was adopted. While fragile and time-consuming to make, pots could be placed directly in the fire, unlike earlier containers. There are hundreds of Ceramic period sites in Maine, but only seven in the Belgrade Lakes region: three are known from private collections, and the rest were identified during a phase I survey at Farmington Falls by the University of Maine at Farmington (Cyr *et al.* 2003).

The Contact period refers to the time when Native Americans first encountered European culture on a sustained basis. The nearest Contact period sites to the Kennebec Highlands are clustered at Farmington Falls (Cyr *et al.* 2003).

## *Historic Period*

In 1749 a group of wealthy Boston merchants and land speculators, the Kennebeck Proprietors obtained rights to the Plymouth grant. By 1752 the proprietors owned a 30-mile-wide strip of the Kennebec River valley from the northern end of Merrymeeting Bay to the confluence of Wesserunsett Stream and the Kennebec River in present-day Skowhegan (Kershaw 1975). Included in the Proprietors' holdings were West Pond (Rome), Unity (New Sharon), Goshen (Vienna), and Washington (Mount Vernon) Plantations. Political, legal and religious struggles between the proprietors, settlers, and colonial governments plagued the Company and by the end of the Revolution its influence was significantly eroded and some of its holdings in possession of the Commonwealth of Massachusetts.

### **Kennebec Highlands Area Nomenclature**

- **Berry Hill:** For the Berry family.
- **Boody Pond:** Unknown.
- **French's Mountain:** For the Moses French family, who lived here in 1865.
- **John Brown Mountain:** For John Brown, who lived on its crest in the mid-1800s.
- **Kidder Pond:** For the Kidder ancestors of Hazel Eaton.
- **McGaffey Mountain:** For Charles McGaffey.
- **McIntire Pond:** Unknown
- **Roberts Hill:** For the Frank Roberts family.
- **Sanders Hill:** Unknown.
- **Vienna Mountain:** For Vienna, Austria.
- **Watson Pond:** For John Watson, who owned a farm on the east side in 1882.
- **Whittier Pond:** For Thomas Whittier, mill owner, 1840.
- **Yallaly Hill:** Probably for a Yallaly family - least one buried in Rome.

**MOUNT VERNON:** In a letter dated April 6, 1775, John Pinkham and Barnabus Baker were authorized by Kennebec Proprietor Silvester Gardiner to consult with surveyor John Jones to layout lots and begin settlement of Washington Plantation (Devine 1992). In 1780, Gould French also petitioned the proprietors for lot 73 and a positive response to the request was delivered to French by then agent Dr. Obediah Williams of Augusta. Among the first settlers were John Stain, Caleb Dudley, John Dudley, Daniel Gordon, Jonah Bean, John Bean, Nathaniel Ladd, Peltiah Cobb and Reuben Rand (Kingsbury and Deyo 1892:930).

In 1792 the plantation was incorporated as Mount Vernon, apparently in honor of George Washington's plantation. Eight years later the town's first saw mill was constructed at Mount Vernon village by William Whittier. Various other mills and tanneries followed, but none apparently was built within the Kennebec Highlands purchase. In fact, it may never have been settled since the Mount Vernon portion of the purchase is dominated by steep slopes of McGaffey Mountain and because there were no farms or roads there in 1879.

**ROME:** About 1780, West Pond Plantation was the second of the four plantations to be settled. Early settlers included John Rogers, Joseph Hall, Benjamin Furbush, Stephen Philbrick, Joseph Halbo, Trip Mosher-and-Starbird Turner (Kingsbury and Deyo 1892). Titles were obtained from Kennebec Purchase agents Charles Vaughan, R.G. Shaw and Renel Williams, and most of the farms were located around Great Pond. In 1804 the plantation was incorporated as Rome and the population was around 300.

The town's first grist mill was constructed before 1820 by Joel Richardson on Robbins Mills Stream, which empties into Great Pond. The first saw mill on the outlet of Watson Pond (then known as Allen Pond) was constructed by Thomas Whittier in 1840. Six years later Whittier built a shingle mill that he operated for 15 years before tearing it down (Kingsbury and Deyo 1892:989). Settlement along Watson Pond Road, which forms the eastern boundary of the

Kennebec Highlands property, probably began by 1820, and some of the early families included the Chesleys, Watsons, Prescotts and Philbricks. The Trasks apparently arrived sometime before the 1830 census was taken, the Wilts, Browns, Farnhams and Wards, whose cellar holes were identified during phase I survey, settled.

**NEW SHARON:** New Sharon was part of a tract granted by Massachusetts to the representatives of Captain William Tyng and company in recognition for services during the first winter of Queen Anne's War in 1703. Known initially as Tyngstown, it later was known as Carr Plantation (Cass Plantation in the 1790 census), then Unity Plantation. The first settler was Prince Baker, a Pembroke, Massachusetts native who built a cabin in 1783. Baker accumulated several hundred acres of the plantation, and then sold parcels off to later settlers. Surveyor Jedidiah Prescott was appointed to initiate purchase and in 1791 the township was granted to Prince Baker and others by Massachusetts. In 1794 the town was incorporated as New Sharon in honor of Sharon, Massachusetts from which many of the early settlers had emigrated (Kearney and Bonney, 1981).

The first settler on the Kimball Pond Road leading to the Kennebec Highlands purchase was Christopher Dyer who built a house in 1797. Others followed including Henry McIntire whose farm was located about halfway between McIntire and Kimball Ponds. The McIntires, Henry and/or Henry Jr. were recorded by New Sharon census takers from 1850 to 1880, so they likely established their farms sometime after 1840. When comparing the 1861 town map to the modern topographic sheet, it appears that neither the McIntires nor their closest neighbors in New Sharon lived on what is now Kennebec Highlands land. By 1910, the road leading to McIntire Pond was long abandoned and the nearest house standing in New Sharon was owned by W.G. Rand.

**VIENNA:** English settlement in Vienna began sometime around 1780, when the Withees, Thompsons and Wymans built cabins. About 1786, the surveyor Jedidiah Prescott and his brother-in-law Nathaniel Whittier purchased much of Wyman's Plantation for about 10 cents an acre (Smith 1985). Soon after, Prescott and Whittier sold the first parcels to Joshua Howland, John Thompson, Patrick Galbraith, Noah Prescott, John Allen and William Allen. These settlers were soon followed by Arnold Wethren, James Cofren, Robert Cofren, Jonathan Gordon, Gideon Wells, Elijah Bunker, Daniel Matthews, Benjamin Porter, Timothy White, Caleb Brown and Joshua Moore (Kingsbury and Deyo 1892:975). Perhaps because of Prescott and Whittier's land speculation, in 1788 Abram Wyman petitioned the Commonwealth of Massachusetts to grant him and his four sons a sufficient amount of land as a reward for bridge construction, land clearing and road building in the plantation (Smith 1985:24).

While the Wymans stayed in Vienna, neither Whittier nor Prescott settled there. Whittier gave lots to sons Jedediah, Abel, Nathaniel, and Levi, daughters Dorothy Johnson, Ruhamah Whittier, and Hannah Whittier, and grandsons Nathaniel Cochran and Cyrus Whittier upon his death in 1798 (Patterson 1895:309-311).

The first grist mill and dam was constructed in Vienna village in 1800 by Patrick Galbraith. By 1870 the mill was owned and operated by George H. Mooers. One of the first saw mills was built on McGurdy Stream south of Boody Pond by Nathaniel Cochran and Arnold Wethren. It does not appear that any mills were constructed within the Kennebec Highlands purchase.

At least a score of family farms and a school house were located in the Kennebec

Highlands of Vienna in 1879. Some of the families were residents of Vienna since around 1800, such as the Brayleys, Mooers, and Wells. Others like Crowell Merchant and William Atkins, whose cellar holes are located in the purchase on the east side of Kimball Pond, may have moved to Vienna after 1860.

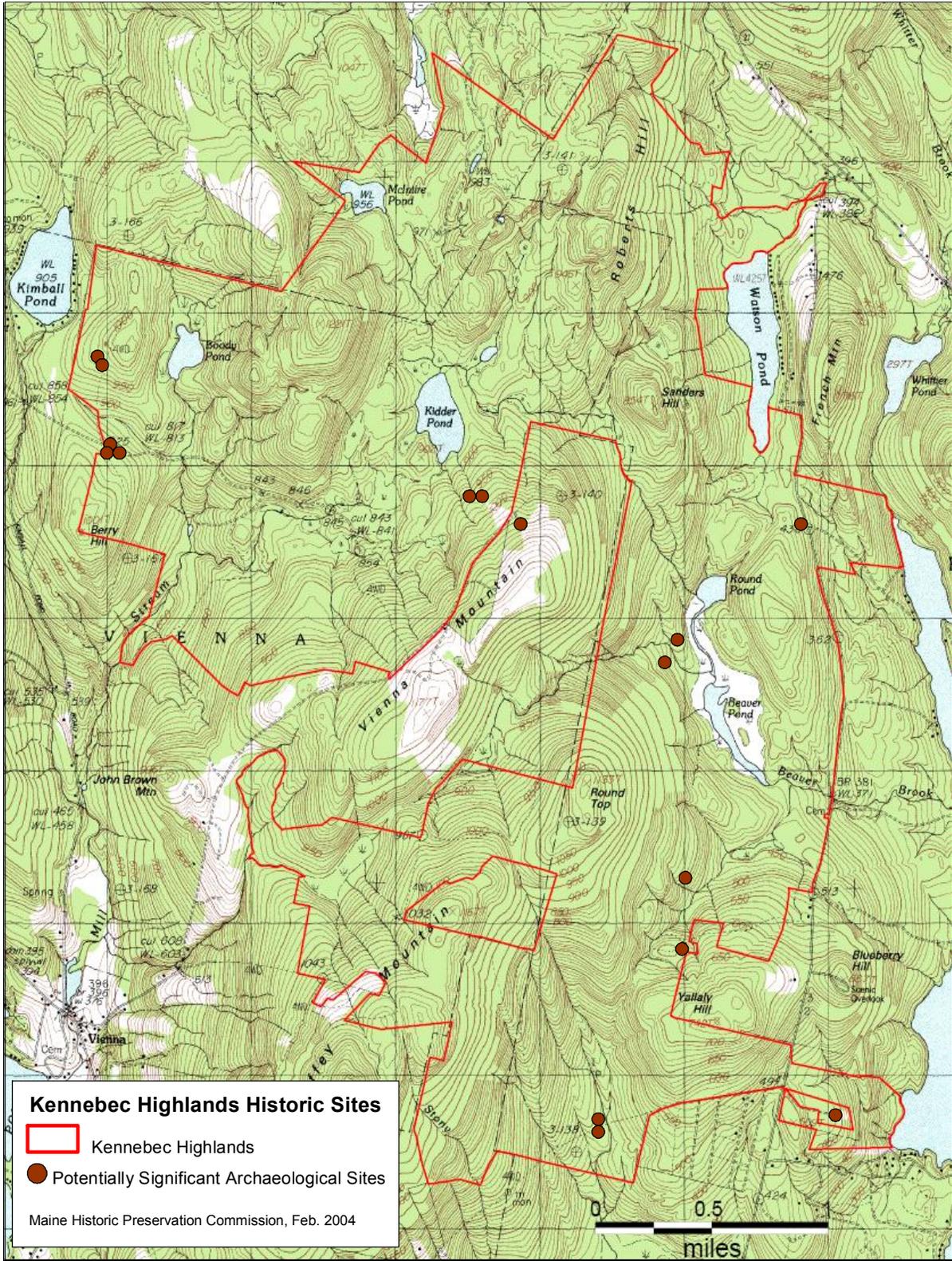
### *Land Use and Harvest History*

The Kennebec Highlands includes old homesteads and pasture land, as evidenced by numerous stone walls and old foundations. During the 2003 Phase I archaeological survey by the Maine Historic Preservation Commission for the Kennebec Highlands Project, 15 homesteads were documented, and the 1897 town maps of Vienna and Rome indicate that the remains of at least 20 houses and two schools may be within the parcel (Mosher and Cranmer 2004). It is estimated that as much as one-quarter of the Kennebec Highlands parcel may have been cleared for agriculture and pasture at one time (Alexander 2007). In addition, diversion ditches were dug from Kidder Pond to the Mill Stream watershed and from Round Pond to the Watson Pond drainage; both presumably served to provide more water to small mills downstream (Alexander 2007). Timber has been harvested multiple times, including recent heavy harvests that occurred prior to state acquisition of the unit.

### *Historic Sites on the Kennebec Highlands*

The fifteen 19<sup>th</sup>-century homesteads were identified as potentially significant archaeological sites warranting protection. Seven (7) are located in Rome, and eight (8) are located in Vienna. Most of the sites are located within 5 to 10 meters of existing trails and roads. Currently the sites do not appear to be adversely affected by the network of trails, except for pot hunting. However, they could be impacted by trail upgrades, sign posts or other alterations in the future.

<b>Potentially Significant Archaeological Sites on the Kennebec Highlands</b>				
<b>Town</b>	<b>Site Name</b>	<b>Street/Highway</b>	<b>Authenticity/Type</b>	<b>Size (ac.)</b>
Rome	John R. Prescott farmstead	Wildflower Est. Rd	American farmstead	1-10
Rome	David Brown farmstead	na	American farmstead	<1
Rome	Marcellus Trask farmstead	na	American farmstead	<1
Rome	Asa Trask farmstead	na	American farmstead	<1
Rome	David B Welts farmstead	na	American farmstead	<1
Rome	Clapp Ward farmstead	na	American farmstead	<1
Rome	Elias Farnham farmstead	na	American farmstead	1-10
Vienna	William Atkins farmstead	na	American farmstead	1-10
Vienna	Crowell Merchant farmstead	na	American farmstead	<1
Vienna	Unknown barn/structure	na	American farmstead	<1
Vienna	Sarah Wight homestead	Anderson Rd	American domestic	<1
Vienna	Unknown barn/structure	Anderson Rd	American farmstead	<1
Vienna	Unknown farmstead	na	American farmstead	
Vienna	Calvin Griffin farmstead	Kimball Pond Rd	American farmstead	<1
Vienna	Robert Baldwin farmstead	Kidder Pond Rd	American farmstead	<1



## ***Recreation Resources***

The features of the Kennebec Highlands that make it an attractive area for outdoor recreation are:

- its overall size as public land in central Maine;
- its lack of building development and permanent roads;
- a varied terrain that includes multiple elevations and lowlands;
- scenic views of lakes and distant mountains from a variety of locations on the present ownership and on abutting private land within the Kennebec Highlands Project area;
- five undeveloped ponds on its interior, some with important sport fisheries, and frontage on Long Pond;
- deer wintering areas and waterfowl habitat that support hunting;
- a network of old field and woods roads – estimates range from nine to ninety miles – that provide access to destinations within the unit and routes for a variety of trail activities;
- other sites of interest, including blueberry fields and remnants of former farmsteads; and
- access from public or private roads.

Most recreational use until acquisition was by people familiar with the area. The old roads continue to provide unimproved routes for a variety of uses, including hiking, horseback riding, mountain biking, snowshoeing, skiing, snowmobiling, ATV riding and 2- or 4-wheel drive general vehicle access.

## ***Recreation Opportunities and Facilities***

### *Experience*

The current recreational experience over much of the unit is of a semi-remote “back woods” based on a forest returning after decades of farming and wood harvesting. The quality of remoteness ranges from most remote in the area generally between Boody, Kidder and McIntire ponds, to less remote as one approaches developed and managed areas and public roads. Exceptions to the semi-remote character occur primarily along Watson Pond Road, a paved public road and on Vienna Mountain, where public and private roads provide good 2-wheel drive access to the summit and commercial blueberry operation. The future use of a portion of the Dolley property as an education center will give this area a less remote character, as well.

### *Public Access*

Improved public vehicle access on state land exists at the Round Top and Sanders Hill trailheads on Watson Pond Road and at McIntyre Pond from the Roxy Rand Road. The parking lots accommodate three to five cars. The Round Top trailhead serves both the Round Top and Dolley trails. The McIntyre Pond access provides a parking area from which boats can be carried to the water, ending years of direct vehicle access and associated erosion and siltation. There is no formal point of public access to the unit from the west, other than the Mountain Road.

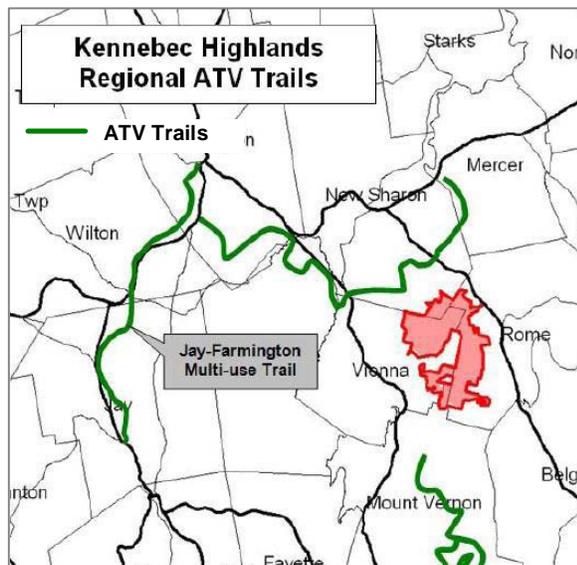
Most other vehicle access to the Highlands occurs over gravel or unimproved routes that include a mix of public and private rights that require documentation before further vehicle access to the unit can be provided or controlled.

### Camping

There are no designated campsites on the unit, although the potential for such sites exists, particularly at popular fishing ponds and in some more remote areas. No campsites have been authorized for open fire, but there is evidence of a recent campfire at Kidder Pond. Informal camping, without an open fire, is permitted on all public reserved lands and campfires are allowed on snowcovered ground.

### Boating

Boating on the unit's small ponds – primarily McIntyre and Kidder ponds – is generally in association with fishing and generally in small boats. Although there has been some driveway boat access to the ponds for many years, past and potential future impacts on water quality are such that carry in access or approved boat storage may become the preferred means of providing boat access to these waters. There is now a small parking area to serve hand carry boat access to McIntyre Pond. Long Pond currently has public boat access from a state boat launch in Rome.

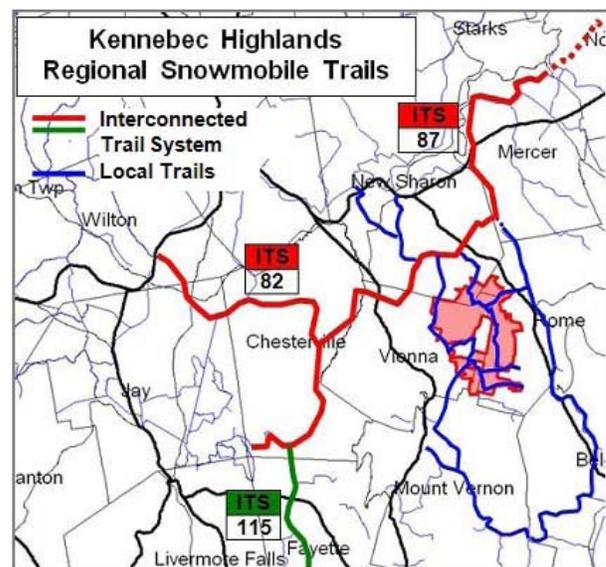


### ATV Riding

There are currently no designated ATV trails on the Highlands, although about 14 miles of ATV riding routes existed prior to state ownership. These were temporarily suspended pending preparation of this management plan. There are formal ATV trails north of the Kennebec Highlands in New Sharon and Farmington and south of the unit in Mount Vernon. Local ATV clubs hope to link these trails through the unit as part of a larger system connecting the capital area to the state's multiuse Jay Farmington Rail Trail. The clubs also hope to connect to the Blueberry Hill state park property, where visitors may arrive by ATV or snowmobile.

### Snowmobiling

Area snowmobile clubs maintain and use roughly 12 miles of trail in the Highlands. The trails connect to Interconnected Trail System route 87 (ITS 87) in New Sharon via York Hill Road and to local club trail systems in other directions. Previous Highlands property owners gave clubs permission to establish the trails, which, with some modifications, continue today. The trails on the unit are not major thoroughfares, are generally draggroomed to a width of five feet and are based on cooperative arrangements with adjacent landowners.

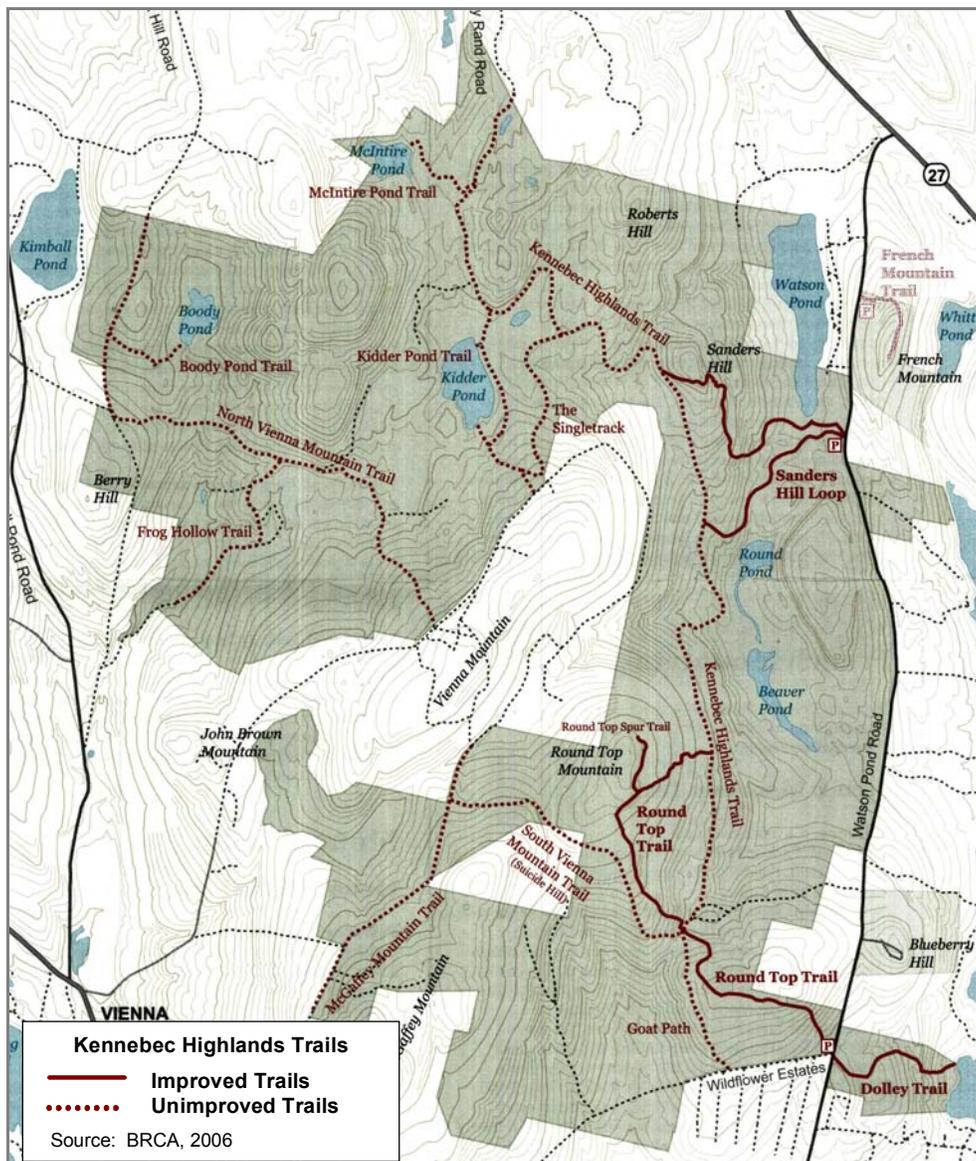


## Hiking

There are two designated, improved hiking trails on the Highlands: Sanders Hill Loop Round Top Trail (The Dolley Trail, also used by snowmobiles, is no longer designated as a hiking trail.) The trails are served by two parking areas on Watson Pond Road that are signed and equipped with bulletin boards. The parking lots are plowed in winter. The Round Top and Sanders Hill trails connect to unimproved routes, generally former land management roads that have been used for recreation primarily by local residents with knowledge of the area.

## Bicycling, Horseback Riding, Skiing and Snowshoeing

The old roads within the Highlands are used for cycling, horseback riding, skiing and snowshoeing, although specific routes have not been designated, and the roads are not maintained for these activities.



### Hunting and Fishing

As noted previously, the Highlands are popular hunting and fishing territory. Deer hunting is most common and supported by a number of deer wintering areas on the unit. Fishing interest centers on the undeveloped ponds, in particular McIntire and Kidder ponds, which offer brook trout fishing. McIntire stocked every year with spring yearlings.

### Berry Picking

Berry picking is a popular activity among local residents, and there is a blubbery field on the unit near the summit of Vienna Mountain. The field is accessible over the private gravel road serving the commercial blueberry operation.

### Opportunities

The unit is large enough to continue to provide the variety of recreation activities it has in the past.

- Strategic placement of trail routes for snowmobile and ATV trails will allow for the separation of motorized and non-motorized users so the former can connect to regional systems and the latter can find areas for quiet recreation.
- The presence of few roads and the character of the landscape and forest in the area between Boody, Kidder and McIntyre ponds make this area particularly suitable for remote hiking and primitive camping.
- The Round and Beaver ponds area has some relatively gentle gradients that may be well suited for walking, skiing and other activities over less steep terrain than characterizes much of the rest of the unit.
- The proposed education center at the BRCA Dolley property makes the larger Dolley parcel particularly suited for interpreted nature trails that are accessible to people with different abilities.
- In the longer term, there is the potential to connect the summits on the unit with a hiking trail that, along with well-placed campsites, could offer a two or three day backpacking trip.

## ***Timber Resources***

### ***Harvest History***

The current forest within the Kennebec Highlands is primarily a product of relatively recent harvesting. About 75% of the forest received moderate to heavy harvesting during the past 20 years, and most of the remainder has been entered since 1970. The most extensive harvesting occurred during the late 1980s and early 1990s, mainly on Vienna Mountain and the lands north and east of Round Top. Much of this acreage is now dominated by abundant hardwood saplings. A few areas on the northern edge of the tract were cut after 2000, and often have marginal stocking of seedlings and saplings, though their eventual full stocking is inevitable.

Harvesting on Vienna Mountain took most of the timber value, and most other moderate to heavy cuts took the very best trees but left areas with quality small and mid-sized trees. Few of these post-1985 harvest areas warrant any timber harvesting during the 15-year plan period, though there may be opportunities to improve species mix by thinning small poletimber (trees of 6-10" in diameter).

Those areas entered lightly or not at all over the past 30+ years are generally well stocked with desirable species of good quality. These acres lie mainly on the southern part of the tract, though some well-stocked areas are also found near Boody Pond and between Round Pond and Watson Pond Road.

A second significant recent factor in the Highlands forest is the 1998 ice storm. Its effects were quite variable on the unit, with some severe damage to large trees on east to north aspects from Round Pond south; and some small pole stands south of Round Top with patches totally crumpled by ice. Lands north and west of Vienna Mountain had much less damage, probably because the storm fell more as ice pellets that did not cling to the trees. Though some small areas were largely destroyed, the affected acreage is relatively small, and it is well beyond the time when any salvage work might be feasible.

### ***Stand Types***

This information is tentative due to the lack of a standardized inventory. However, site and exploration and review of air photos allow a reasonable estimation. About 70% of the forest area is in C or D density classes: the overstory is somewhat open (C) or sparse (D) on those acres. Only 9% of the forest is A density, and 25% of that is thick sapling hardwoods. Using related stand types on somewhat similar sites and conditions on other bureau lands, the merchantable volume is estimated to be about 16 cords per acre. This is almost 30% below the average for bureau forests but close to the statewide average. If this estimate were valid, Kennebec Highlands would be in the lowest 20% of large bureau tracts for average volume per acre. The species percentages offered below are even more speculative than the volumes, and represent rough estimates only, due also to incomplete data.

Nearly all of this land is capable of growing high value forest products, both of hardwood and softwood species. Though late successional forest is scarce at present, the current mix of trees

includes a high proportion of long-lived species. Though species percentages are only estimates because of a lack of current data, some conclusions are warranted. First, the most abundant species is hemlock, a very long-lived tree, though it is probably less than 20% of overall tract volume. Next in abundance are red maple, beech, and white pine, all in the range of 12-15% of tract size. Following these are sugar maple, red oak, white birch, yellow birch, aspen, and white ash, with estimated stocking ranging from 8% for sugar maple down to 4% for white ash. Of the ten species noted, all but white birch and aspen are characteristic of a late successional forest, though red maple is commonly found in all successional stages. Thus, the Highlands forest holds the potential to manage for future late successional stands holding high value timber products while maintaining/enhancing the ecological characteristics of such stands.

### ***Stand Type Characteristics***

**Hardwood types** cover almost 3,100 acres, 59% of tract forest. This includes all of the size class 1 (seedling/sapling) stands on the tract (+/- 400 acres), with most of the rest being understocked poletimber. Though the low stocking levels are a result of the recent harvesting, the preponderance of acres in hardwood type is probably not. Most of the tract was hardwood type before these harvests because the soils in most areas hold sufficient fertility to grow large and valuable hardwoods. Beech and red maple seem to be the most common species, followed by sugar maple and oak. (The only sawtimber-sized hardwood stand is also the only stand typed as oak, 15 acres on very steep ground south of Round Top.) Hemlock, yellow birch, white birch, and aspen are also significant. Some of the latter two are smaller trees established by recent cuts. Oak is the key species, most valuable for both timber and wildlife, and should be favored wherever found. This is true even in the small areas of former deeryard converted to hardwood type by cutting, as oak over hemlock can provide good cover plus mast. Sugar maple and yellow birch are also preferred species: hemlock can be retained as a mid-story species, and white pine should usually be retained, as it is scattered and thus not a significant competitor with the shorter species. Tree quality is presently fair to good in hardwoods, with the younger trees being better on average as many older trees are leftovers from high grading or ice damaged.

**Mixedwood types** are found on almost 1,800 acres, 34% of the forest area. They are found on all but the wettest and driest sites. Though, like hardwoods, these acres are mainly in C density, mixedwood acres have somewhat higher stocking on average than hardwoods. There is significant well-stocked mixedwood acreage in the southern part of the property. Hemlock is by far the leading species in mixedwood, and may represent one third of the stocking. Red maple and white pine are each estimated at 11-12%, and beech at just under 10%. Other significant species include white birch, spruces, oak, sugar maple and yellow birch. Management should work to keep the aggressive red maple from increasing, while encouraging pine and oak and maintaining the strong hemlock component. Given the comparatively small area in non-pine softwood type, hemlock-rich mixedwood may offer the best opportunities for deer winter cover. Most other species can be retained in amounts similar to at present, consistent with individual tree quality. Tree quality is generally good in mixedwood, with a preponderance of younger stems on most acres.

**Softwood types** cover only about 360 acres, 7% of tract forest. There are two distinct subtypes within the broad type. S type is the less common, covering only 100 acres, though it includes a

stand near Boody Pond with late successional (and possibly old growth) character. This subtype is about half hemlock, with significant components of red maple, white and red pines, and spruce. Management should retain the hemlock and spruce, increase the white pine (probably as red pine inevitably decreases), and encourage the scattered oak component in the above-mentioned oak-over-hemlock condition. Pine type covers about 5% of the overall tract, and is found mainly near Boody and Round Ponds, and near the south property line. White pine is estimated to make up over two-thirds of the stand, and hemlock almost half of the remainder. Red maple, red pine and spruce are scattered amid the two major species. White pine should remain the key species here, and regenerating it on the more fertile sites will be challenging. Hemlock regeneration is fine as long as it does not suppress the younger pine. Overall quality in the softwood types is good. The pines are generally healthy and well formed, though some are limby. The pine sawtimber acres include frequent stems 20-30+” in diameter. Hemlocks average much smaller, typically 8-14”, and are mostly vigorous and well formed. Estimated volume per acre on softwood types averages 50-75% higher than on hardwood or mixedwood acres.

<b>Estimated Acreage of Forested Land in Kennebec Highlands</b>							
Tract	Total Acres	Forest Acres	Regulated Acres (for now, all forest)				Unreg. For. Ac.
			Total	H+Oak	MW	S+Pine	
Kennebec Highlands	5,401.1	5,192.2	5,192.2	3,066.0	1,769.0	357.2	0
Forest	% of land	96.1%					(for now)
		H/M/S %	of regul.	59.0%	34.1%	6.9%	0
Very rough estimated volumes per acre			16	14	17	28	n/a



- Hardwood seedling/saplings
- Hardwood pole stands
- Mixedwood pole stands
- Mixedwood saw timber
- Oak sawtimber

- Pine pole stands
- Pine sawtimber
- Softwood pole stands
- Softwood sawtimber
- ▨ Crown Density 67% or Greater

## **IV. Management Issues**

Unit management issues arise throughout the planning process, and are identified by the public and the bureau. Issues are expressed as hopes and concerns for the future of the property and as management problems to be solved or management objectives to be achieved.

### ***Administrative and Management Challenges***

- Key parcels of the original Kennebec Highlands project that are important to the use and management of the property are yet to be acquired. In addition, the BRCA and the bureau are looking at potential additional acquisitions that would expand the unit and associated management responsibilities. Thus, the size of the unit, its resources and uses will be in a state of transition for a number of years.
- As the largest block of public land with significant conservation and recreation values in a relatively developed area of the state, public interest in the property for a variety of recreational uses is high. There is already public concern about potential overuse and conflict among uses.
- Preliminary research into the status of old roads on the unit indicates that there are residual public and private rights to use these roads that will affect the bureau's ability to manage access to the property. Further research and consultation with affected municipalities is needed to clarify the bureau's authority on these roads.
- There are many abutting property owners with whom the bureau must communicate about access to and use of the unit to address concerns about trespass and misuse of private property. Prompt marking of the Highlands boundaries was recommended to deter trespassing.
- The bureau must coordinate closely with four distinct host communities on public access rights over existing roads, planning, land use, fire protection and emergency access.
- Many indicated a need for stewardship or policing of the unit to maintain order within the area; monitor trash disposal, illegal dumping, theft of gravel, timber and other material; and trail conflicts and misuse. Along with a site presence, follow-up enforcement is seen as necessary to gain compliance with trail laws/rules and keep users off abutting private property. (ATV, snowmobile and truck use was particularly noted.)

### ***Access***

#### ***General***

- There is a general, though not unanimous, desire to provide access to the Kennebec Highlands for multiple recreational uses, including hiking, horseback riding, mountain biking, skiing, ATV riding, snowmobiling, and educational activities; and to provide recreation opportunities for people with varying abilities and disabilities.
- At the same time, overuse is the main concern for the Highlands: its discovery by more people will lead to development pressures in and around the unit, which could be "loved to death" by too many trails, people, and uses - to the detriment of the natural environment and character of the area.
- Limit the number and capacity of access points so that the number of users and activities do not overwhelm or degrade the natural resources or the experience of a semi-remote area.

- While existing trailheads are at or over capacity on some days, a few small dispersed parking areas on the perimeter of the unit, posted as to appropriate uses and behavior remains the preferred access option. There is interest in one additional point of access from the west in Vienna.

### ***Public Vehicle Access***

- There is some interest both in maintaining roads on the unit for vehicle access, particularly for trucks, and in closing roads to general vehicle access. Any road maintenance on the unit today occurs as a result of efforts of private property owners. Numerous instances of poor road conditions have been cited, along with road damage from vehicle use in wet conditions, damage to snowmobile bridges from vehicle use, trespass by recreation users onto abutting private property, and water quality impacts that result from vehicle use of deteriorated roads.
- The bureau's need for roads on the unit is primarily for forest management, developing and maintaining recreation facilities and administrative purposes. Management class roads meet most of these needs and are likely to meet the needs of fire protection and emergency services, as well. Maintenance of roads to public use standards requires a higher level of investment and supports a higher level of public access than is desired by some abutters who share access rights with the bureau.
- It was recommended that the bureau gate some Highlands access roads to control access and prevent damage to the roads during wet weather, particularly in the spring. Clear authority to gate roads and agreements with fire and emergency service agencies will be necessary before this can be pursued.
- The Roxy Rand Road is a specific road for which both management class maintenance and spring gating were recommended. The bureau has proposed to maintain the section of road on the unit to the level necessary to accommodate public access to the McIntire Pond hand-carry parking area and the fish stocking program of the Department of Inland Fisheries and Wildlife.

### ***Access to Ponds***

- Access for the Highlands ponds for fishing was important to many, although there were reservations about providing vehicle access to Boody and Kidder ponds similar to that provided on McIntire Pond.
- As alternatives to improved vehicle access to these ponds, the bureau was asked to consider permitting storage of personal small boats or canoes or providing state-owned canoes stored near the ponds for public use.

### ***Access for Different Abilities***

- Two types of access to the Highlands related to physical ability have been recommended:
- Access for people with disabilities, such as inability to walk or blindness, for whom there are trail and facility design guidelines under the Americans with Disabilities Act. Such facilities would be particularly appropriate in connection with the nature education center envisaged for the Dolley/Monataka property.
- Access for differently-abled people (DAP), for whom trail design incorporates dimensions, grades and surfaces that can be comfortably used by all age groups. These would incorporate level areas or benches for resting and switchback approaches to higher elevations, for example

## ***Recreation***

### ***Experience***

There is a general desire to see the unit retain its undeveloped and semi-remote character. Too much use and formal facilities will alter this character and the experience that the Highlands offers. There should continue to be areas on the unit where quiet can be enjoyed.

### ***Camping***

- Informal, low impact camping without fires (as currently allowed under bureau rules) is preferred over designated fire-authorized campsites that cannot be policed.
- If campsites are designated, they should be far from points of vehicle use and foot or water accessible only.

### ***Hunting, Fishing, Trapping***

- There was some concern that these activities would no longer be available or allowed.
- Hunting, fishing and trapping are generally permitted on public reserved lands where not prohibited by deed or ordinance. Under current bureau rules, loaded firearms are not permitted in campsites, on marked hiking trails, or at boat launches and picnic sites, and should not be discharged within 300 feet of such areas. (People with a concealed weapons permit are excepted.) The bureau may close areas to hunting due to unsafe conditions or threats to property or resources and must post notice of such closures at access points. In organized towns, trapping requires permission from the bureau.

### ***Trails, General***

- Limit trails in/remove trails from environmentally sensitive areas.
- Ensure quality trail construction and maintenance to prevent erosion, siltation and degradation of water quality.
- Designate trails for: mountain biking, horseback riding, ski-only and utility vehicles.
- Designate different trails for different uses, ensuring safety and compatibility. Allocate different trails for motorized and non-motorized users.
- Consider connectivity with trails on adjacent property, e.g., with planned interpretive trails on SWOAM property on east side of Watson Pond Road – across from the Highlands.
- Post trail mileages and approximate travel times at trailheads to alert visitors to actual distances and times.

### ***Trailheads***

- Trailhead parking areas are occasionally over capacity, and people park along the Watson Pond Road.
- There may be demands for additional parking and toilet facilities at these trailheads
- Trailhead parking areas were designed for hikers, cyclists, skiers, etc. but are being used by snowmobilers and ATV riders who park trailers in these lots. This may reflect confusion between the type of parking allowed in these lots versus the trailer parking allowed at Blueberry Hill. Highlands's trailheads should be signed to indicate that trailer parking is not allowed.
- Trailhead location and signage should be discreet and functional, not designed to attract use.

### ***ATV Trails***

- ATV use is the single most controversial recreation issue for the Kennebec Highlands. The unit had considerable, legally permitted ATV use prior to state acquisition. Permission to ATV clubs for ATV trails on the unit was suspended following state acquisition, with the understanding that it would be reconsidered under the management plan. Some ATV use has nonetheless continued and may be legally permitted on roads that retain public access rights.
- Two area ATV clubs propose to access the Highlands from the south in via the McGaffey Mountain Road, circle around Vienna Mountain over logging roads and connect north to the York Hill Road in New Sharon. This route avoids wet areas and commercial blueberry fields, follows the existing snowmobile trails and logging roads, and keeps the trail on state property. It connects ATV trails authorized on private land north and south of the unit and to the state's Jay-Farmington multi-use rail trail. The clubs would like access to Blueberry Hill, east of Watson Pond Road, where ATV parking is permitted. Clubs would maintain ATV routes in the Highlands, improving conditions where unauthorized ATV use is occurring. Trails would be open to other users, and club members would be a resource for landowners with ATV issues. The clubs' primary interest is making connections for a long distance route. They wish to avoid the commercial blueberry fields to discourage riders from entering them; recognize landowner opposition to ATV use of the Roxy Rand Road; and wish no to disturb other users.
- Objections to this proposal or to ATVs in general included: opposition to the establishment of ATV use in the Highlands because it is inconsistent with the conservation values of the property and destroys trail improvements; ATV use on sections of the logging road now included in hiking loops conflicts with established hiking; a desire to have horseback riding and hiking trails separate from ATV trails; the likely inability of club members to control irresponsible non-member riders, particularly near ponds; the need to explore a shorter ATV route over the mountain or on public roads to avoid conflict with the hiking trails; the desire to see ATVs confined to the western portion of the unit, if allowed at all; a destination ATV trail to Blueberry Hill is inconsistent with the more limited goal of providing routes through the unit that ensure important connections to other trails in the region. Club members indicated that improved education efforts, ATV law enforcement grants from Inland Fisheries and Wildlife to discourage rogue users, and the backing of the bureau to upgrade trail conditions would significantly improve ATV use of the property.

### ***ADA Accessible Trails***

- BRCA is hopes to establish an ADA accessible trail at the nature center using BRCA and state land. Trail would be a self-guided nature trail, and suitable for skiing in the winter.
- Boardwalks will likely be required in wet areas.

### ***DAP Trails***

- Some hope to develop bicycle and pedestrian routes for multiple ages and abilities over existing and new trails via use of switchbacks and smoother trail surfaces. Such trails are not compatible with ATVs, which can create ruts.
- Suggests DAP trails be created in Goat Path/Suicide Hill area, Round Top and along snowmobile trail on Cross Road.

### ***Hiking Trails***

- There are two established, blazed hiking trails: Round Top Trail, with views to Katahdin from spur; and Sanders Loop Trail. Hiking trails are open for snow shoeing in winter, and DOC plows trailhead parking lots.
- There is a lot of hiking use on roads that are not maintained hiking trails. Trails to ponds are not marked.
- Have eliminated Dolley Trail as improved hiking trail.
- Poor hiking conditions occur on Vienna Mountain Road (erosion); Sanders Hill Loop on snowmobile trail/logging road section (rutted and likely eroding); on trail between Kidder and McIntire ponds (rutted, suggest non-motorized only route parallel to existing road); on Kidder Pond/Beaver Brook Loop where ATVs have been driving through the brook and silting the water (suggest hiking only here); at intersection of Kennebec Highlands Trail with Round Pond Trail (notes unclear); and Dolley snowmobile trail (erosion in middle section).
- Potential use conflicts: on Round Top and Sanders Hill hiking trail sections located on the logging road (Kennebec Highlands Trail) where multiple (and motorized) uses may be allowed; even parallel but separate trails here not address the noise and dust created by ATVs.
- ATVs parking at Round Top Trailhead and ATV use of Wildflower Estates Road to access Kennebec Highlands Trail
- Other concerns: impact on water quality throughout watershed from heavier motorized use; higher maintenance requirements for motorized uses, especially ATVs
- There is interest in a new hiking trail between the ponds; a trail up No Name Hill from Cross Road, east of Boody Pond; and a peak-to-peak trail from Sanders Hill to Berry Hill.

### ***Horseback Riding Trails***

- There are probably not that many users, and use is sporadic and unpredictable. There is no organized club. It is likely the views that attract riders. Most riders use old road system, piggyback on other trails and go where they wish to go. Most often used routes include Berry Hill Road, Cross Road and Mountain Road, with loops at blueberry fields.
- Conditions for horseback riding are poor on Cross Road (badly eroded, steep & stony) and Rugged Hill Road (highly eroded).
- If the Highlands is opened to horseback riding, a parking area for trucks and trailers will be needed. Higher volume equestrian use could generate major erosion problems, if trails are not hardened. Conflict with other users could be the major problem for horseback riders, particularly with cyclists and ATV riders. ATVs can spook horses that are not used to them, and bikes are quiet and can startle horses and riders. Cyclists should signal approach to riders.

### ***Mountain Biking Trails***

- Cyclists use many of the same trails as snowmobiles and ATVs and many of the logging roads. Some use unimproved routes that offer more challenging rides and hope these can continue to be used.

### ***Ski Trails***

- Many ski routes overlap other trails, e.g., snowmobile trails, but skiers also use roads that are too wet for summer use.
- Much of the Highlands landscape is used for skiing.
- Future nature center trail is a potential short ski trail.
- Some hope to see ski-only trails.

- Track-set ski trails are not recommended for the Highlands. There are plenty of these opportunities elsewhere.

### ***Snowmobile Trails***

- Rome snowmobile club maintains a number of snowmobile trails on the Highlands. Routes used vary depending on snow depth. Riders often access the Highlands from Long Pond and take the Goat Path to connect to with Mount Vernon and New Sharon trails and with ITS 86 north of the unit. There is a snowmobile destination trail to Blueberry Hill for views. New Sharon and Vienna snowmobile clubs have been maintaining trails around commercial blueberry fields. Clubs have no problem sharing snow trails with skiers and other users.
- Issues: trucks have destroyed bridges built for snowmobiles; trailside vegetation is encroaching on trail in some areas and requires cutting; 50" barricades are too narrow to accommodate grooming drags - need 54"-56."

### ***Education***

- The BRCA plans to establish a nature education center on the Dolley property ("Monataka") it holds east of Watson Pond Road. The center hopes to incorporate portions of the surrounding state property and construct a self-guided nature trail that is accessible to the disabled.
- Educational trips onto the larger unit main unit for students from the nature center and area schools are desirable, but there is some concern for student safety during hunting season, which is a particularly good time to get students outdoors.

### ***Resource Protection and Management***

#### ***Forests***

- A number hope to see a healthy forest restored to the unit, which was heavily cut prior to acquisition. Proper forest management is needed.

#### ***Historic Areas***

- Material remaining at historic sites will be particularly subject to theft, if vehicle access is allowed to these sites. Theft of granite from Dolley property was cited.
- 2 hand-dug streams or canals associated with Watson and Kidder ponds should noted as sites of historic interest.

#### ***Special Natural Areas***

- The Round Pond/Beaver Pond wetland was identified as a special area, with a significant deer wintering area and other wildlife habitat, where too much access would be damaging to the environment and the wildlife.
- Much of the Beaver Brook watershed is within the unit and drains into Long Pond. The water quality of the brook is of concern.
- Access to Kidder Pond from McIntire Pond requires crossing Beaver Brook at a very sensitive point. Continued access through this area may require a bridge.

#### ***Wildlife***

- Healthy wildlife populations

- Varied management practices to accommodate/enhance wildlife habitat; type of cutting determines type of wild life
- Designated critical areas for critical species

***Water Quality***

- Water quality throughout the unit should be maintained or improved. Erosion and siltation controls are recommend for all trails.

## **V. A Vision for the Kennebec Highlands**

### **General Principles:**

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

#### **Multiple Use Management**

1. Management of the Kennebec Highlands 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 Highlands provides a demonstration of exemplary land management practices, including silvicultural, wildlife, and recreation management practices (Title 12, Section 1847).

#### **Recreational Uses**

3. The Kennebec Highlands provides a variety 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 Highlands together with the right to reasonable use of those lands; reasonable fees may be charged to defray the cost of constructing and maintaining 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 Kennebec Highlands:**

#### **Overall Vision**

5. The Kennebec Highlands provides a unique, semi-remote "back woods" experience within a short distance of central Maine population centers.
6. Management of the Highlands provides high quality recreational experiences, demonstrates exemplary multiple use and sustainable forestry, advances understanding of the value of special protected resources; and models partnerships with private landowners, municipalities, and conservation, recreation and education groups.
7. The spectrum of available recreation experiences includes:
  - remote and quiet areas, with limited or no road access, characterized by low-intensity and primarily non-motorized use;
  - snowmobile and ATV touring on designated routes that are components extended trail systems based on cooperative arrangements with adjacent landowners.
  - destinations for recreation and education with facilities that ensure enjoyment by visitors of different abilities.
8. Recreation opportunities include hunting, fishing, trapping, boating, hiking, primitive camping, wildlife viewing, nature and history study, mountain biking, horseback riding, snowshoeing, skiing, and ATV and snowmobile touring.

### **Recreation Experience**

9. The recreational experience of the Kennebec Highlands is primarily one of a forest returning after a history of farming and logging. Improved trails and old roads invite exploration of a landscape that is large enough to impart a sense of remoteness, varied enough to encompass lowland ponds and high elevation vistas, and rich in evidence of past settlement by area families.
10. There is public access to points in the Highlands from public roads in New Sharon, Rome and Vienna. Existing roads within the property have been systematically evaluated to determine public and private access rights and identify those that are needed for forest management, recreation, administration and fire protection. There are no roads improved for general vehicle travel throughout the Highlands.
11. Pond access is primarily walk-to. Storage of small watercraft is permitted near ponds with foot-access only. Access to McIntyre Pond is from a small parking area reached by the Roxy Rand Road, which has been improved on the unit.

### **Recreational Trails and Facilities**

12. Recreational trails are designated or developed to meet the needs of different users through a combination of single use and shared use routes, depending on the compatibility of the uses. There are summer and winter trails for both motorized and non-motorized trail activities, and trails for different abilities. The trail system includes improved components and sections of old woods roads as unimproved components.
13. ATV and snowmobile trails are designated or developed in collaboration with the state, local clubs and surrounding landowners to minimize adverse impacts on wildlife, other users, and adjacent owners.
14. Accessible nature trails that offer plant, wildlife or scenic viewing opportunities are developed in conjunction with efforts to develop an education center on the Dolley property.
15. Trail needs and issues are addressed annually at a trails forum including representatives of the different user groups.

### **Forest and Wildlife Management**

16. The quality of the forests on the Kennebec Highlands is improved, and a multi-aged forest is being regenerated that supports a high quality recreation experience, enhances wildlife habitat, and, on those areas actively managed for timber, produces high value timber products. Timber management is conducted with a minimum of roads.
17. The Highlands is generally managed without permanent public use roads to retain its value as a large and minimally fragmented habitat block in an otherwise developed area of the state. Much of the unit is managed cooperatively with the Maine Department of Inland Fisheries and Wildlife to enhance deeryards, fisheries and other wildlife habitat.

## VI. Resource Allocations

### *Summary of the Resource Allocation System*

The Resource Allocation System is a land management and planning tool first developed in the 1980's and formalized in an *Integrated Resource Policy (IRP)*. The system is used to designate appropriate management based on resource characteristics and values and 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. Timber-dominant acres, if any, are determined by subtraction of other allocations

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

The following is a description of the resource allocation system applied in this plan to the Kennebec Highlands.

### *Overview of Allocations for the Kennebec Highlands*

The plan proposes that the primary values of the Kennebec Highlands are for protection of special natural and historic resources, protection and enhancement of fish and wildlife habitat and recreation. As such, the dominant allocations will be for these values, and timber harvesting, while important, will be a secondary use throughout the unit, except where it is not permitted. Recreation settings on the Highlands range from remote to semi-remote to developed, indicating that allocations for both Remote Recreation and Developed Recreation will be appropriate.

The bureau has sufficient information at this point to make resource allocations for Special Protection areas and Wildlife Dominant areas. However, the bureau does not have enough information to complete recreation allocations for the entire parcel. The primary obstacle is a lack of clear authority to manage use on the network of roads on the unit. Many former town roads continue to have rights of public access, although the towns no longer maintain them. Other roads carry access rights granted to other parties by prior private owners. Similarly, access rights granted to the state over non-state property need to be more clearly defined.

Until these rights are clarified, the bureau proposes the following recreation allocations for the unit:

- Developed Recreation Class I areas at existing Sanders and Round Top trailheads on Watson Pond Road and the Dolley property.

- An Interim Developed Recreation Class I over the remainder of the unit not otherwise allocated as Special Protection or Wildlife Dominant. This allocation is chosen because it allows recreational use to continue and more detailed planning for future recreation to proceed as information about the public access rights on the roads becomes clear.

While not allocated at this time, a future Remote Recreation around Boody, Kidder and McIntire Ponds is also proposed and shown on the allocation maps.

Table to be completed.

<b>Resource Allocation</b>	<b>Dominant Allocations (acres)</b>	<b>Secondary Allocations (acres)</b>
<b>Special Protection</b>		
<b>Significant Natural Areas*</b>		
<b>Wildlife Management</b>		
<b>Remote Recreation</b>		
<b>Developed Recreation</b>		
<b>Timber Management</b>		
<b>TOTAL ACRES</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 (Allocation Map 1)***

### ***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 belowground) containing valuable or important prehistoric, historic, and cultural features.

### ***General Management Direction***

In general, uses allowed in Special Protection areas are carefully managed and limited to protect the important 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. Other direction provided in the IRP includes:

### ***Special Protection Areas on the Kennebec Highlands***

There are no ecological reserves on this unit. Special Protection areas include the following sites.

- **Historic Sites:** Fifteen (15) nineteenth century homesteads identified as potentially significant archaeological sites by the Maine Historic Preservation Commission. The sites range in size from <1-10 acres. The recommended management treatment is to avoid disturbance of the sites.
- **Natural Sites:** One rare plant site near the Sanders Hill hiking trail south of Watson Pond. The site includes a small population of alpine club moss (northern firmoss) with a State Rank of 2 and a Global Rank of 5. If the site is located within the 330' major riparian zone of Watson Pond, it will be treated as a special inclusion within the Wildlife allocation. If it is located beyond the 330' riparian zone, it will be treated as a separate Special Protection area.

Though not allocated for special protection, the locally important diversion ditches or canals from Kidder Pond to Mill Stream and from Round Pond to the Watson Pond drainage should be defined during fieldwork in preparation for forest or recreation management activities.

### ***Wildlife Dominant Areas (Allocation Map 1)***

#### ***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.

### ***General 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).

### ***Wildlife Dominant Areas on the Kennebec Highlands***

There is no known “essential habitat” on the unit. Wildlife Dominant areas include significant habitat defined under the Natural Resources Protection Act and designated by the Department of Inland Fisheries and Wildlife, and major riparian shorelines along ponds and major streams (330-foot zone from edge of water). The significant wildlife habitat on the Highlands includes four (4) Inland Waterfowl and Wading Bird and Habitat and the fringes of a fifth habitat located off the unit; and five (5) deer wintering areas and the fringes of a sixth area located off the unit. Based on orthographic evidence of recent timber harvests, one deer wintering area has been reduced in size. Major riparian shorelines occur on Long, Watson, Kidder, McIntire, Boody, Round and Beaver ponds and on Beaver Brook and Mill Stream.

There is also one exemplary natural community, the unpatterned fen ecosystem associated with Round and Beaver ponds that is wholly contained within a significant wildlife habitat and the Wildlife allocation. This natural community will be treated as a special inclusion within the Wildlife allocation that surrounds it. Any management activity that may affect this natural community will be undertaken in consultation with MNAP.

Additional specialized habitat areas and features areas may be defined through detailed fieldwork related to forest management, including additional riparian zones, vernal pools wetlands; wildlife trees etc.

### ***Remote Recreation Areas - Future (Allocation Map 2)***

#### ***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 areas.
4. Examples include trail corridors, shorelines, and remote ponds.

#### ***General 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.

### ***Future Remote Recreation Areas on Kennebec Highlands***

The Boody Pond-Kidder Pond-McIntire Pond area that is not otherwise allocated as Wildlife Dominant is proposed for future allocation as a Remote Recreation area. The presence of few roads and the character of the landscape and forest make this area capable of imparting a sense of remoteness and is particularly suitable for remote hiking and primitive camping.

Depending on the status of roads in the area and the location of snowmobile and ATV routes, this Remote Recreation area could be significantly expanded to encompass much of the surrounding area. Also depending on the future location of snowmobile and ATV routes, other areas of the Highlands may be allocated for Remote Recreation, as well.

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

Many public reserved lands have natural settings in which visual attributes enhance the enjoyment of recreational users. Timber harvests that 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.

### ***General Management Direction***

***Visual Class I:*** Timber harvesting occurs 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:*** 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 on the Kennebec Highlands***

Both Visual Classes I and II areas are more specifically defined during compartment exams in preparation for forest management activities.

Visual Class I areas (managed for foreground views) on the Kennebec Highlands are designated at the following locations: the Roxy Rand Road on the unit and maintained public roads abutting the unit; trailheads and parking areas; improved trails; the shorelines of McIntire, Boody, Kidder, Round, Beaver, Watson and Long Ponds; and the nature education center on the Dolley property.

Visual Class II areas (managed for background views) on the Highlands are designated for areas with views of the forest canopy 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.

### ***Developed Recreation Areas (Allocation Map 2)***

#### ***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 Kennebec Highlands, There are no Class II Developed Recreation areas being proposed for the Kennebec Highlands

#### ***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.

#### ***General Management Direction***

Developed Recreation areas allow a broad range of recreational activities, with timber management and wildlife management allowed as secondary uses.

#### ***Developed Recreation Areas on the Kennebec Highlands***

Areas allocated as Developed Recreation Class I include the following where not otherwise allocated as Special Protection or Wildlife Dominant:

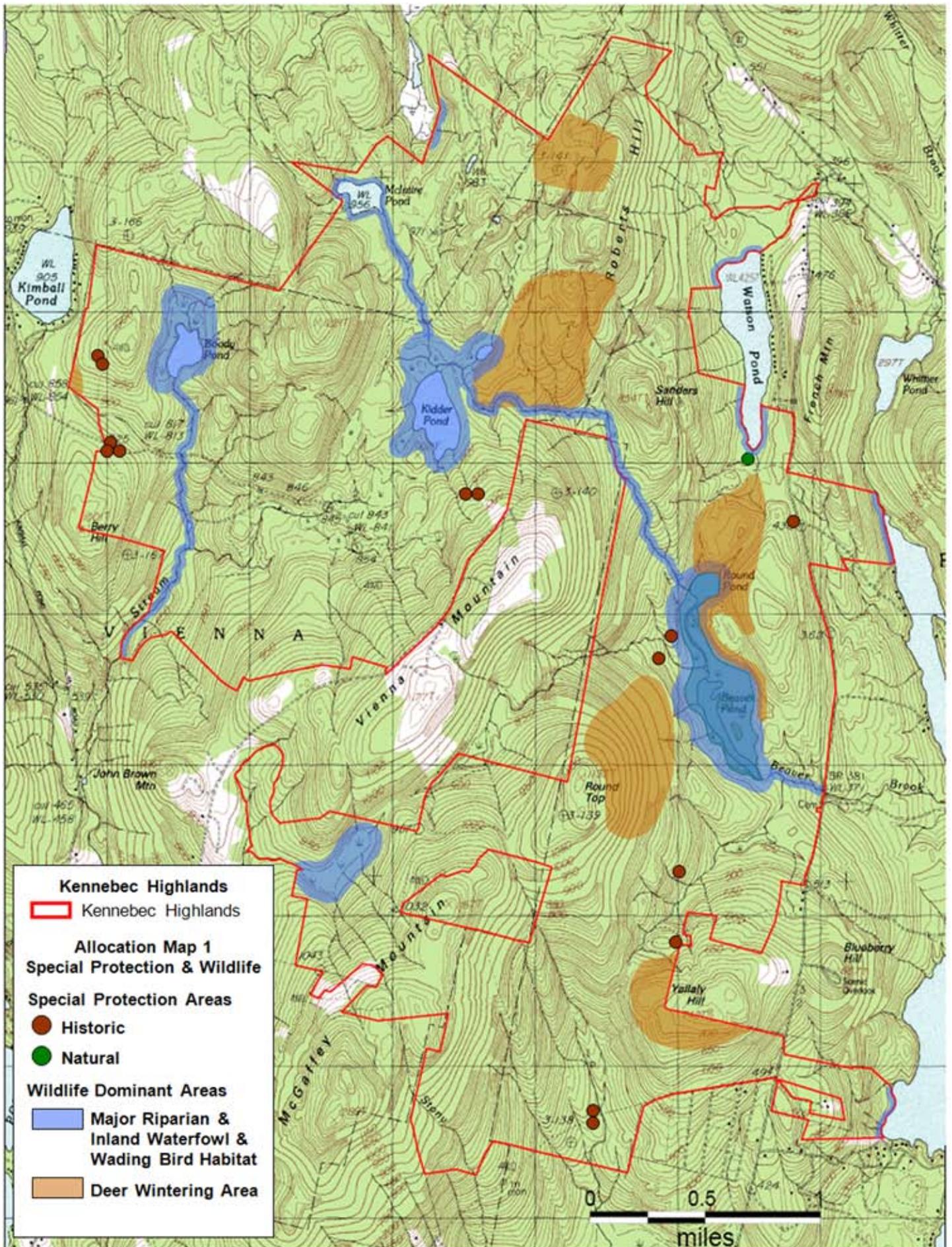
- the Sanders Hill Trailhead;
- the Round Top Trailhead;
- the Dolley property between Watson Pond Road and Long Pond.

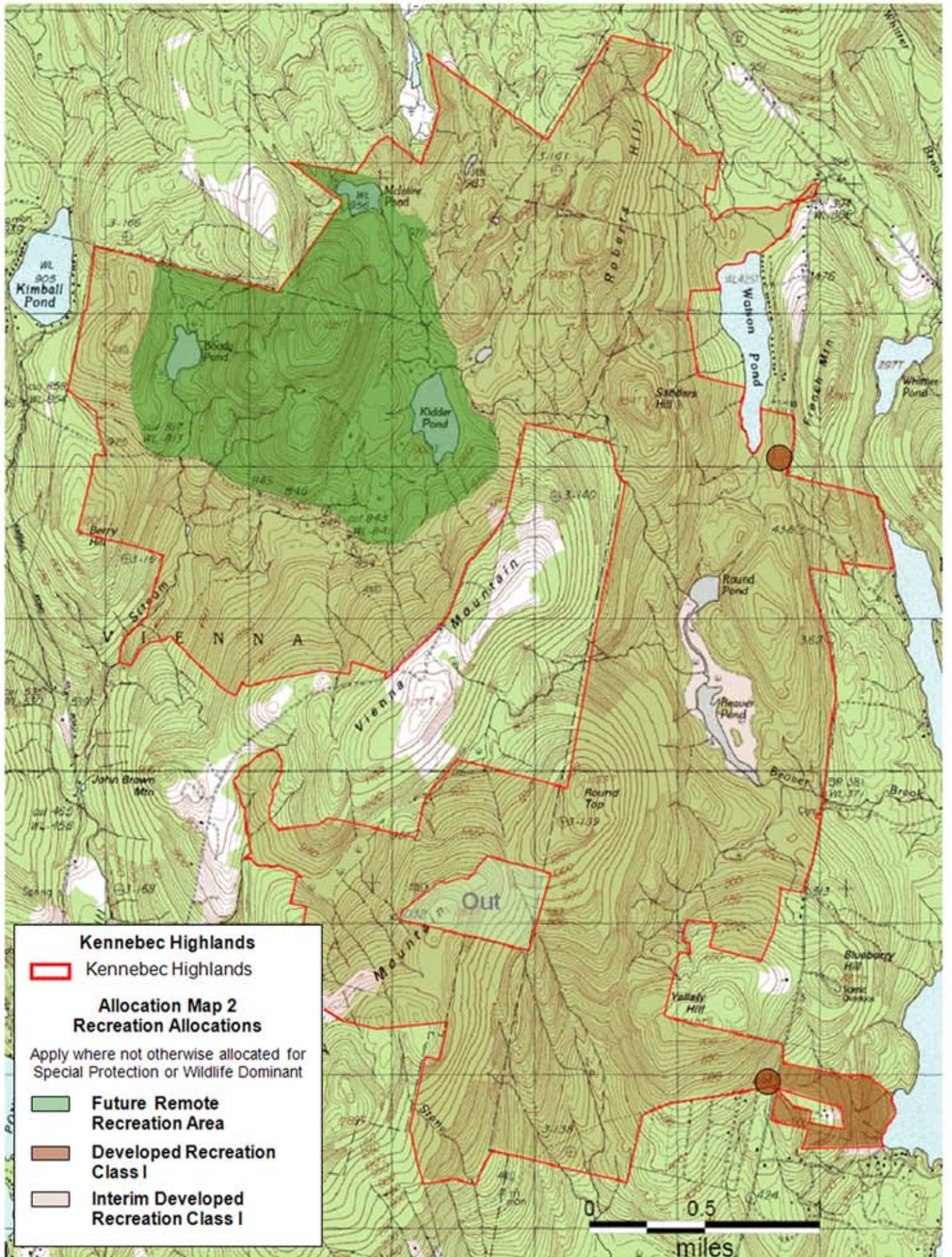
Additional future Developed Recreation Class I areas are likely to include:

- a future trailhead in Vienna that will serve as a point of access to the Highlands from the west;
- future snowmobile and ATV trails.

***Interim Developed Recreation Areas (Allocation Map 2)***

As a interim measure, until there is more certainty about the bureau's ability to manage the access to and use of the unit, the remaining state land not allocated as Special Protection or Wildlife Dominant will also be allocated as Developed Recreation Class I.





## **VII. Management Recommendations**

### ***General***

Document public and private access rights over roads leading to and on the state-owned Kennebec Highlands. Consult with municipalities regarding management of public access and use of the unit as it relates to these public access rights and to local land use, fire protection and emergency requirements

Complete fee or easement acquisition of remaining parcels in the Kennebec Highlands Project. Identify additional acquisitions of land, rights-of-way or easements that would be desirable to protect or enhance the unit and ensure appropriate public access.

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

#### Historic Sites

- Determine on-site location and dimensions of Special Protection areas in consultation with the Maine Historic Preservation Commission.
- As necessary, move roads, trails and other ground disturbances out of the protected areas.
- Append and post state law regarding removal of artifacts on state lands to rules for the use of the Kennebec Highlands.
- In addition to locating historic sites allocated for special protection, secure documentation of the existence and location of drainage ditches or canals associated with Kidder and Round/Watson Ponds.

#### Rare plant site:

Determine on-site location and dimensions of the rare plant site in consultation with the Maine Natural Areas Program (MNAP) and finalize its allocation as a Special Protection area or special inclusion within the Wildlife Dominant allocation (Watson Pond major riparian zone). Take measures needed to secure and protect the site, including any necessary relocation of the Sanders Hill trail.

### ***Wildlife Dominant Areas***

Identify as a result of field work, additional areas that need to be protected as wildlife habitat, including particularly additional major riparian zones (330 feet from water), minor riparian zones (75 feet from water), wetlands, including vernal pools, mast-producing timber stands (oak or beech), etc.

#### Exemplary natural community:

Prior to beginning any management activity, that may affect the natural community located at Round and Beaver ponds, consult with MNAP about procedures necessary to protect the community.

Determine and implement forest and vegetation management, water quality control and other measures that will protect and enhance fish and wildlife habitat. In particular, restore heavily cut historic deer wintering areas to viable winter cover and provide substantial buffers and erosion control measures around the unit's ponds and major streams.

### ***Recreation Areas***

Maintain a limited number of small parking areas, generally on the perimeter of the unit, to provide access to the unit. In consultation with the town and abutting land owners, attempt to locate one additional small trailhead in Vienna that will provide access to trails from the west. These trailheads are intended to serve pedestrian and bicycle trail users and to limit and distribute use of the unit at any one time.

Work with the BRCA to develop the Dolley Property as an educational center with opportunities for accessible recreation and education.

Trail activities are the primary recreational use of the Kennebec Highlands. The designation, development and management of most trails will be affected by the outcome of research into the status of public access rights on the unit's roads. Therefore, management recommendations at this time are limited to relatively broad objectives.

### ***Motorized Use (Snowmobiles and ATVs)***

In consultation with towns and abutting land owners, locate a limited number of snowmobile and ATV routes through the unit that provide important connections to other trails in the region. Access to the Highlands for snowmobile and ATV riding will be over trails from outside the unit, with no ATV or snowmobile trailheads on the unit or at the state-owned Blueberry Hill Scenic Area.

Review snowmobile trails to limit duplicative routes (both over and around Vienna Mountain) and scenic vista destinations (Vienna Mountain and Blueberry Hill).

Identify an ATV route through the unit that meets safety and environmental requirements, is practical to manage, and provides the needed connections to regional trail systems. This effort will focus on the western portion of the unit; on the Berry Hill/Boody Pond Roads and McGaffey Mountain Roads as points of ingress and egress; and on a connecting route between these points that has public access rights and may include existing roads on or off the unit.

Work with ATV and snowmobile clubs to attempt to locate an alternate route to the Blueberry Hill Scenic Area from McGaffey Mountain Road over existing public rights of way and the perimeter of the unit. To the extent possible, the bureau attempts to provide access to points of interest, including high elevation views, for all users, while limiting conflict among different interest groups.

A lack of enforcement of motorized trail laws and rules was an often voiced concern, particularly in connection with ATVs. The bureau's preferred approach to recreation management is to provide quality facilities that will be attractive to use – in this case trails - and supporting

information and education that directs users to these facilities. This is most effective when local management partners are directly involved in the effort. When necessary, the bureau does and will work with enforcement agencies under grant programs or contracts to bring strategic enforcement to the site.

### ***Trails for Non-motorized Use***

In consultation with different trail users, identify single-, multi- and shared use roads and trails on the unit that:

- provide opportunities for walking, hiking, mountain biking, horseback riding, skiing, snowshoeing, and nature and wildlife observation;
- separate incompatible uses;
- provide summer and winter routes for non-motorized trail activities; and
- provide opportunities for users of different abilities

### ***DAP Trails***

In consultation with other users of Highlands trails, work to develop a pilot trail for differently-abled persons (DAP).

### ***Timber Management***

Determine the road network that will be necessary for forest management.

Provide advance notification to interest groups, (e.g., BPCA, snowmobile and ATV clubs) of timber operations that require temporary interruption of recreational use of these roads.

Timber management will favor high value (for both timber and wildlife) and longer lived species such as pine, hemlock, oak, spruce, sugar maple, and yellow birch. Objectives will include growing high value timber products, chiefly sawlogs and veneer, while maintaining visual integrity and enhancing the diversity of wildlife habitat.

### ***Administration***

Upon resolution of boundary conflicts, mark the perimeter boundary of the unit for easy identification.

Determine the disposition of Saddle camp & boathouse, structures that are not needed by the bureau for management of the unit.

Continue to manage the blueberry fields without herbicides, using periodic burns, if necessary, and mowing, if feasible.

Coordinate management of the unit with state and local government agencies and maintain communication with abutting property owners about management and use of the unit.

Develop agreements with organizations that will assist in management of the unit, specifically with the BRCA and local snowmobile and ATV clubs.

Convene an annual trails forum for Highlands trail users to discuss problems and opportunities on the unit's trail system.

Develop public information about the Kennebec Highlands consistent with that provided for other public reserved lands with recreational opportunities.

## VIII. Monitoring and Evaluation

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

### *Implementation of Plan Recommendations*

The Bureau will develop, within 2 years of final plan adoption, an action plan for implementing and monitoring the management recommendations in this Plan. This will include an assignment of priorities and timeframes for accomplishment that will be utilized to determine work priorities and budgets on an annual basis. The Bureau will annually document its progress in implementing the recommendations, plans for the coming year, and adjustments to the priorities and timeframes as needed.

### *Recreation*

The Bureau will monitor public use to determine:

- whether improvements to existing facilities or additional facilities might be needed;
- 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);
- whether use is adversely affecting sensitive natural resources or the ecology of the area;
- whether measures are needed to address unforeseen safety issues;
- whether changing recreational uses and demands present the need or opportunity for adjustments to existing facilities and management; and
- 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.

The primary means of gathering information about recreational use and issues include:

- reports from the seasonal recreation ranger;
- reports from management partners (BRCA, ATV and snowmobile clubs);
- discussions at the annual trails forum; and
- incident and other reports made to the bureau's central and regional offices.

### *Wildlife*

The bureau's wildlife biologist and technician routinely conduct a variety of species monitoring activities statewide. The following monitoring activities that are anticipated for the Kennebec Highlands:

- cooperation with MDIF&W on fisheries management of the units ponds;

- cooperation with MDIF&W in the monitoring of game species;
- location of additional, smaller-scale significant wildlife habitat (e.g., vernal pools and den trees) during the preparation of forest management prescriptions.

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

The bureau coordinates with the Maine Natural areas program and the Maine Historic Preservation Commission in the documentation and protection of these areas.

- The boundaries of rare plant communities and potential archaeological sites will be delineated on the ground.

### ***Timber Management***

Local work plans, or prescriptions, are prepared by professional foresters in accordance with the bureau's *Integrated Resource Policy* and peer-reviewed prior to approval. Preparation and layout of timber sales require field investigation of every acre to be treated. Trees to be harvested are generally hand marked. Regional field staff provide regular on-site supervision of harvest activities, with less frequent visits by senior staff. After harvest, roads, trails, and water crossings are discontinued as appropriate. Changes in stand type resulting from the harvest are recorded in the bureau's GIS system.

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

Third party monitoring is done mainly through the forest certification programs of the Forest Stewardship Council (FSC) and the Sustainable Forestry Initiative (SFI). Each program conducts rigorous investigations of both planning and on-ground practices. An initial audit by both programs was completed in 2000, with certification awarded in 2002. A full re-audit of both programs was conducted in the fall of 2006 with certification granted in 2007. The Bureau is also subject to compliance audits during the 5-year certification period.

## **IX. Appendices**

- A. Natural Resource Inventory of the Bureau of Parks and Lands Kennebec Highlands Unit.** Brooke Wilkerson, Maine Natural Areas Program, Maine Department of Conservation, July 2007. Under separate cover, <http://www.maine.gov/doc/parks/>
- B. State Recreation Lands in the Kennebec Highlands Region**
- C. Summary of Public Access Rights in the Kennebec Highlands (to be completed)**
- D. Summary of Municipal Ordinances Related to the Kennebec Highlands (to be completed)**
- E. Summary of Written Public Comments (to be completed)**
- F. Guiding Statutes**
- G. Rules for the Use of Public Reserved Lands**
- H. Glossary**
- I. References**

**Appendix B.**  
**State Recreation Lands in the Kennebec Highlands Region**

**State Park Lands & Public Reserved/Nonreserved Lands in the Kennebec Highlands Region**

**State Park Properties:** Maine Dept. of Conservation, Bureau of Parks & Lands

Cty	Town	Name	Fee	CE	Tot	Recreation Uses	Manager
AN	Turner, Leeds	Androscoggin River Lands	2,262	0	2,262	Trails (hike, bike, atv)	BPL
FR	Weld Temple Avon	Mount Blue State Park	8,220	0	8,220	Camp, swim, picnic, trails (hike, bike, atv, horseback, snowmobile, ski)	BPL
FR	Jay, Farmington Wilton	Jay-Farmington Rail Trail	138	2	141	Trail (multi-use)	BPL
KE	Augusta	Pine Tree State Arboretum	16	0	16	Arboretum, trails (interpretive, ski)	Arboretum
KE	Rome	Blueberry Hill	70	0	70	Picnic	BPL
KE	Pittston	Coburn House	7	0	7	State Historic Site	BPL
KE	Winslow	Fort Halifax	1	0	1	State Historic Site	BPL
KE	Mt Vernon Rome	Long Pond	63	0	63	Boat access	BPL
KE	Oakland	Snow Pond	2	0	2	Water access	BPL
KE	Vassalboro	Spectacle Pond	271	0	271	Wildlife management	IFW
KE	Augusta Manchester	Tyler Pond	128	0	128	Wildlife management	IFW
KE	Litchfield	Woodbury Pond	17	0	17	Swim, picnic	Town
OX	Peru Sumner	Speckled Mountain	65	0	65	Hiking trail	BPL
SO	Canaan Skowhegan	Lake George Regional Park	352	0	352	Swim, picnic, trails	Towns
<b>Total</b>			<b>11,612</b>	<b>2</b>	<b>11,615</b>		

**Public Reserved/Nonreserved Lands:** Maine Dept. of Conservation, Bureau of Parks & Lands:

Cty	Town	Name	Fee	CE	Tot	Uses	Manager
FR	Weld Phillips Twp 6 PerkinsTwp	Tumbledown/Mount Blue	10,556	12,030	22,586	Trails (hike, snowmobile atv)	BPL
KE	Augusta	Augusta Surplus	341	0	341	Ballfields, gardens	CARA, County
KE	Hallowell	Hallowell Public Lands	8	0	8	Gardens	City
KE, FR	Rome Vienna Mt Vernon New Sharon	Kennebec Highlands	5,543	0	5,543	Trails	BPL
SO	Skowhegan	Yankee Woodlot	238	0	238	Woodlot, wildlife	BPL
<b>Total</b>			<b>16,728</b>	<b>12,030</b>	<b>28,758</b>		

Source: Maine DOC, Bureau of Parks & Lands, 12/06

**Wildlife Management Areas:** Maine Dept. of Inland Fisheries & Wildlife

Town(s)	Name	Acres	Boat/ Canoe	Recreational Uses				
				Fur Trap	Ice Fish	Hunt	Fish	Wildlife Watch
Chesterville	<a href="#">Chesterville</a>	1340	Canoe	Yes	Yes	Big, small upland game/waterfowl	Warm water species	Eagle/osprey/ deer/water birds
New Vineyard	<a href="#">Stump (Bauds) Pond</a>	40	Canoe	Yes	Yes	Big, small upland game/waterfowl	Warm water species	Eagle/osprey/ deer/moose/ water birds
Augusta Windsor Vassalboro	Alonzo H. Garcelon (4 Parcels)	4343	Canoe	Yes	Yes	Big, small upland game	Warm water species	Deer/water birds
Belgrade	Gawler	363	.	Yes	Yes	Big, small upland game	Cold water species	Deer
Hallowell Manchester	Jamies Pond	550	Boat/ canoe	Yes	Yes	Big, small upland game/waterfowl	Cold, warm water species	Eagle/osprey/ deer/water birds
Fairfield	Martin Stream	195	Canoe	Yes	Yes	Big, small upland game/waterfowl	Warm water species	Eagle/osprey/ deer/water birds
Manchester, Augusta	Tyler Pond	128	Boat/ canoe	Yes	Yes	Big, small upland game/waterfowl	Cold/warm water species	Eagle/osprey/ deer/water birds
Emben	Fahi Pond	277	Canoe	Yes	Yes	Big, small upland game/waterfowl	Cold/warm water species	Eagle/osprey/ deer/water birds
Mercer	Mercer Bog	317	Canoe	Yes	Yes	Big, small upland game/waterfowl	Warm water species	Eagle/osprey/ deer/moose/ water birds

**Fish Hatcheries:** Maine Dept. of Inland Fisheries & Wildlife

Town(s)	Name	Species
Augusta	Governor Hill Fish Hatchery	brook trout, lake trout, splake
Embden	Embden Fish Rearing Station	brook trout, landlocked salmon

Source: Maine Dept. of Inland Fisheries and Wildlife

**State Sponsored and Assisted Boat Access Sites in the Kennebec Highlands Region**

<b>FRESHWATER LAKES, PONDS &amp; RIVERS</b>				
<b>Cty</b>	<b>Town</b>	<b>Water Body</b>	<b>Type</b>	<b>Owner</b>
AN	LIVERMORE	LONG PD	TR	DIFW
AN	LIVERMORE	ROUND PD	TR	DIFW
AN	TURNER	ANDROSCOGGIN RIV	TR	CMP
AN	TURNER	CRYSTAL PD (BEAL P.)	CI	DIFW
FR	CHESTERVILLE	EGYPT PD	CI	DOC
FR	CHESTERVILLE	L NORRIDGEWOCK STR	CI	DIFW
FR	INDUSTRY	CLEARWATER PD	TR	TOWN
FR	NEW VINEYARD	BAUDS (STUMP) PD	CI	DIFW
FR	STRONG	PORTER LK	TR	TOWN
FR	WELD	WEBB LK	TR	DOC
FR	WILTON	WILSON PD	TR	TOWN
KE	BELGRADE	GREAT PD	TR	DOC
KE	BELGRADE	MESSALONSKEE LK	TR	DOC
KE	BELGRADE	SALMON LK	TR	DIFW
KE	CHINA	CHINA LK	TR	TOWN
KE	FAIRFIELD	KENNEBEC RIV	TR	CMP
KE	FAYETTE	TILTON PD	CI	TOWN
KE	LITCHFIELD	BUKER PD	CI	TOWN
KE	LITCHFIELD	PLEASANT PD	TR	TOWN
KE	LITCHFIELD	WOODBURY PD	TR	DOC
KE	MANCHESTER	JAMIE PD	CI	DIFW
KE	MANCHESTER	SILVER LK	TR	DIFW
KE	MANCHESTER	TYLER PD	CI	DIFW
KE	MONMOUTH	COBBOSSEE LK	TR	TOWN
KE	MONMOUTH	COCHNEWAGON LK	TR	TOWN
KE	MONMOUTH	WILSON PD	TR	TOWN
KE	MT VERNON	DESERT PD	CI	DIFW
KE	MT VERNON	ECHO LK	TR	DOC
KE	MT VERNON	FLYING PD	TR	DOT
KE	MT VERNON	LONG PD	TR	DOC
KE	MT VERNON	TAYLOR PD	TR	DOC
KE	OAKLAND	EAST PD	TR	DIFW
KE	OAKLAND	MESSALONSKEE LK	TR	TOWN
KE	READFIELD	MARANACOOK LK	TR	DOC
KE	READFIELD	TORSEY PD	TR	DOC
KE	SIDNEY	KENNEBEC RIV	TR	TOWN
KE	VASSALBORO	CHINA LK	TR	TOWN
KE	VASSALBORO	SPECTACLE PD	CI	DIFW
KE	VASSALBORO	THREE MILE PD	TR	DOC
KE	VASSALBORO	WEBBER PD	TR	TOWN
KE	WATERVILLE	KENNEBEC RIV	TR	CMP
KE	WAYNE	ANDROSCOGGIN LK	TR	DIFW
KE	WAYNE	BERRY PD	CI	DIFW
KE	WINDSOR	SAVADE PD	CI	DIFW
KE	WINTHROP	COBBOSSEE LK	TR	DIFW

<b>FRESHWATER LAKES, PONDS &amp; RIVERS, continued</b>				
<b>Cty</b>	<b>Town</b>	<b>Water Body</b>	<b>Type</b>	<b>Owner</b>
KE	WINTHROP	MARANACOOK LK	TR	TOWN
KE	WINTHROP	UPPER NARROWS PD	CI	DIFW
SO	EMBDEN	EMBDEN PD	TR	DIFW
SO	EMBDEN	FAHI PD	CI	DIFW
SO	HARTLAND	GREAT MOOSE LK	TR	DOC
SO	MADISON	KENNEBEC RIV	TR	TOWN
SO	MADISON	WESSERUNSETT LK	TR	TOWN
SO	NORRIDGEWOCK	KENNEBEC RIV	TR	TOWN
SO	SKOWHEGAN	KENNEBEC RIV	TR	DOT
SO	SKOWHEGAN	LK GEORGE	CI	TOWNS
SO	SMITHFIELD	NORTH PD	TR	DOC
SO	SOLON	IRONBOUND PD	TR	DIFW
SO	SOLON	KENNEBEC RIV	TR	CMP
WA	FREEDOM	SANDY PD	TR	TOWN
WA	PALERMO	SHEEPSCOT PD	TR	F&G CLUB
WA	UNITY	UNITY PD	TR	TOWN

<b>STATE SPONSORED &amp; ASSISTED BOAT FACILITIES - TIDAL WATERS</b>				
<b>KE</b>	<b>TOWN</b>	<b>Water Body</b>	<b>Type</b>	<b>Owner</b>
KE	AUGUSTA	KENNEBEC RIV	TR	TOWN
KE	AUGUSTA	KENNEBEC RIV	LF	TOWN
KE	CHELSEA	KENNEBEC RIV	TR	TOWN
KE	GARDINER	KENNEBEC RIV	TR	TOWN
KE	HALLOWELL	KENNEBEC RIV	TR	DOC
KE	RANDOLPH	KENNEBEC RIV	LF	TOWN

Source: <http://www.maine.gov/doc/parks/programs/boating/sitelist.html>. 12/26/06

## **Appendix F. Guiding Statutes**

### **12 MRSA §1846. Access to public reserved lands**

**1. Legislative policy.** The Legislature declares that it is the policy of the State to keep the public reserved lands as a public trust and that full and free public access to the public reserved lands to the extent permitted by law, together with the right to reasonable use of those lands, is the privilege of every citizen of the State. The Legislature further declares that it recognizes that such free and reasonable public access may be restricted to ensure the optimum value of such lands as a public trust but that such restrictions, if and when imposed, must be in strict accordance with the requirements set out in this section. [1997, c. 678, §13 (new).]

**2. Establishment of restrictions on public access.** [2001, c. 604, §10 (rp).]

**3. Unlawful entry onto public reserved lands.** [2001, c. 604, §10 (rp).]

**4. Development of public facilities.** The bureau may construct and maintain overnight campsites and other camping and recreation facilities. [1997, c. 678, §13 (new).]

**5. User fees.** The bureau may charge reasonable fees to defray the cost of constructing and maintaining overnight campsites and other camping and recreation facilities. [1997, c. 678, §13 (new).]

### **12 MRSA §1847. Management of public reserved lands**

**1. Purpose.** The Legislature declares that it is in the public interest and for the general benefit of the people of this State that title, possession and the responsibility for the management of the public reserved lands be vested and established in the bureau acting on behalf of the people of the State, that the public reserved lands be managed under the principles of multiple use to produce a sustained yield of products and services by the use of prudent business practices and the principles of sound planning and that the public reserved lands be managed to demonstrate exemplary land management practices, including silvicultural, wildlife and recreation management practices, as a demonstration of state policies governing management of forested and related types of lands. [1997, c. 678, §13 (new).]

**2. Management plans.** The director shall prepare, revise from time to time and maintain a comprehensive management plan for the management of the public reserved lands in accordance with the guidelines in this subchapter. The plan must provide for a flexible and practical approach to the coordinated management of the public reserved lands. In preparing, revising and maintaining such a management plan the director, to the extent practicable, shall compile and maintain an adequate inventory of the public reserved lands, including not only the timber on those lands but also the other multiple use values for which the public reserved lands are managed. In addition, the director shall consider all criteria listed in section 1858 for the location

of public reserved lands in developing the management plan. The director is entitled to the full cooperation of the Bureau of Geology and Natural Areas, the Department of Inland Fisheries and Wildlife, the Maine Land Use Regulation Commission and the State Planning Office in compiling and maintaining the inventory of the public reserved lands. The director shall consult with those agencies as well as other appropriate state agencies in the preparation and maintenance of the comprehensive management plan for the public reserved lands. The plan must provide for the demonstration of appropriate management practices that will enhance the timber, wildlife, recreation, economic and other values of the lands. All management of the public reserved lands, to the extent practicable, must be in accordance with this management plan when prepared.

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

## **Appendix G.**

### **Rules for the Use of Public Reserved Lands**

---

SUMMARY: These rules give the definition of "Public Lands" and explain the Bureau's policy governing public use on camping, fires, litter, disturbances, altering of property, abandoned property, storage of property, closed areas, vehicular use, firearms, preserves, and enforcement and penalty.

---

#### 1.1 Definitions

"Public Lands" shall include the Public Reserved Lands of the State and all other lands under the jurisdiction, and control of the former Bureau of Public Lands. "Bureau" shall mean the Bureau of Parks and Lands within the Department of Conservation.

#### 1.2 Camping

No person shall camp, stay overnight or maintain any tent, camper, shelter, trailer or other camping unit on any public lands for more than fourteen days in any 45 day period, without the prior written permission of the Bureau.

#### 1.3 Fires

Unless ground is snow covered no person shall build or maintain an open fire including charcoal on public lands except (i) at a campsite duly authorized and designated for open fires or (ii) where a permit has been obtained for such fire from the Maine Bureau of Forestry. For visitor safety and resource protection, open fires must be attended. Campstoves fueled with sterno, propane, kerosene, etc. are allowed in any safe location. Charcoal fires, off the ground, attended and used in proper cooking containers, which will not leave a disposable residue or ash on the ground, are permitted on structurally improved leased lots. On islands in tidal areas, all fires shall be built below the mean high tide line.

#### 1.4 Litter

In accordance with State law that prohibits littering, trash which cannot be burned in accordance with Section 1.3 Fires, must be carried out. Plastic and other tarps such as shelters shall be removed.

#### 1.5 Disturbances

All persons camping on public lands will conduct themselves in a manner which does not impair the reasonable use and enjoyment of public lands by others. In consideration of other visitors and wildlife, pets in campsites must be kept leashed, and shall not be left unattended; outside of campsites, pets must be kept under control. To maintain reasonable quiet, the use of chain saws, generators, and other power equipment is prohibited within and around campsites.

#### 1.6 Property

No person shall deface, paint, damage or mutilate any structure, natural feature, tree or marker, on any public lands. Dead and down wood only may be used for campfires. No living trees shall be cut without the Bureau's prior written permission.

#### 1.7 Abandoned Property

Any boat, tent, shelter or other personal property (or structure or fixture) which is left unattended on any public land for more than three consecutive days without prior written authorization from the Bureau shall be deemed to have been abandoned, and the Bureau may take custody of such

property and dispose of the same in accordance with the law. For purposes of this regulation, personal property shall be deemed to be "unattended" unless it is actually personally used.

#### 1.8 Closed Areas

During periods determined by the Bureau to be critical for forest fire danger or other condition, any portion of the public lands may be closed to the public at the discretion of the Bureau and no person shall enter or remain in said closed area except agents of the Bureau, law enforcement personnel in the line of duty and others authorized by the Bureau in writing. In making a determination to close any portion of the public lands because of a forest fire danger, the Bureau will consult with the Bureau of Forestry.

#### 1.10 Enforcement

These regulations may be enforced by any law enforcement officer. These regulations shall constitute written authorization to the appropriate agencies of the State and its political subdivisions to enforce the provisions of Title 12, M.R.S.A. §556

#### 1.11 Authorized Storage

Storage of private property on public lands is authorized only by special use permit issued by the Bureau. Unauthorized stored property shall be confiscated or destroyed.

Permits for storage will be subject to an annual fee (based upon the estimated cost of disposing such property). Permittees will be liable for the removal of their property upon request of the Bureau. Failure to remove such property within thirty (30) days of notice will result in the forfeit of said property and payment of a \$50 penalty.

#### 1.12 Firearms

Except for persons holding a valid Maine concealed weapons permit, loaded firearms are not permitted in campsites, on marked hiking trails, or at boat launches and picnic sites, and should not be discharged within 300 feet of such areas.

#### 1.13 Vehicular Use

Vehicles shall use only designated public access roads. Parked vehicles shall not block any road (including closed side roads).

Off-road travel by wheeled vehicles of any sort is prohibited. Except as specified by the Bureau, all-terrain vehicles (ATVs) are not permitted on public lands.

Snowmobiles are permitted to traverse public lands, but may not travel on plowed roads, marked cross-country ski trails, and other areas so designated.

#### 1.14 Preserves

To preserve Critical Areas, Forest Preserves, Cultural Resources and other designated sites for educational and scientific purposes, such areas and objects are to be left undisturbed.

## Appendix H. Glossary

**“Age Class”:** the biological age of a stand of timber; in single-aged stands, age classes are generally separated by 10-year intervals.

**“ATV Trails”:** designated trails of varying length with a variety of trail surfaces and grades, designed primarily for the use of all-terrain vehicles.

**“All-Terrain Vehicles”:** motor driven, off-road recreational vehicles capable of cross-country travel on land, snow, ice, marsh, swampland, or other natural terrain. For the purposes of this document an all-terrain vehicle includes a multi-track, multi-wheel or low pressure tire vehicle; a motorcycle or related 2-wheel vehicle; and 3- or 4-wheel or belt-driven vehicles. It does not include an automobile or motor truck; a snowmobile; an airmobile; a construction or logging vehicle used in performance of its common functions; a farm vehicle used for farming purposes; or a vehicle used exclusively for emergency, military, law enforcement, or fire control purposes (Title 12, Chapter 715, Section 7851.2).

**“Backcountry Ponds”:** ponds having no existing road access by two-wheel drive motor vehicles during summer months within ½ mile of the normal high water mark of the body of water with no more than one noncommercial remote camp and its accessory structures within ½ mile of the normal high water mark of the body of water, that support cold water game fisheries and may offer outstanding foot trail, remote camping, and scenic vista opportunities.

**“Backpack Hiking Trails”:** designated foot trails of moderate to long length designed primarily for overnight foot traffic, with primitive campsites provided for overnight camping.

**“Campgrounds”:** areas designed for transient occupancy by camping in tents, camp trailers, travel trailers, motor homes, or similar facilities or vehicles designed for temporary shelter. Developed campgrounds usually provide toilet buildings, drinking water, picnic tables, and fireplaces, and may provide disposal areas for RVs, showers, boat access to water, walking trails, and swimming opportunities.

**“Carry-In Boat Access”:** dirt or gravel launch sites accessible by foot over a short to moderate length trail that generally accommodates the use of only small watercraft. Includes a trailhead with parking and a designated trail to the access site.

**“Clear-cut”:** a single-age harvesting method in which all trees or all merchantable trees are removed from a site in a single operation.

**“Commercial Forest Land”:** the portion of the landbase that is both available and capable of producing at least 20 cubic feet of wood or fiber per acre per year.

**“Commercial Harvest”:** any harvest from which forest products are sold. By contrast, in a pre-commercial harvest, no products are sold, and it is designed principally to improve stand quality and conditions.

**“Community”**: an assemblage of interacting plants and animals and their common environment, recurring across the landscape, in which the effects of recent human intervention are minimal (“Natural Landscapes of Maine: A Classification of Ecosystems and Natural Communities” Maine Natural Heritage Program, April 1991).

**“Compartment”**: the basic inventory unit, a parcel of forest land, easily identifiable on the ground and generally ranging between 500 and 1,500 acres in size.

**“Cross-Country Ski Trails”**: designated winter-use trails primarily available for the activity of cross-country skiing. Trails may be short to long for day or overnight use.

**“Cutting Cycle”**: in uneven-aged management, the interval between harvest operations.

**“Day Walking Trails”**: designated foot trails of short to moderate length designed primarily for day use foot traffic.

**“Demonstration Forest”**: a forest in which management activities are designed to illustrate various facets of forest management; and/or to demonstrate exemplary multiple use techniques including but not limited to natural, scenic, wildlife, and educational values; and where information transfer through signs, brochures, and tours is provided.

**“Ecological Reserve”**: a parcel of land designated by the Bureau of Parks and Lands Director, containing certain “ecosystem types” (see below), and set aside primarily for non-manipulative scientific research and education purposes.

**“Ecosystem Type”**: a group of communities and their environment, occurring together over a particular portion of the landscape, and held together by some common physical or biotic feature. (“Natural Landscapes of Maine: A Classification of Ecosystems and Natural Communities.” Maine Natural Heritage Program, April 1991).

**“Essential Habitat”**: areas currently or historically providing physical or biological features essential to the conservation of an endangered or threatened species in Maine, and which may require special management considerations. Examples of areas that could qualify for designation are nest sites or important feeding areas. For some species, protection of these kinds of habitats is vital to preventing further decline or achieving recovery goals.

**“Exotic (nonnative)”**: a species that enters or is deliberately introduced into an ecosystem beyond its historic range, except through natural expansion, including organisms transferred from other countries into the state, unnaturally occurring hybrids, cultivars, genetically altered or engineered species or strains, or species or subspecies with nonnative genetic lineage.

**“Forest Condition”**: the state of the forest, including the age, size, height, species, and spatial arrangement of plants, and the functioning as an ecosystem of the combined plant and animal life of the forest.

**“Forest Type”**: a descriptive title for an area of forest growth based on similarities of species and size characteristics.

**“Group Camping Areas”**: vehicle or foot-accessible areas designated for overnight camping by large groups. These may include one or more privies, several fire rings or grills, a minimum of one water source, and several picnic tables.

**“Group Picnic Area/Shelters”**: areas designed to accommodate large groups that are generally separated from other nearby recreation facilities. These areas will usually include a large indoor charcoal grill and a large field area for game play. Outhouses may be shared with other users of the parcel.

**“Horseback Ride/Pack Stock Trails”**: generally moderate to long-distance trails designated for use by horses, other ride or pack stock.

**“Improved Boat Access”**: vehicle-accessible hard-surfaced launch sites with gravel or hard-surface parking areas. May also contain one or more picnic tables, an outhouse, and floats or docks.

**“Interpretation, Interpretive Trails”**: an educational activity which aims to reveal meanings and relationships through the use of original objects, by first hand experience, and by illustrative media, rather than simply to communicate factual information.

**“Invasive Species”**: generally nonnative species that invade native ecosystems and successfully compete with and displace native species due to the absence of natural controls. Examples are purple loosestrife and the zebra mussel.

**“Log Landings”**: areas, generally close to haul roads, where forest products may be hauled to and stored prior to being trucked to markets.

**“Management Roads”**: roads designed for timber management and/or administrative use that may be used by the public as long as they remain in service. Management roads may be closed in areas containing special resources, where there are issues of public safety or environmental protection.

**“Mature Tree”**: a tree which has reached the age at which its height growth has significantly slowed or ceased, though its diameter growth may still be substantial. When its annual growth no longer exceeds its internal decay and/or crown loss (net growth is negative), the tree is over-mature.

**“Non-mechanized”**: a mode of travel across the landbase which does not utilize internal combustion, electric, or mechanically powered conveyances; which in itself constitutes a recreational activity, or facilitates participation in a recreational activity.

**“Motorized”**: a mode of travel across the landbase which utilizes internal combustion or electric powered conveyances; which in itself constitutes a recreational activity, or facilitates

participation in a recreational activity. This includes or assumes the use of mechanized forms of travel, such as a bicycle, for the same purpose.

**“Mountain Bike Trails”:** designated trails generally located on rough trail surfaces with moderate to steep grades, designed primarily for the use of mountain bicycles with all-terrain tires by individuals seeking a challenging experience.

**“Multi-aged Management”:** management which is designed to retain two or more age classes and canopy layers at all times. Its harvest methods imitate natural disturbance regimes, which cause partial stand replacement (shelterwood with reserves) or small gap disturbances (selection).

**”Multi-use Trail”:** a trail whereby more than one use occurs and varies by season.

**“Native”:** any species present in an ecosystem within its historic range, or naturally expanded from its historic range.

**“Natural Resource Values”:** described in Maine’s Natural Resource Protection Act to include coastal sand dunes, coastal wetlands, significant wildlife habitat, fragile mountain areas, freshwater wetlands, great ponds and rivers, streams, and brooks. For the purposes of this plan they also include unique or unusual plant communities.

**“Nontimber Management”:** describes acres on which, due to administrative decision or site/terrain factors, either will not be cut or otherwise are unlikely to be cut. These acres will be excluded from sustainable harvest calculations.

**“Old Growth Stand”:** a stand in which the majority of the main crown canopy consists of long-lived or late successional species usually 150 to 200 years old or older, often with characteristics such as large snags, large downed woody material, and multiple age classes, and in which evidence of human-caused disturbance is absent or old and faint.

**“Old Growth Tree”:** for the purposes of this document, a tree which is in the latter stages of maturity or is over-mature.

**“Original Public Lot”:** That portion of the public landbase that constitutes “original reservations” held out from the sale of township blocks as surveyed in the 1800’s. These areas were at first held in common with others, most of which have now been delineated as separate lots.

**“Pesticide”:** a chemical agent or substance employed to kill or suppress pests (such as insects, weeds, fungi, rodents, nematodes, or other organism) or intended for use as a plant regulator, defoliant, or desiccant. (LURC Regulations, Ch. 10)

**“Primary Forest”:** forest areas having no discernible evidence of human-caused disturbance. Depending on where a particular primary forest is along its stand replacement sequence, it may or may not fit the definition of old growth.

**“Primitive Campsites”:** campsites that are rustic in nature, have one outhouse, and may include tent pads, Adirondack-type shelters, and rustic picnic tables. Campsites are generally accessed by vehicle, foot, or water.

**“Primitive Picnic Areas”:** trail or water access only areas that may contain one or more rustic picnic table, fire ring or outhouse.

**“Public Road or Roadway”:** any roadway which is owned, leased, or otherwise operated by a government body or public entity. (LURC Regulations, Ch. 10)

**“Public Use Roads”:** all-weather gravel or paved roads designed for two-way travel to facilitate both public and administrative access to recreation facilities; and includes parking facilities for the public. Management will include roadside aesthetic values normally associated with travel-influenced zones.

**“Recreation Biking Trails”:** designated trails of short to moderate length located on hard-packed or paved trail surfaces with slight to moderate grades, designed primarily for the use of groups or individuals seeking a more leisurely experience.

**“Recreation Values”:** the values associated with participation in outdoor recreation activities.

**“Regeneration”:** both the process of establishing new growth and the new growth itself, occurring naturally through seeding or sprouting, and artificially by planting seeds or seedlings.

**“Regulated Forest Acreage”:** that portion of the commercial forest landbase upon which the sustainable harvest will be calculated at or near maximum sustainable levels.

**“Release Cutting”:** any cutting operation designed to remove competing vegetation from or establish proper spacing intervals among featured trees.

**“Riparian”:** an area of land or water that includes stream channels, lakes, floodplains and wetlands, and their adjacent upland ecosystems.

**“Rotation”:** the age at which stands of timber are harvested for particular economic or silvicultural objectives.

**“Salvage”:** a harvest operation designed to remove dead and dying timber in order to remove whatever value the stand may have before it becomes unmerchantable.

**“Selection”:** related to multi-aged management, the cutting of individual or small groups of trees; generally limited in area to patches of one acre or less.

**“Semi-Regulated Forest Acreage”:** describes acres on which, due to site, terrain or nontimber values, will yield commercial forest products at rates significantly lower than the maximum sustainable were timber the dominant use. These acres, which will have periodic but non-regular

harvests, are to be distinguished from those on which commercial timber harvesting will be excluded.

**“Service Roads”:** summer or winter roads located to provide access to Bureau-owned lodging, maintenance structures, and utilities. Some service roads will be gated or plugged to prevent public access for safety, security, and other management objectives.

**“Significant Habitat”:** those habitats regulated by the Natural Resources Protection Act (NRPA) administered by the Maine Department of Environmental Protection. Essential habitats include freshwater wetlands, vernal pools, waterfowl and wading bird habitats, deer wintering areas.

**“Silviculture”:** the branch of forestry, which deals with the application of forest management principles to achieve specific objectives with respect to the production of forest products and services.

**“Single-aged Management”:** management which is designed to manage single age, single canopy layer stands. Its harvest methods imitate natural disturbance regimes, which result in full stand replacement. A simple two-step (seed cut/removal cut) shelterwood is an example of a single-aged system.

**“Site Quality”:** the combination of environmental factors and species' requirements, which serve to measure the degree of success with which a particular species of tree will occupy a given area of the forest.

**“Shared Use”:** recreational uses that occur concurrently on a given segment of road or trail.

**“Snowmobile Trails”:** designated winter-use trails of varying length located on a groomed trail surfaces with flat to moderate grades, designed primarily for the use of snowmobiles.

**“Specialized Habitat”:** habitat areas and features including rare natural communities, riparian areas, wetlands, mast-producing trees (beech and oak), grasslands, snags and den trees, large woody debris on the ground, raptor nesting trees, apple trees, and alpine slopes.

**“Stand”:** a group of trees, the characteristics of which are sufficiently alike to allow uniform classification.

**“Sustainable Harvest”:** that level of timber harvesting, expressed as treated acres and/or volume removals, which can be conducted on a perpetual basis while providing for nonforest values as expressed in this document. Ideally this harvest level would be “even-flow,” that is, the same quantity each year. In practice, the current condition of the different properties under Bureau timber management, and the ever-changing situation in markets, will dictate a somewhat cyclical harvest, which will approach even-flow only over time periods of a decade or more.

**“Sustainable Harvest Unit”:** a grouping of Bureau parcels with total area in the range of 10,000 to 50,000 acres, typically one or more consolidated units plus nearby smaller tracts, for

which forest conditions are similar enough to make unified sustainable harvest calculations feasible.

**“Unimproved Boat Access”:** vehicle-accessible launch sites with dirt or gravel ramps to the water and parking areas, and where no other facilities are normally provided.

**“Unregulated Forest Acreage”:** describes acres on which, due to administrative decision or site/terrain factors will not be harvested, or are very unlikely to be harvested. These acres will be excluded from sustainable harvest calculations.

**“Wide-area (Landscape)”:** in the context used in this document, this is the large-scale view of the land, beyond forest stand or compartment level, taking in entire consolidated units or more, and including similarities and contrasts with conditions on abutting lands.

## **Appendix I. References**

US Census 2000

Wilkerson, Brooke. 2007. *Natural Resources Inventory for the Bureau of Parks and Lands Kennebec Highlands Unit*. Maine Natural Areas Program, Maine Department of Conservation.

Mosher, John P. and Cramner, Leon. 2004. *Report on Phase I Archaeological Survey of the Kennebec Highlands Land for Maine's Future Board Acquisition in Rome, Vienna, New Sharon and Mount Vernon, Maine*. Maine Historic Preservation Commission

US Forest Service, Northeastern Forest Inventory and Analysis, 2003 Maine Inventory Tables, Table 1. Distribution of forest land by biophysical region, Maine, 2003

Kablitz, Antje. 2007. Draft KH Inventory Report. Planning Decisions, Inc.