

- Address the impermissible seasonal residency by an Attean Lodge employee at the landing, potentially with the development of an alternative site for the trailer up the road, outside the protected shoreline riparian zones.

Potential Agricultural Lease

- Determine whether harvesting of hay from the field near Attean Landing will continue; if so, develop an agricultural lease to permit and regulate this use.

Cold Stream Forest Unit

This section provides background information on the Cold Stream Forest property, including the general character of the land base; geologic and ecological resources and natural communities; wildlife resources; historic and cultural resources; recreation and visual resources; and timber resources. This is followed by a summary of the key management issues and opportunities that the Plan will seek to address through the Vision, resource allocations and management recommendations for the unit.

Character of the Land Base and Acquisition History

The Cold Stream Unit was acquired in March 2016, with the primary goal of protecting wild native brook trout habitat and deer wintering habitat. The acquisition was accomplished with both Forest Legacy Program and Land for Maine’s Future (LMF) funds. In the application for LMF funds, the Bureau committed to special protective measures for riparian areas, given the significance of the fisheries resource (BPL and TPL, 2014). (The measures were to be specified in a Habitat Management Agreement, which is addressed below, under *Wildlife and Fisheries Resources*.)

The 8,150 acres is divided into north and south sections by Capital Road. About half the acreage surrounds a group of ponds at the north end of the unit. A roughly quarter mile-wide corridor extends south for about eight miles on either side of Cold Stream, before widening out at the south end of the Unit. A mile and a half stretch of Cold Stream upstream of Capital Road flows through a 200-300 ft. deep gorge. Additional forested acreage is near Capital Road, adjacent to the Johnson Mountain and West Forks Plt. NE lots, and at the south end of the Unit. A 100-foot wide Central Maine Power-owned powerline ROW crosses the stream corridor half a mile south of Capital Road, along the Johnson Mountain/West Forks town line.

Natural Resources

(Note: The information in this section is excerpted from the Natural Resource Inventory report on the Cold Stream Unit, which is based on 2017 field surveys and is available from MNAP.)

Geology and Soils

The underlying bedrock consists of various northeast-southwest bands formed over 350 million years ago. The northern portion of the parcel is primarily underlain by sandstone, slate, and rhyolite. The southern portion of the parcel is primarily underlain by mudstone, quartzite, phyllite, and mélangé (rock characterized by fragments and blocks of multiple sizes embedded in a matrix of finer-grained material). A relatively small (163 acre) band of calcareous bedrock (limestone) is mapped crossing the stream corridor in the central portion but the vegetation does not appear to reflect this calcareous influence.

Most of the parcel is covered in till (gravel and stones) deposited following the retreat of the last glacier over 11,000 years ago. The property also contains various fine-grained sediment deposits of glacial origin, including glacial outwash deposits, ribbed moraine, ice contact deposits, and several eskers. Soils on the parcel are characterized by silt loams and sandy loams formed from glacial till. The most extensive soil types are the Danforth-Masardis-Shirley series, which tend to be well drained to somewhat excessively drained. However, other soils on the property are somewhat poorly drained to very poorly drained, such as the Telos-Monarda-Monson association around spruce flats and wetlands.

Hydrology and Wetlands

The Cold Stream Forest Unit contains ~30 miles of mapped perennial streams, including a 15-mile section of Cold Stream. Most of the property drains into Cold Stream, which empties out to the south into the Kennebec River. The northernmost portion of the property drains into Parlin Stream, which eventually flows northward into the Moose River. The areas south of the confluence of Cold Stream and the Kennebec River drain into the Lower Dead River to the west and into the Kennebec River to the east. Several stretches of Cold Stream, including Cold Stream Falls, flow through steep, narrow ravines approaching 150 feet in depth.

More than 600 acres of the property is mapped as wetland according to the National Wetlands Inventory. Most of the wetlands occur in the northern portion, including the ponds, as well as at least one bog complex and several beaver meadows.

Natural Communities

Reflecting timber harvesting over the past two decades, much of the Cold Stream Forest exists as a matrix of early successional Lowland Spruce-Fir Forest and Northern Hardwood Forest, within which other smaller patch natural community types (including a number of wetlands) occur. One of the tract's larger wetland complexes lies in the northern portion of the parcel, northeast of Durgin Pond. This ~50 acre peatland supports a Spruce-Larch Wooded Bog, a Sheep laurel Dwarf Shrub Bog, and a Leatherleaf Boggy Fen.

The steepest slopes of the ravine through which Cold Stream flows in the middle portion of the property support a mature to late-successional Spruce-fir-Northern Hardwoods Ecosystem, which is dominated by red spruce with yellow birch, balsam fir, white pine, and old paper birch. Stands on portions of these very steep (>60%) slopes show little to no signs of past harvesting; one cored cedar tree was 130 years old.

Aside from the steep ravine of Cold Stream, mature forest is uncommon on the parcel. One of the areas supporting older forest is around Lang Pond, where a mature, roughly even-aged stand of Lowland Spruce-Fir Forest occurs. Tree ages (~115 years old) and charcoal found in the soil indicate that this stand likely originated after fires around 1900. Southeast of Lang Pond, intact northern hardwood forest occurs along a small rocky stream draining out of the pond. This stand was last harvested 40+ years ago and contains moderate amounts of deadwood. Further south and downslope the sugar maple forest grades into a Beech-Birch-Maple Forest. This forest type is dominated by sugar maple and yellow birch.

There are several other small pockets of mature forest. These include a 2-acre late successional area of Beech-Birch-Maple forest west of Big Berry Pond and an isolated area of the same type of forest within the Spruce-fir-Northern Hardwoods Ecosystem described above, both with numerous large yellow birch and sugar maples. Each of these are considered high value late successional forest stands.

Multiple areas of the parcel apparently burned approximately 100 years ago. In addition to the charcoal found near Lang Pond, the steep Cold Stream ravine slopes showed structural indications of previous wildfire. Rapid early tree growth visible in tree cores, followed by gradually declining growth rates, as well as evidence of previous birch overstory, both suggest that wildfires were responsible for stand origin.

Alluvial areas of the Cold Stream valley floor support a moderately enriched Sugar Maple Forest. Further downstream, an extensive Cobble Rivershore natural community occurs along the stream banks, characterized by lakeshore sedge (*Carex lenticularis*) and several species of flowering herbaceous plants. Small rivershore bedrock outcrops nearby support the uncommon bulbet bladderfern (*Cystopteris bulbifera*) and fragile fern (*Cystopteris fragilis*). A small patch of Hardwood River Terrace Forest (a type of floodplain forest) occurs slightly above the stream channel, with a canopy of black ash and sugar maple. Small patches of Northern White Cedar Seepage Forest also occur where small streams run down the steep ravine slopes.

Exemplary Natural Communities and Rare Plant Species

Both the Cobble Rivershore natural community described above, and a spruce-fir northern hardwoods ecosystem on the adjacent valley floor and lower slopes of the ravine (and partly composed of the enriched Sugar Maple Forest also described above) are mapped by MNAP as exemplary natural communities. Although some uncommon understory plant species were noted during recent surveys, as noted above, no rare plants were found.

Wildlife and Fisheries Resources

Cold Stream Forest's 8,000+ acres provide habitat for a number of wide-ranging game species of Maine's North Woods, including black bear, white-tailed deer, and moose. MDIF&W has mapped 578 acres of inland wading bird and waterfowl habitat (128 rated as high quality, 450 rated as medium quality) in the northern part of the Unit. A large un-mapped Deer Wintering Area (DWA) in the southernmost third of the property provides habitat and connectivity to wintering areas farther to the southwest.

The only record of endangered or threatened wildlife on the Unit is rusty blackbird (*Euphagus carolinus*), an ecologically distinct wetland-dependent species that survey data indicates is in decline, and a species of special concern in Maine. The species has been recorded at two locations in the north part of the Unit. However, the northern half of the Unit has been designated critical habitat for the Canada Lynx, federally listed as threatened by the US Fish and Wildlife Service.

Seven of the nine named ponds in the northern part of the unit have been designated by MDIF&W as SHFWs. No stream or pond in the Cold Stream watershed has been stocked since 1954. Four of the SHFW ponds are considered to have "outstanding" or "significant" fishery

value, per the Maine Wildland Lakes Assessment (see table below). Several are on or close to roads; most others can be reached on foot following existing foot paths. Four are zoned as Remote Ponds by LUPC, with a half mile P-RR protection subdistrict surrounding them within which new roads and other development are restricted.

MDIF&W has established special fishing regulations for the SHFW brook trout ponds as well as Fernald Pond: All are “fly fishing only” and most have a two-fish limit. Additional special regulations apply to some of the ponds. All are closed to ice fishing. Special regulations also apply to Cold Stream south of the Capital Road bridge: artificial lures only and catch-and-release from August 16 to the end of the season on September 30. The lower part of Cold Stream has been documented to provide critical thermal refuge and spawning habitat for wild brook trout inhabiting the Upper Kennebec River and Dead River (E/PRO, LLC, 2000).

Physical and Fisheries Data on Ponds within the Cold Stream Unit						
Water Body	Size (acres)	Max. Depth (feet)	Principal Fisheries (see key)	Stocked? (Y/N)	LURC Fisheries Rating (see key)	LURC Resource Class (see key)
Lang Pond	30	30	BT*	N	O	1B
Little Lang Pond	13	18	BT*	N	O	1B
Durgin Pond	15	9	BT*	N	S	2
(Big) Berry Pond	35	21	BT*	N	S	2
Little Berry Pond	12	17	BT*	N	NA	3
Lone Jack Pond	15	8	BT*	N	NA	3
Snake Pond	8	no data	BT*	N	NA	3
Fernald Pond	8	no data	None	N	NA	NA
Campstove Pond	10	4	None	N	NA	NA

Sources: Maine Lakes: Geographic & Morphometric Information (MDEP/MDIF&W, 2010), Maine Wildlands Lake Assessment (LURC, 1987); Lake Survey Maps (MDIF&W, various dates); Online Maine Fishing Guide (MDIF&W).

Key to Principal Fisheries

BT = brook trout (* = State Heritage Fish Water)

Key to LURC Maine Wildland Lakes Assessment resource ratings

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

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

Habitat Management Agreements

As required for LMF-funded acquisitions, BPL and MDIF&W have developed two Habitat Management Agreements (HMAs) that will help guide timber management and other activities, particularly in the riparian areas of Cold Stream, its tributaries and the ponds, and in the deer wintering area. The HMAs (provided in Appendix C) were adopted in November, 2016.

The *Cold Stream Forest Fisheries Habitat HMA* covers the entire Unit. The agreement states goals and objectives for wild brook trout, and provides guidelines for management of fisheries resources in the Unit, specifically management/harvest strategies in riparian corridors and management of public access to Cold Stream and the headwater ponds.

The *Cold Stream Forest Deer Wintering Area HMA* addresses 3,000+ acres comprising the southern third of the Unit, most of which was identified as a “biological deer yard” (as described in the LMF proposal). Prior to the State’s ownership, part of this area was managed a “Cooperative Deer Wintering Area,” one of 16 such DWAs managed by Plum Creek in cooperation with MDIF&W. The agreement states goals and objectives for the biological deer wintering area (BDWA), provides guidelines and principles for management of the area, and further addresses several aspects of timber harvesting, road construction, recreational use, and other uses/activities.

Each HMA will be reviewed annually, with renewal of the agreements every 5 years (Fisheries) or 15 years (BDWA) into perpetuity. The Fisheries HMA takes precedence where there is overlap between the two, recognizing the inherent compatibility of fisheries management in the BDWA.

History and Culture

There exists a long history of recreational use of the trout ponds at the north end of the Unit, in some families extending back for several generations. At one time, some of this use may have been associated with private and sporting camps at Parlin Pond; a 1924 USGS topographical map shows a jeep trail extending from the east side of Parlin Pond and branching out to pass by several of the Cold Stream Forest ponds, with structures indicated (possibly outpost camps) at Big Berry and Lang Pond. There are no known archeological resources on the Unit.

Access

All portions of the Unit are accessible to vehicles from US 201 and Capital Road via several forest management roads on which ROWs were granted by Plum Creek (now Weyerhaeuser) as part of the State’s acquisition of the parcels. Parts of this road network cross the State-owned parcels, with ROWs retained by Plum Creek across the State lands. Eighteen of these roads and road segments are included in a Reciprocal Easement Agreement, under which BPL has the right to maintain the roads owned by Plum Creek for public access. Several additional miles of gravel roads on the Unit not covered by the agreement remain open to vehicles.

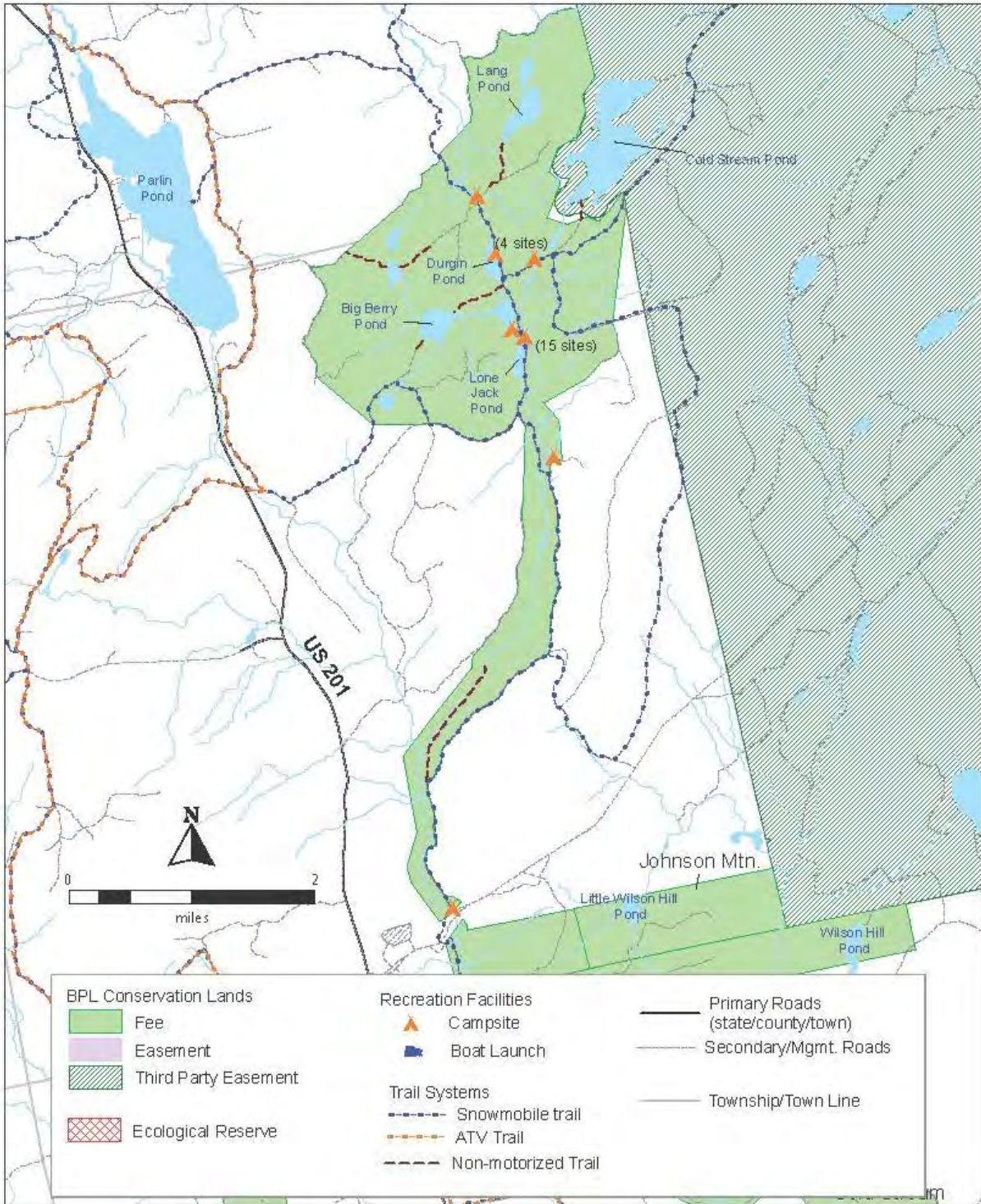
The roads used to access the unit are generally in good condition, and most are drivable with reasonable care by standard non-4WD vehicles. With some notable exceptions, most of the roads within the Unit are also in good condition. Map Figures 7a and 7b depicts the road system used to access the Unit as well as the roads and recreation resources on the Unit.

Recreation Resources

The most prominent and attractive features of the Cold Stream Unit are the several small ponds described above and Cold Stream as it flows the 14.5 miles from north to south through the Unit, passing through several deadwaters and beaver flowages attractive for paddling, and over two small waterfalls.

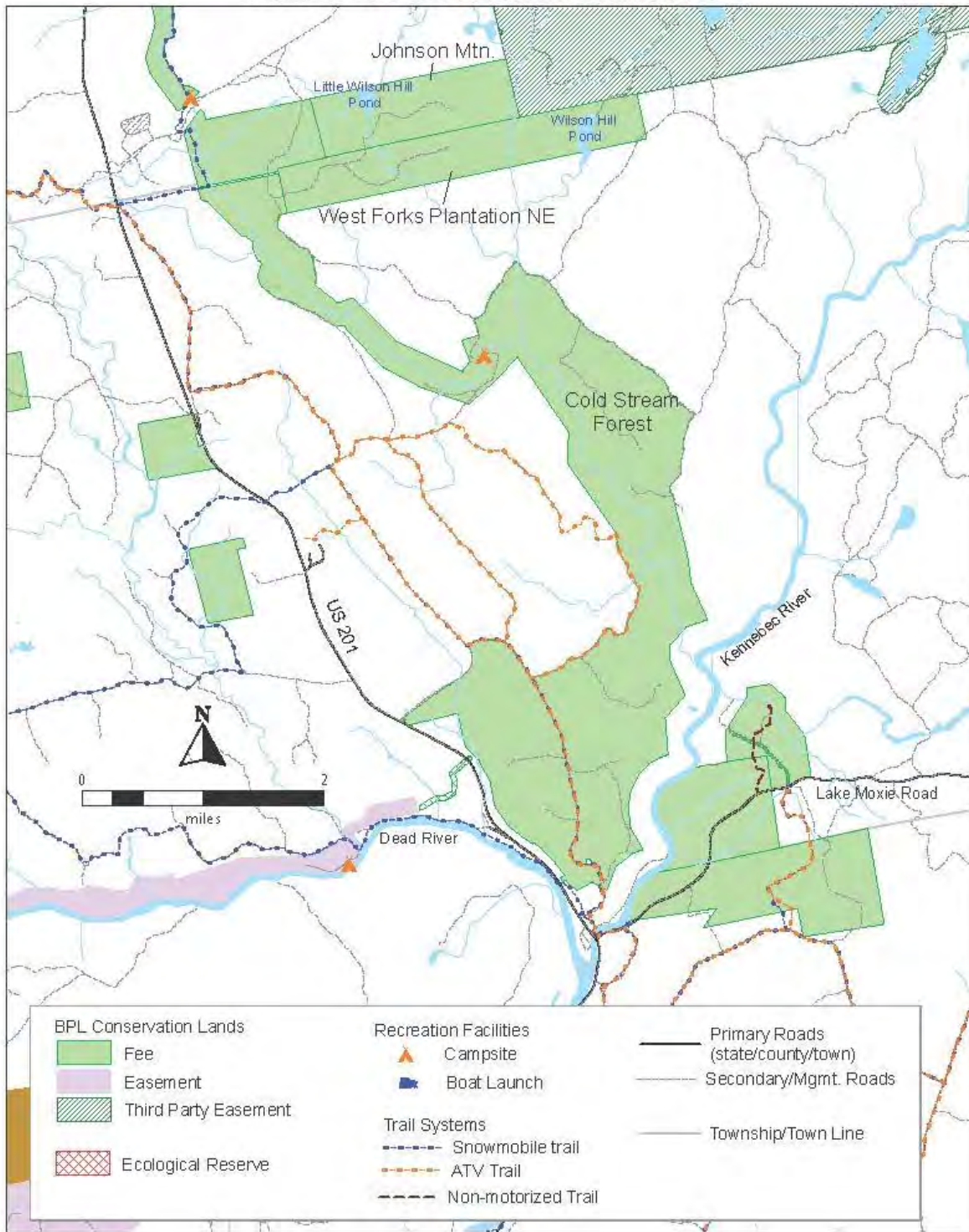
Under the previous ownership, the 15-site Lone Jack primitive campground, with fire rings, picnic tables, and three privies was established along Cold Stream east of Lone Jack Pond. There is a small floating dock on the stream at the campground. Four additional roadside shoreline campsites were established next to Durgin Pond, and several others in scattered

Cold Stream Forest Unit - North Section Roads and Recreation Facilities



MAP FIGURE 7a.

Cold Stream Forest Unit - South Section Roads and Recreation Facilities



MAP FIGURE 7b.

locations near to roads. The campsites, particularly at Lone Jack and Durgin, are frequently used by RV campers, some whom appear to stay for extended periods.



Campsites at Lone Jack campground.

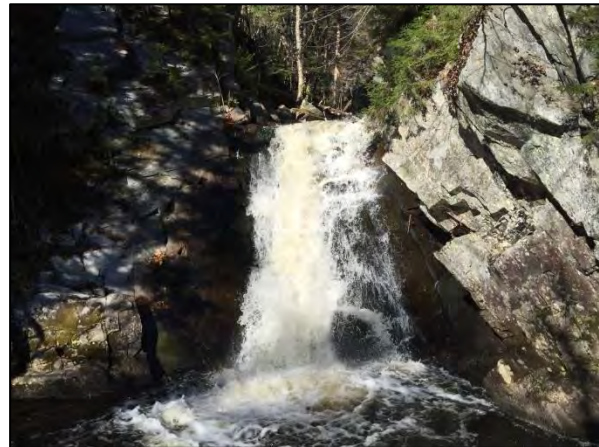


Roadside campsite at Durgin Pond.

Walk-in trails have been established into Lang Pond and Big Berry Pond, all less than 0.5 miles in length. A short trail also extends to the south end of Cold Stream Pond (on the MRCE) from a dead-end management road. There are additional informal trails, by appearances less used and maintained, into Snake and Fernald Ponds, and similar trails into Cold Stream downstream of the headwaters area. A one-mile well-used trail, mainly following an old road, extends from an informal roadside parking area to 20-foot Cold Stream Falls, a scenic highlight of the Unit.



Angler trail to Lang Pond.



Cold Stream Falls.

For several decades, the commercial timberland owners of the property (most recently Plum Creek) had a cooperative relationship with long-time recreational users of the area under which the primitive camping facilities and informal trails were developed and maintained. Maintenance, as well as some road and bridge work, was conducted by the users with the oversight of the landowners.

In general, the existing trails are not adequately signed or blazed; some are difficult to locate. Portions of the trails to the ponds cross wet areas, which has led to development of short detours and placement of poles laid “corduroy-style” across the trail tread.

Historically, recreation use of the area has included the practice of storing canoes and other small boats at several of the ponds, particularly those with only walk-in access. There are also scattered boats stored at ponds accessible by vehicle, such as Lone Jack Pond. Over the years, the number of boats stored has greatly increased to the point that there are now over 80 boats on the south shore of Lang Pond alone. (In contrast, a 1973 MDIF&W survey reported “at least 10” boats left on the shore at Lang Pond.) There are similar numbers of boats stored on the south and north shores of Big Berry Pond. The photos below show a small portion of the stored boats.



Stored boats and rack at Lang Pond.



Stored boats at Big Berry Pond.

At both Land and Big Berry Pond, a broad area of shoreline extending for several hundred feet is occupied by boats. Some of the watercraft are unusable or in poor condition, and few are marked with the owner’s name as required by the IRP. Some do not appear to have been used for several years, judging by the duff and debris accumulated on them. Rudimentary boat racks have been constructed from poles lashed to trees or out of metal scavenged from old camps that had stood nearby. Most of the boats are locked to trees.

The Cold Stream property is also used for dispersed activities, particularly hunting, wildlife viewing and sightseeing, facilitated by the good vehicle and pedestrian access afforded by the road system reaching into all parts of the Unit. The previous landowner leased a total of seven bear bait sites to hunting guides, four on the north part of the Unit (all west of the ponds) and three on the south part of the Unit. Additional bait sites are on the commercial forestland surrounding the Unit.

The area around The Forks is a choke point for motorized trails in the region. ITS 87 runs through the Unit from north to south and is an important regional snowmobile route, connecting to Rockwood and Jackman to the north and The Forks to the south. Other connecting trails extend east and west from the Unit, including one popular branch leading to Coburn Mountain. A designated ATV route crosses the south part of the Unit, connecting to The Forks Area. There are no other designated ATV routes on the Unit.

Timber Resources

Cold Stream Forest is primarily timbered with softwood and mixedwood stands, and to a lesser extent with hardwood stands. Approximately 7,550 of the 8,160 acres (93 percent) are forested.

Work is ongoing to gather sufficient data to accurately determine what portion of the unit will be regulated forest. However, a rough estimate based on BPL foresters' field work to-date indicates that there are approximately 5,920 acres of regulated forest, greater than 72 percent of the total area. Much of the approximately 1,630 acres of unregulated forest or non-forest are the wetlands that occur in the northern part of the Unit and steep areas of the stream gorge.

Harvest History and Stocking

Substantial quantities of forest products have historically been produced from the lands, and the Unit was heavily harvested prior to State ownership. The Bureau has estimated, based on air photos, that most of the area has been harvested by the previous owner in the past 30 years, with the exception of buffer areas around the ponds and along Cold Stream, including significant harvesting during the past decade. Those recent harvests include one 30-40 acre clearcut, and a number of heavy partial cuts. A majority of the forest (particularly the softwoods) is young (seedling/sapling).

Stand Type Characteristics (regulated acres only)

Because it is a recent acquisition, detailed stand-level data on timber resources at Cold Stream is not yet available. This information will be compiled over the next few years based on field surveys and remote sensing data.

Management Issues, Concerns and Opportunities

The Bureau will manage the Cold Stream Forest Unit for multiple uses including outdoor recreation, wildlife habitat, scenic and natural area protection, water quality protection, and production of forest products. The following discussion summarizes the key management issues and opportunities associated with each of these uses on the Cold Stream Forest lands. Protection of wild brook trout habitat will take precedence across the Unit. At this new Unit, the Bureau will be guided in its approach to recreation and administrative issues, in particular, by an accumulating knowledge and observations of visitor use patterns, behavior, and impacts.

Timber Management

Much of the Cold Stream Forest lands will continue to be managed as a multiple use working forest. The approximately 5,920 acres of regulated forest in the Cold Stream Forest Unit may be allocated to timber management as a dominant or important secondary use. Timber management may be designated as a dominant land use but may also occur as a secondary activity on lands with other dominant resource allocations, such as Remote Recreation or Wildlife Management areas. For example, Wildlife will be the dominant use in riparian buffers and on wetlands and beaver flowages. The Wildlife dominant allocation will also be applied to the 3,000+ acres of BDWA in the south end of the Unit, with all harvesting activity conducted within the protocols and guidelines of the Biological Deer Wintering Area HMA. All harvesting activity in riparian areas will be conducted under the guidelines set forth in the Fisheries Habitat HMA.

Visual management is particularly important near the ponds and Cold Stream. Access is good throughout the Unit, with development of the forest management road system essentially complete.

Wildlife and Habitat Protection/Special Resources

The Habitat Management Agreements provide the road map for management of the two most critical types of habitat on the Unit, wild brook trout habitat and deer wintering area, in close cooperation with MDIF&W. The HMAs are incorporated by reference into this Plan and will be the overriding guiding documents for management of fisheries resources and the biological deer wintering area throughout the life of the Plan.

Trout Unlimited and others have expressed interest in potential stream habitat restoration work, including “chop and drop” projects to add large woody debris (LWD) to streams. Natural recruitment of LWD to streams is an objective of the Fisheries Habitat HMA, and “chop and drop” projects using existing MDIF&W protocol are also authorized. Several years ago, a stream restoration project was completed by MDIF&W at the site of an old bridge crossing on the lower part of Cold Stream, involving the placement of several large boulders in the stream. The Bureau would support additional stream habitat restoration, in accordance with the Fisheries HMA and with the involvement of MDIF&W in the planning and execution of any such project.

The wetlands used by the rusty blackbird will be protected as specialized habitat under a Wildlife dominant resource allocation, and with application of the protocols described in the Wildlife Guidelines for the Public Reserved Lands. See Appendix C for a summary of the designation criteria for Wildlife dominant areas.

The only botanical resources on the Unit of a significance that would justify Special Protection allocations are the Cobble Rivershore community and Spruce-Northern Hardwoods Ecosystem associated with the downstream-most section of Cold Stream. Both of these MNAP-mapped areas are within the major riparian zone extending 330 feet from each side of Cold Stream, which will be allocated to Wildlife Management as the dominant use. The HMA’s, both of which address the areas where these resources occur, place additional constraints on timber management and other activities.

Recreation Resources

A few of the campsites at Lone Jack campground and all of those at Durgin Pond as well as some of the individual roadside sites are on or close to stream or pond shorelines, within the riparian zone. The LUPC shoreland (P-SL1), great pond (P-GP) and wetland protection (P-WL1) zoning in these areas prohibits construction of campsites. Although LUPC rules permit these existing sites to be “grandfathered,” it may be appropriate to move the affected campsites, if feasible, outside the protected zone.

Although the existing campsite amenities are generally in good condition, there are picnic tables and fire rings that should be refurbished or replaced. An inventory and assessment of these amenities is needed. The existing privies should also be evaluated and possibly replaced, and additional toilet facilities considered. The functionality and condition of the dock at Lone Jack Campground should also be evaluated, and replacement considered if appropriate.

The existing angler access trails need to be assessed as to which trails will become permanent formalized trails, and those trails brought up to Bureau standards for trail tread, vegetation clearance, blazing and signage. Wet areas should be addressed.

The initial quarter-mile of the trail to Cold Stream Falls follows a short haul road/skid trail, before dropping down a slope into the Cold Stream riparian corridor. This section of trail will likely be affected by future timber harvesting. Relocating this section to the riparian corridor would eliminate this conflict as well as provide a more attractive setting for the trail. The adequacy of the existing small parking area should also be evaluated.

Administrative Issues

Storage of Boats at Ponds

The Bureau recognizes the traditional practice of storing boats at backcountry ponds, and that anglers and others who visit Cold Stream Forest benefit from having a boat available at the ponds with no vehicle access. The Backcountry Pond Watercraft Storage policy (IRP, section D18) allows for storage of boats on designated backcountry ponds 1) at least 25 feet from the shoreline and 2) with the watercraft owner identified on the watercraft. Canoe racks that are unobstrusive and safe are allowed. Watercraft that are not stored according to the above conditions, or that are decrepit, may be removed by the Bureau.

The current storage of boats at Lang, Big Berry and other ponds does not conform to the policy, in that most do not have the owner identified and many are stored closer than 25 feet to the shoreline. In addition, the decrepit boats stored at these sites are not in keeping with the policy.

The Bureau is also concerned to maintain an appropriate backcountry setting at the ponds. The high number of boats stored and the large areas occupied result in substantial aesthetic degradation. The presence of decrepit boats and other usable boats in poor condition, the scattered way the boats are stored, and the make-shift boat racks also contribute to the unsightliness. The Bureau does not consider storage of a large number of privately owned boats that are unused or rarely used and unavailable to all but the owner to be a suitable use of public land, and considers the sprawling and cluttered appearance of the boat storage areas unacceptable.

Campsite Management

Given the concentration of campsites at Cold Stream Forest, it would be desirable for a volunteer campground host to be on site during the spring through fall peak use period. (A similar arrangement has been in place at the Moosehead Lake East Shoreline camping facilities for several years). The host would perform basic maintenance and report any concerns or problems that arise to the Western Region office.

Access and Road Maintenance

The Bureau is responsible for maintenance of the several miles of public use roads and management roads that remain open to vehicles on the Unit. The Bureau may also conduct maintenance on the roads leading to the Unit, in consultation with Weyerhaeuser and as required to maintain recreation access, under the terms of the Reciprocal Agreement.

Some of the roads on and leading to the Unit need resurfacing or other work. Within the Unit, for example, at the time of the acquisition much of the half-mile section of Lone Jack Road between the campground and Durgin Pond had an uneven, rough cobble surface with poor drainage. Beaver activity frequently flooded the road near the campground when two small bridges were blocked, backing up the flow from Little Berry Pond. Also, a portion of Tower Road descending a grade near the south end of the Unit was badly eroded.

Work began on Lone Jack Road near the campground in fall of 2017, along with bridge and culvert work, grading, graveling and brush control there and at other locations on the Unit. Later, work was done on the Tower Road grade to improve the surface. Additional bridges and culverts need to be inspected and evaluated for condition, fish passage, and ability to pass high flows, which may be more frequent as Maine's climate changes. (Passage of peak flows without constriction of stream channels, and culverts that provide passage for fish, amphibians and invertebrates at all flows are also requirements of the Fisheries Habitat HMA.)

An access and road maintenance plan is needed to designate primary access routes into the north and south portions of the Unit and prioritize road and bridge work. The priority for future road work, continuing the work already begun, will be protecting water quality and providing safe passage for all users. Designation of primary access routes may depend in part on expected road usage and maintenance on the abutting lands as dictated by timber harvesting in the area.

Signage

As a new acquisition, there is no BPL signage or information posted on the Unit. A plan for installation of entry signs identifying the Unit, information kiosks, directional signage, etc. is needed. Designation of primary access routes will help determine the locations of entry signs and kiosks. Formalization of the existing trails will help determine locations for trailhead signboards.

MDIF&W has jurisdiction over posting of fishing regulations. Trout Unlimited and brook trout anglers have expressed concern that visitors to Cold Stream Forest may be unaware of the special regulations for the headwater ponds and Cold Stream due to a lack of signage, and that this may threaten the native brook trout resource. The Bureau needs to coordinate with MDIF&W regarding this issue.

Bear Bait Sites

As described above, the Bureau has inherited several bear bait sites on the unit from the prior owner. No changes have been made regarding these sites for the first few seasons of the State's ownership. However, there is a need to evaluate the appropriate number of the sites on the unit and their locations (e.g., proximity to existing trails).

Vision for the Cold Stream Forest Unit

The Cold Stream Forest lands are a relatively accessible forestland surrounding high-value cold-water streams and ponds, with significant ecological, fisheries, wildlife, timber and recreational values. The overriding objective of management will be the protection of native brook trout habitat, as well as deer wintering habitat in the southern part of the Unit.

These lands will provide a flow of forest products with much of the property managed as a multiple-use working forest for quality timber, respecting fisheries and wildlife habitat needs and accommodating access trails to remote ponds.

Protections will be provided with appropriate allocations for sensitive natural resources, such as exemplary natural communities, wetlands and riparian habitats. The wild brook trout and deer wintering area habitats that were the primary purposes for the State's acquisition of the property will be further protected and enhanced, as guided by the Habitat Management Agreements (HMAs) signed by BPL and MDIF&W.

These newly acquired public lands are recognized as having a unique history, with generations of anglers drawn to the renowned wild brook trout resource. In addition to natural area protections, the remote ponds will continue to be managed for remote recreation experiences, with walk-in access only. Actions will be taken to reduce the number of boats stored at the remote ponds and otherwise reduce the adverse impact on the aesthetic quality of the storage locations. Primitive campsites will continue to be provided at the existing Lone Jack campground and other sites. Some campsites may be relocated in order to meet riparian and shoreline protection requirements. A foot path will be maintained to Cold Stream Falls.

In addition to fishing, traditional dispersed recreation activities such as hunting, trapping, and canoeing will continue on the unit. Snowmobile and ATV use of existing routes, primarily on management roads designated and signed as shared use roads, will continue.

The Bureau will take steps to establish signage on the Unit and provide other visitor information disseminated through maps and brochures. Road and bridge improvements will be conducted as resources allow, in close coordination with MDIF&W and in compliance with the Fisheries Habitat HMA. Priority will be placed on water quality protection and safety for all users.

Resource Allocations for the Cold Stream Forest Unit

The following "allocations," as shown on Map Figures 8a and 8b – Cold Stream Forest Dominant Use Allocations, define general management objectives and direction for specific areas within the Unit. (Secondary allocations are not shown on the map.) See Appendix C for a description of designation criteria and management direction for the various allocation categories.

Wildlife Management Areas (Dominant Allocation)

- A total of about 3,160 acres as a dominant allocation within the HMA/biological deer wintering area that occupies most of the south end of the Unit. This includes all of the area covered by the Biological Deer Wintering Area HMA, within which are 185 acres

east of the BDWA that were added to the HMA area to ensure operational and management planning efficiency. Remote Recreation is a secondary allocation in this area.

- A total of about 1,525 additional acres as a dominant allocation within the major riparian zones (330 feet) and minor riparian zones (75 feet) surrounding the ponds and along the perennial streams in the Unit, as well as mapped inland waterfowl and wading bird habitat. Remote Recreation is a secondary allocation in these riparian areas.

A secondary Timber Management allocation is also designated for the riparian buffer areas, subject to wildlife, recreation, and visual resource concerns, and the guidelines contained in the HMAs.

Remote Recreation Areas (Dominant and Secondary Allocation)

- A Remote Recreation buffer would apply to areas within 500 feet of the existing angler access and Cold Stream Falls trails, outside the riparian areas with a Wildlife dominant allocation, totaling about 40 acres.
- Remote Recreation would apply as a secondary allocation in the riparian areas and the deer wintering area with a Wildlife dominant allocation, as described above.

A secondary Timber Management allocation is also designated for the trail buffer areas, subject to wildlife, recreation, and visual resource concerns.

Visual Consideration Areas (Secondary Allocation)

- Visual Class I areas (generally areas where foreground views of natural features that may directly affect the enjoyment of viewers) will be defined as a secondary allocation on the ground for areas adjacent to the primary access roads, and areas around campsites and designated non-motorized trails.
- Visual Class II areas will be defined as a secondary allocation in areas beyond the immediate foreground, such as background views of forest canopies from ridgelines and background hillsides viewed from public use roads, or interior views beyond the Class I area likely to be seen from a road, trail or water body.

Developed Recreation - Class I Areas (Dominant Allocation)

- All roads or trails designated for public motor vehicle use, snowmobile use, or ATV use.
- Existing primitive campsites and the Lone Jack campground, as well as existing parking areas; these are small areas of less than an acre.

Timber Management Areas (Dominant Allocation)

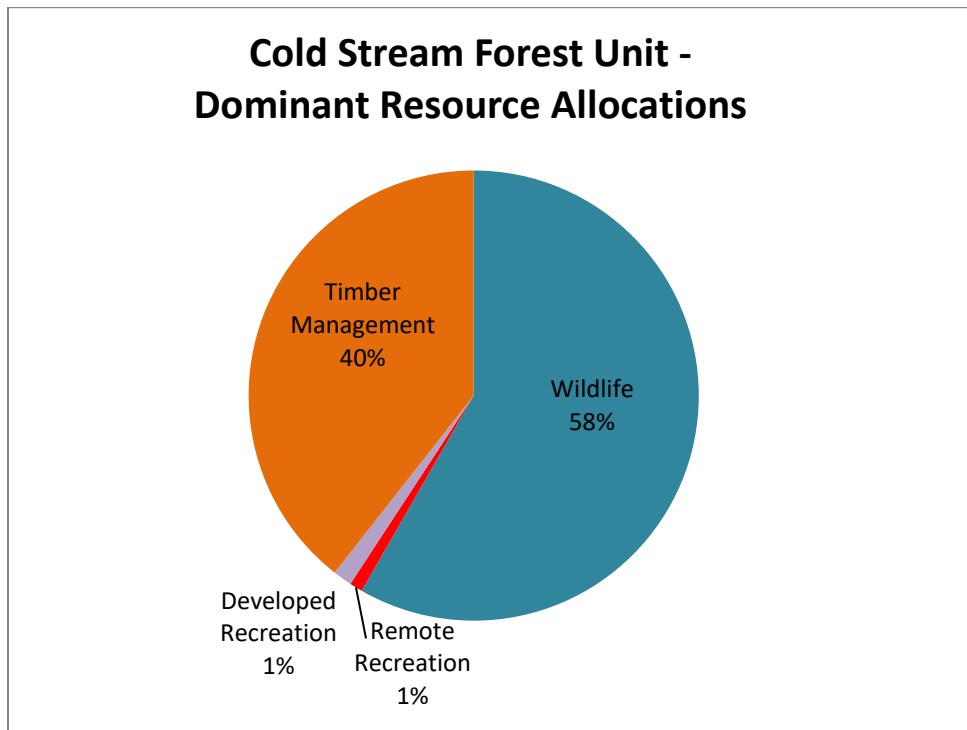
- All other areas not allocated above are designated Timber Management dominant (approximately 3,170 acres); includes a majority of the northern section of the Unit, excepting the portions allocated to Wildlife in the shoreline and stream riparian areas, and the small areas allocated to Developed Recreation and Remote Recreation. Recreation will be recognized as an important secondary use within the timber dominant allocation.

Summary of Cold Stream Forest Unit Resource Allocations

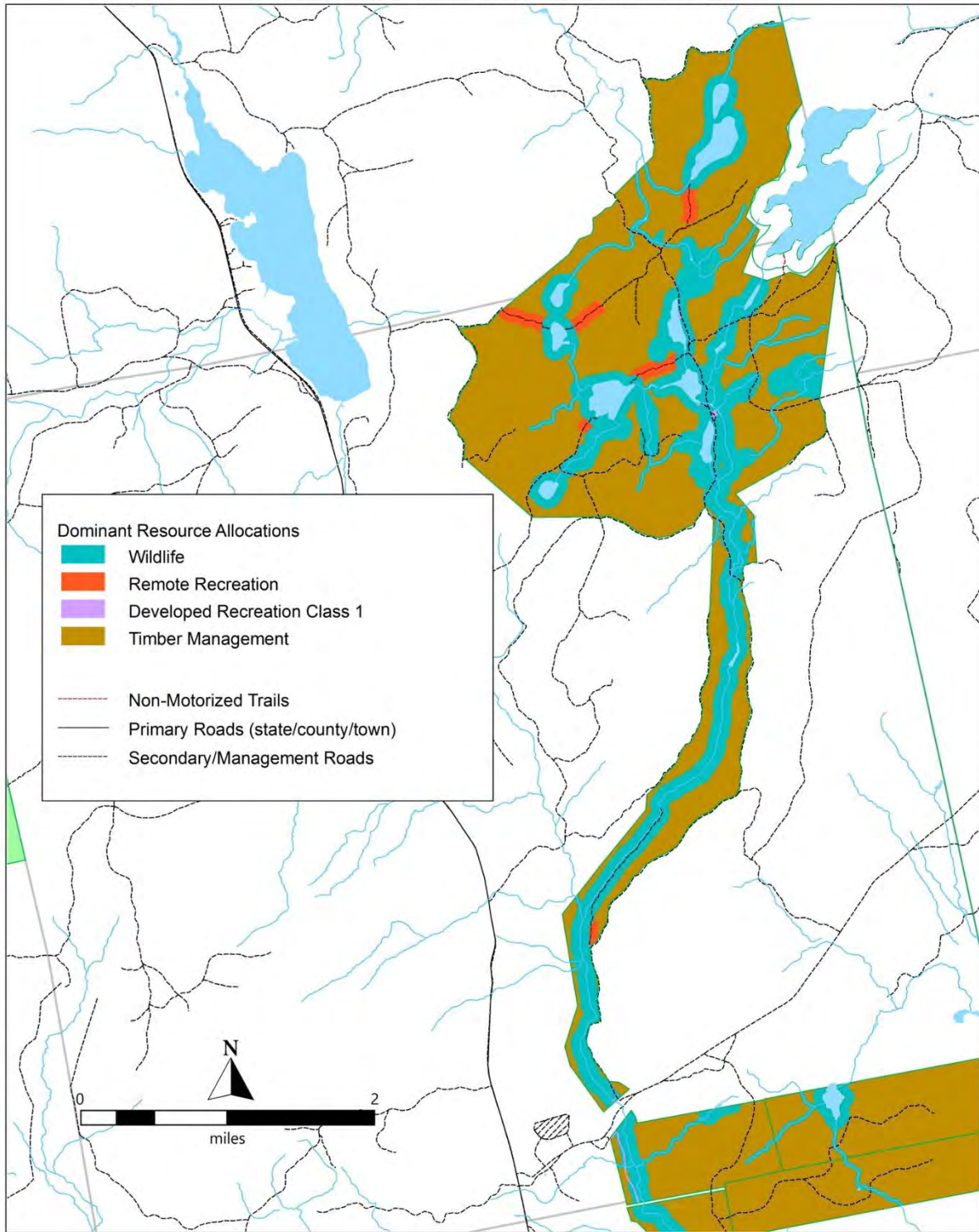
Allocation	Number of Acres			%
	Dominant	Secondary	Total	
Wildlife Management	4,690	Not applicable	4,690	58.3
Remote Recreation	75	4,690	4,765	59.2
Visual Consideration – Class I	0	1,680*	1,680	20.9
Visual Consideration – Class II	0	150*	150	1.9
Developed Recreation – Class I	110	Not applicable	110	1.4
Timber Management	3,170	1,600	4,770	59.3

Note: Acreages are representations based on GIS metrics rounded to the nearest 5 acres, and do not sum to the total Unit acreage due to measuring error and limits of GIS precision (above acres are overall low by approx. 1.5%).

* Preliminary estimate, to be refined in the field as part of forest prescription process.

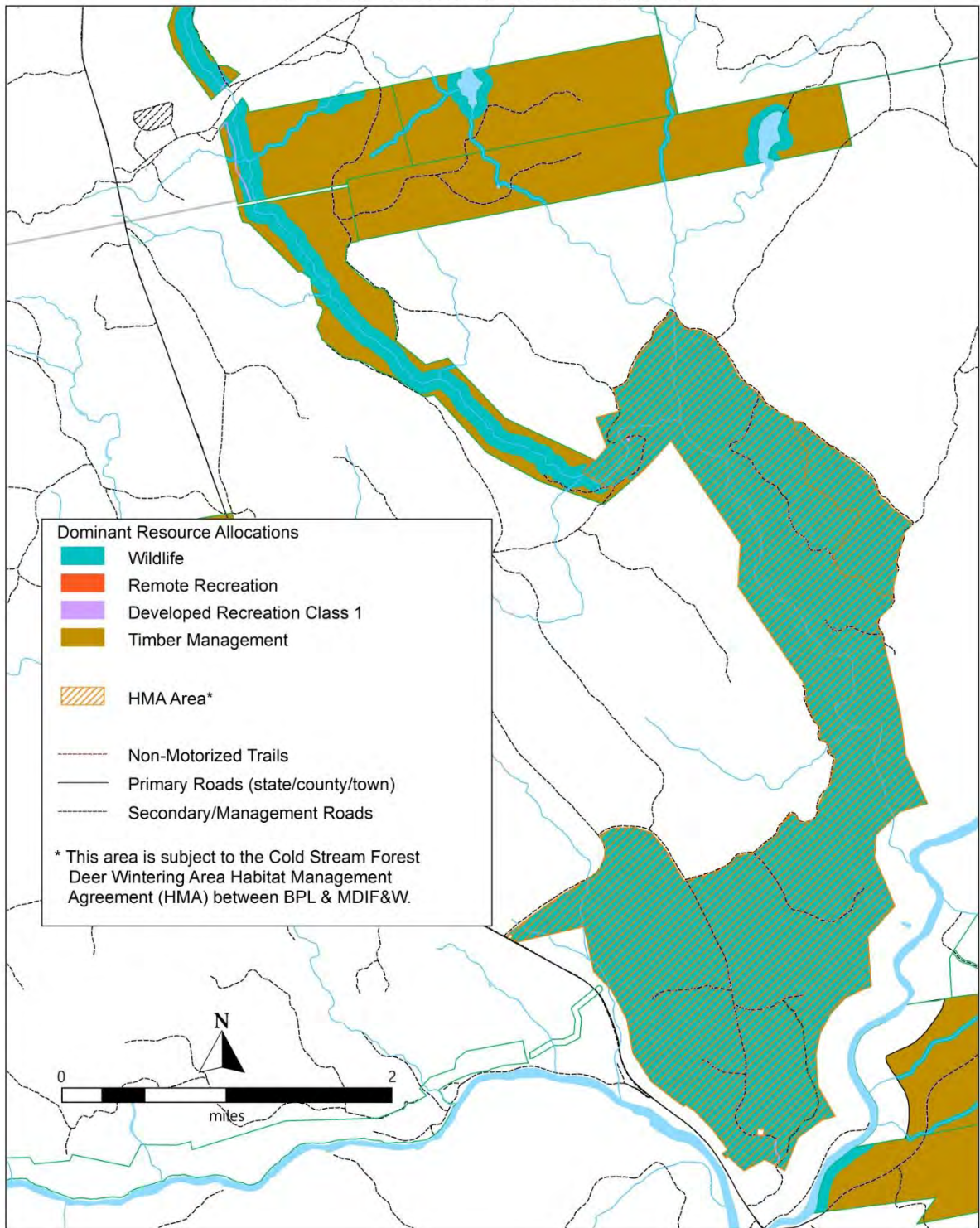


Cold Stream Forest Unit - North Section Dominant Resource Allocations



MAP FIGURE 8a.

Cold Stream Forest Unit - South Section Dominant Resource Allocations



MAP FIGURE 8b.

Management Recommendations for the Cold Stream Forest Unit

Recreation

Campground and Campsite Management

- Evaluate the need to relocate campsites to bring them into environmental compliance, particularly within riparian resource protection zones. Upgrade or relocate campsites as needed based on this evaluation.
- Remove the collapsing privy in the woods near the Durgin Pond campsites. Depending on the above evaluation, consider replacing the privy with a new unit nearby, or with a portable chemical toilet placed in the area each camping season.
- Evaluate the condition of picnic tables, fire rings, and privies at the Lone Jack campground and other campsites; repair or replace as needed. Evaluate privies for possible relocation to protect water resources.
- Evaluate the need for privies at established individual roadside campsites and informal sites that may receive heavy use, or possible closure of sites where no good options exist for installation of a privy.
- Implement a volunteer caretaker program to provide a visible management presence and routine maintenance of the existing Lone Jack campground and all individual campsites.

Trail Maintenance

- Maintain access trails to Lang Pond, Big Berry Pond and Snake Pond to provide adequate clearance for those carrying in/out boats, remove blowdowns, etc. Consider minor rerouting of these trails and/or improvements to trail treads in wet areas, as resources allow. Install trailhead signage and mark trails as needed.
- Mark and maintain the trail to Cold Stream Falls and formalize the parking area, including trailhead signage; reroute the first quarter-mile of the trail off the old skid trail to minimize conflict with future timber harvesting, and improve the trail users experience.

Motorized Recreation

- Continue to allow ATVs to use the existing routes, on the southern end of the Unit near The Forks, primarily on management roads, to maintain important regional routes and trail connections. No additional ATV routes will be developed. Existing trails may be rerouted, if necessary, to address problematic sections or in response to other management concerns.
- Continue to allow snowmobiles to use the management roads for currently designated trails across the Unit, as part of the regional ITS route and to maintain important trail connections. Temporary alternate routes may be designated to avoid conflicts with winter harvests.

Bear Bait Sites

- Evaluate number and location of bear bait sites; remove or relocate sites as necessary to bring the sites into compliance with Bureau standards.

Public Access and Management Roads

- As resources allow, continue to upgrade the road between Durgin Pond and Lone Jack campground with the objective of providing access for non-4WD or high-clearance vehicles to the camping, angling and other recreational opportunities in the north part of the unit.
- Consider additional work to improve drainage in the vicinity of the Tower Road grade.
- Continue to inspect and evaluate bridges and culverts for condition, fish passage, and ability to pass high flows, as required by the Fisheries Habitat HMA.
- Develop a road plan within the next few years by which to maintain the access road system, and determine the most appropriate primary access routes on which the Bureau will focus resources. The primary objectives of the plan will include:
 - Stop water siltation caused by road traffic
 - Brush back road sides to improve visibility and aid in early season drying of roads
 - Address roadside water ponding to reduce effects on water temperature (warming)
 - Replace unsafe water structures (bridges, box culverts)
 - Replace water crossings that impede fish passage
 - Improve roadside ditching and road surfaces to achieve a gradable surface

Wildlife/Rare or Exemplary Ecosystems and Habitats

- Implement the Fisheries Habitat HMA. As stipulated in the HMA, BPL will confer with MDIF&W when conducting timber harvesting or other activities with the potential to affect fisheries habitat.
- Implement the Biological Deer Wintering Areas HMA. All timber harvesting and other forest management within the BDWA will be conducted in accordance with the HMA and in consultation with MDIF&W.
- Coordinate with MDIF&W on any potential non-motorized trail or campsite development/relocation in areas allocated to Wildlife Management to ensure protection of sensitive wildlife habitats.

Timber Management

- The Bureau will manage areas allocated to Timber Management as a multiple use working forest. Timber resources where allocated will provide a diverse forested environment and generate high quality-high value products to support Bureau operations and Maine's timber-based economy. The Bureau will practice multi-aged management with a long-term focus primarily on mature quality timber.
- Because of the popular and accessible trout ponds on this unit as well as the scenic Cold Stream corridor, certain areas nearest those features will be subject to Visual Class I considerations.

Administrative Issues

Boat Storage at Ponds

- Implement a phased program to bring boat storage at the ponds into compliance with BPL policy as stated in the IRP, and address to the extent possible – recognizing boater and angler needs/desires and historic use patterns – the undesirable aesthetic impacts on the remote pond setting.

- Phase I will focus on removal of all unusable and abandoned boats and ensuring all remaining boats are properly marked with owner identification. BPL will make a rigorous effort to contact boat owners before usable boats are removed. Removed boats will be stored by BPL off-site for a period of time, and owners will be given the opportunity to retrieve them if desired.
- Phase II, after an assessment of the effects of Phase I on the number of boats stored at the ponds and site aesthetics, will seek to further consolidate boat storage in more limited, defined areas, potentially with storage racks constructed by BPL, and may seek to further reduce the number of stored boats to facilitate the consolidation of the storage areas and to minimize storage of unused or rarely used boats.

Signage and Visitor Information

- Develop a plan for signage to be installed and visitor information to be provided on the Unit, to include BPLs standard yardarm signs at primary entrance points, directional signage, and informational kiosks. The role of the Land for Maine’s Future program and the state’s partners in the acquisition process (Trout Unlimited, Trust for Public Land and others) should be a feature of the kiosks.
- Coordinate with MDIF&W regarding posting of fishing regulations on the Unit.
- Develop a Cold Stream Forest Unit brochure and map for distribution to the public.

Sandy Bay Unit

This section provides background information on the Sandy Bay property, including the general character of the land base; geologic and ecological resources and natural communities; wildlife resources; historic and cultural resources; recreation and visual resources; and timber resources. This is followed by a summary of the key management issues and opportunities that the Plan will seek to address through the Vision, resource allocations and management recommendations for the unit, which conclude the section.

Character of the Land Base and Acquisition History

The 2,712-acre Sandy Bay Unit is a largely forested block of land touching on the Canadian border at its northern end. The Unit is dominated by a broad central ridge of modest height, with the highest ground at approximately 2,200 feet, about 550 feet higher than the lowest ground at the south end of the Unit. The US Department of Homeland Security operates the Jackman border crossing facility adjacent to the northwest corner of the unit.

The property was conveyed to the State of Maine in 1985 as a part of a land trade with Louis O. Hilton. There are several outlots zoned for commercial uses adjacent to the border crossing facility, and a residential lot straddling the international border nearby.

Natural Resources

Geology and Soils

The Sandy Bay Unit is underlain by the large Frontenac Formation, a wide band of bedrock extending more than 50 miles to the northeast and westward into Canada, and characterized by interbedded mudstones and sandstones within the broader landscape of sedimentary and metamorphic rocks. The surface geology of Sandy Bay is mostly basal till, a heterogeneous