Management Recommendations for the Round Pond Unit

Recreation and Access

- Develop interpretive information and displays, in cooperation with AWW staff, to be installed at the rehabilitated fire tower (and potentially in the new cab) related to fire lookout function of the original tower.
- Move the existing gate near the southeast entrance to the Unit to just south of the location where the trail to the fire tower crosses the management road, about ¹/₄ mile from the tower.
- Continue coordination with AWW staff for the maintenance of the fire tower trail.

Wildlife/Rare or Exemplary Ecosystems and Habitats

• Continue implementation of the Deer Wintering Area HMA, in cooperation with MDIF&W.

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 on most acres (aspen excluded) with a long-term focus primarily on mature quality timber.
- Because of the presence of the AWW across the middle of the Unit, certain areas nearest the AWW (mapped Visual Concern Areas) will be subject to Visual Class I considerations.

Chamberlain Unit

This section provides background information on the Chamberlain Unit, including the general character of the land base; ecological resources and natural communities; wildlife resources; history and culture; 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 Chamberlain Unit is a grouping of eight non-contiguous tracts covering just under 9,500 acres. A majority of the acres were acquired in 1984 as part of larger land trades with Great Northern Nekoosa and the Pingree Heirs. Most of the remaining acres were acquired in 1987 in a land trade with The Nature Conservancy. The current tracts also include three original public lots that were retained; others in the region were traded away.

The largest of these subunits (composed of two tracts) is the 2,885-acre Chamberlain Lake (aka Bear Mountain) Ecological Reserve, most of which occupies the Bear Mountain peninsula, north of Lock Dam and between Chamberlain and Big Eagle Lakes; the remainder occupies the ~500 acre Woodman Brook peninsula at the south end of Big Eagle Lake. The Indian Pond tract is contiguous to the main part of the ecological reserve, to the southeast, and contains 2,075 acres. Two small peninsular tracts are on the west side of Big Eagle Lake: the "Boot" tract (329 acres)

and the First and Second Ridge or the "Pump Handle" tract (284 acres). The Soper Mountain tract (1,055 acres) is at the southeast side of Big Eagle Lake. Furthest to the west are the Otter Pond tract (1,776 acres), and the Allagash Mountain tract (694 acres) on the east and southwest sides of Allagash Lake, respectively. Lastly and furthest south is the Lost Pond tract (364 acres), near the west shore of Chamberlain Lake.

All of the Chamberlain Unit tracts abut AWW parcels along the shorelines of Big Eagle Lake, Chamberlain Lake, and Allagash Lake, which were acquired in 1968-69.

Topography on these tracts is mostly gentle slopes and flats, with a few somewhat steeper areas. An exception is the Allagash Mountain tract, where the peak, located near the center of the lot, rises to just over 1,800 ft. elevation, some 770 ft. above Allagash Lake. Except for the rocky outcrop of Allagash Mountain, these tracts hold the same variety of soil types and drainages as the remainder of the Plan area.

Natural Resources

Communities, Hydrology and Wetlands

Of the approximately 9,500 acres in the Chamberlain Unit, 98% is forested. The proportion of softwood, hardwood and mixedwood stands varies among the tracts; details on stand types are provided below under Timber Resources. There are few perennial streams on the tracts, as might be expected given that most are of modest size. Most of the tracts host small wetlands; however, there are substantial wetlands near the center of the Bear Mountain peninsula.

Exemplary Natural Communities and Rare Plant Species

Most areas of the Chamberlain Lake Ecological Reserve have not been harvested since the 1930s, when logging declined in the region due to the Great Depression. Portions of the Bear Mountain peninsula were inventoried for rare features in 1995, and no marked changes of these areas have occurred since then, with the exception of natural forest disturbance such as tree blowdowns. Features identified in the 1995 survey include *Spruce – Fir Wet Flat, Spruce – Northern Hardwoods Forest*, and *White Pine – Mixed Conifer Forest*. The upland portions of these communities contained a number of large and old trees. MNAP established 16 forest monitoring plots on the Bear Mountain peninsula in 2008. Cores of trees obtained from canopy trees within the plots indicated a median age of 135 years, with ages ranging from 95 to 198 years.

On the <u>Allagash Mountain</u> tract, the east slope of the mountain supports a small area of moderately calcareous cliffs which are an extension of the *Boreal Circumneutral Outcrop* on the same ridge about a quarter mile to the south. The cliffs support the rare fragrant wood fern, a species of special concern, while portions of the upper and mid-slopes of the mountain support old and minimally disturbed spruce-fir and northern hardwood forest, respectively.

<u>The Boot peninsula</u> is largely occupied by an exemplary *Spruce – Fir Wet Flat*. This is an open canopy forest dominated by a patchwork of red and black spruce, with a peat substrate. Several black spruce that dominate the core of the flat were aged at over 100 years old.

<u>The Pump Handle peninsula</u> is mature forest with little to no evidence of past harvesting. MNAP has identified the peninsula as a significant *Spruce – Northern Hardwood Ecosystem* with many old growth or late successional characteristics. Hardwood trees cored in 1980 averaged 113 years old; if alive today, they would be over 150 years old. Small boreal circumneutral ledge communities associated with volcanic bedrock also exist here, and enriched woods below the ledges support several uncommon plants.

Additional details on the natural communities found in each of these areas are available in the NRI Report prepared by MNAP. The exemplary communities and rare plants are shown on Map Figure 11.

Wildlife and Fisheries Resources

These tracts provide habitat for a number of wide-ranging game species of Maine's North Woods, including black bear, white-tailed deer, and moose. All of the ecological reserve and a portion of the Soper Mountain parcel is within the Eagle Lake Region Focus Area of the Maine Wildlife Action Plan, one of 140 such areas of statewide ecological significance identified by state biologists. These areas support rare plants, animals, and natural communities; high quality common natural communities; significant wildlife habitats; and their intersections with large blocks of undeveloped habitat.

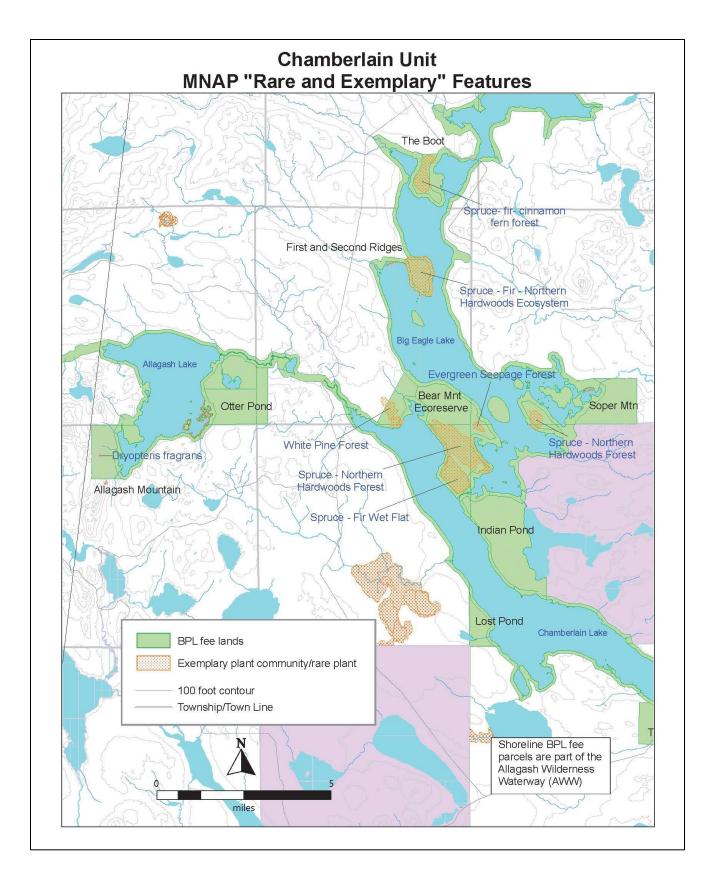
A substantial zoned deer wintering area lies primarily within the northern half of the Bear Mountain peninsula. There is a historical deer trail that roughly parallels the Chamberlain Lake shoreline on the Indian Pond tract some 500-1000 feet from water's edge, leading south from the Bear Mountain DWA. The trail currently is little used, due to the drastic decline of deer numbers in the general area, but the Bureau has nevertheless sought to maintain cover in the corridor area.

MDIF&W has mapped about 95 acres of inland wading bird and waterfowl habitat on these tracts. However, a majority of this habitat is along the lake shorelines, in the AWW.

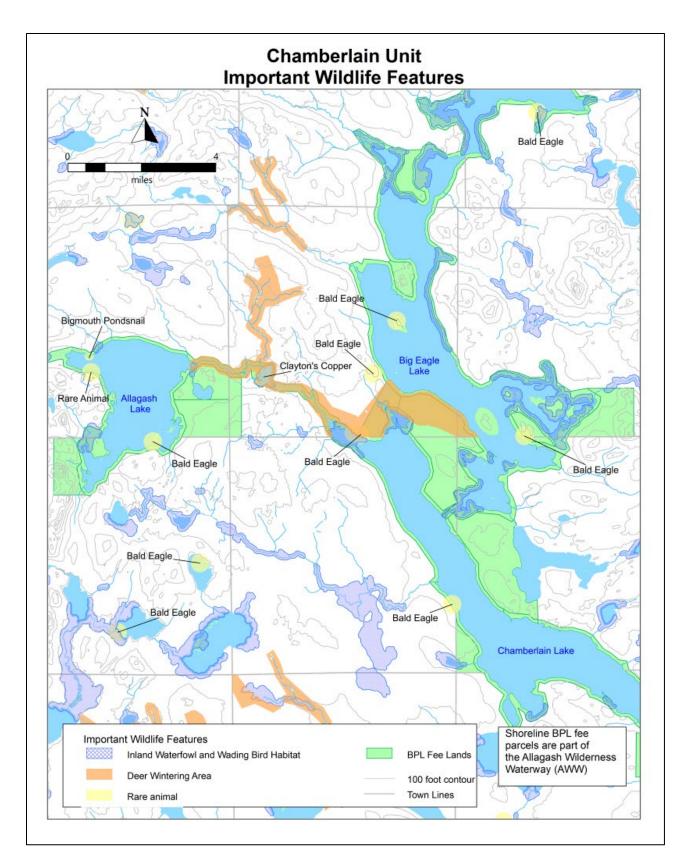
Canada lynx are known to be present on the Chamberlain parcels. No other endangered or threatened wildlife are known to be present or been recorded on the tracts. Bald eagle nests have been recorded at a number of locations near the shores of Big Eagle, Chamberlain and Allagash Lakes, within the AWW.

Wild brook trout are present in the lakes and are also present in some of the tributary streams that flow to the lakes from the tracts, based on MDIF&W mapping of brook trout habitat. These streams are essential to maintaining the integrity of the wild brook trout population in the lakes and in the Allagash River drainage by providing spawning and nursery habitat. The lakes also provide habitat for other cold-water game fish including lake trout and lake whitefish; these species likewise benefit from the flow of these streams.

Indian Pond, whose west shoreline forms the boundary of the BPL Indian Pond tract, has brook trout, togue, and lake whitefish fisheries. Boat access is available on the eastern shore. Otter Pond, the only pond of the Chamberlain Unit that is entirely on the public lands, is a shallow waterbody with no significant or outstanding natural values, per the Wildland Lake Assessment.



MAP FIGURE 11.



MAP FIGURE 12.

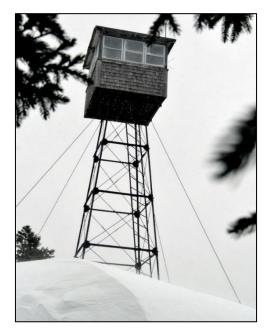
History and Culture

The Bear Mountain area is the site of two of the most significant historic resources in the region associated with the logging industry. In 1902, the Eagle Lake Tramway was constructed on the tract to move logs from Eagle to Chamberlain Lake. The tramway, which ceased operation in 1907, was essentially a modified rail car pulled by cables. Much of the tramway machinery is still present, within the ecoreserve and the adjacent AWW parcels. The Tramway Historic District, extending 500 feet to each side of the tramway, was placed on the National Register of Historic Places in 1979. In 2012, AWW with the assistance of volunteers and donors, completed considerable rehabilitation work on the historic resources and installed interpretive panels near the tramway machinery. Additional work has occurred since 2012.

In 1927, the Eagle Lake and West Branch Railroad was completed, with a northern terminus at the Eagle Lake landing of the defunct tramway. The rail line, which carried pulpwood floated across Eagle Lake, also operated only a few years. The rails are still present (see photo below), as are two large locomotives and the remains of a number of rail cars abandoned near the Eagle Lake landing, within the AWW.

These historic resources have long been a special highlight for both AWW paddlers in the summer and snowmobile tourers in the winter. Walking in to the locomotives has become more publicized and popular in recent years, with several articles published online and in print.

The Allagash Mountain Fire Tower (see photo below) is a decommissioned Maine Forest Service fire lookout that was installed in 1924 and operated until 1991. In 2008, volunteers conducted repair and restoration work on the tower and covered cab, and the Bureau has performed periodic maintenance as needed. A new cab was installed in summer 2020. A map table has been installed in the cab to give a sense of its historic function and to help visitors identify the surrounding natural features.



Allagash Mountain Fire Tower.



Old rail line at Bear Mtn. Ecological Res.

Access and Recreation Resources

Road access to the tracts vary, and most of the tracts do not have roads that are open to the public. Primary haul roads or secondary management roads in the NMW system cross or come to/near the boundaries of the Bear Mountain ecoreserve, the Indian Pond tract, the Soper Mountain tract, and the Otter Pond tract. Soper Mountain and Otter Pond are accessible via management roads. On the Soper Mountain tract, the haul road that crosses the parcel has reverted to a management road after the failure and removal of the bridge over Smith Brook, near the north boundary of the lot. On the Allagash Mountain tract, a gated road that had provided access to the AWW ranger station on the lake has reverted to a trail; the gate is about a half mile south of the parcel. No roads open to the public come within a half mile of the Lost Pond tract, or the Boot and Pump Handle tracts on Big Eagle Lake.

Other than the Allagash Mountain fire tower, recreation facilities on these tracts are limited to short day-hike, access, and portage trails. A one-mile trail maintained by AWW staff extends to the Allagash Mountain tower from the AWW ranger station. At the Chamberlain Lake Ecological Reserve, a one-mile hiking trail from a parking area north of the tract leads to the Eagle Lake end of the old rail line and thence to the tramway and the locomotives. A portage trail parallels the tramway route across the tract. The trail to the locomotives (beginning on abutter's land and ending within the AWW) and a 4-5 car parking area (on abutter's land) were constructed in 2018 to replace a poorly-sited unofficial trail that had been used for many years.

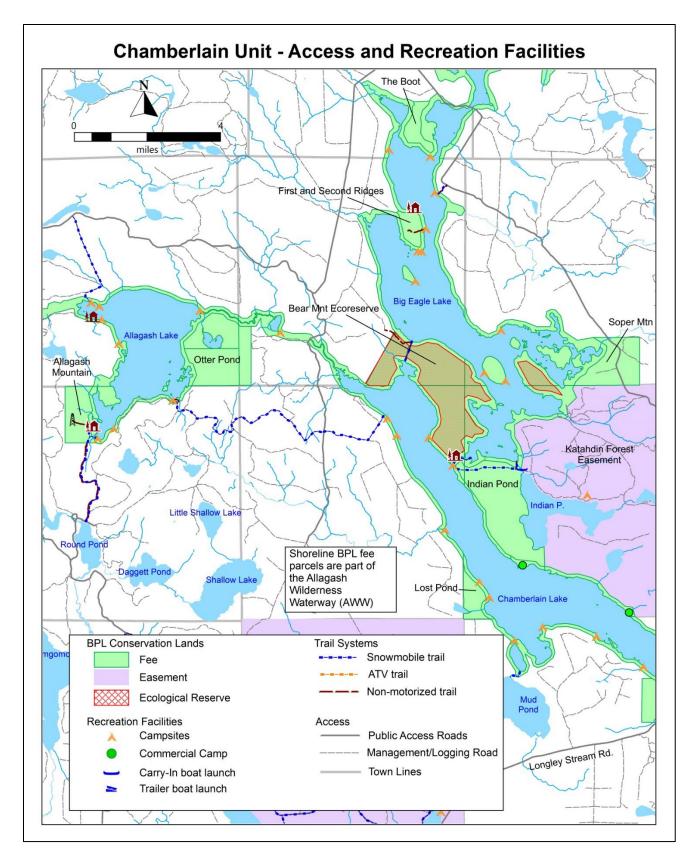
On the Indian Pond tract, a 0.2-mile bog boardwalk links Lock Dam Road (the primary management road across the north end of the tract) to the shore of Eagle Lake, near the gated entrance to the tract at Indian Stream. The boardwalk, about half of which lies within the AWW, is used by paddlers to access Eagle Lake, as an alternative to paddling or wading down the stream. A parking area is located just outside the BPL property, on the east side of Indian Steam. The distance between the parking area and the start of the boardwalk is about 1,000 feet.

A short trail on the Pump Handle tract, the Lookout Trail, leads from a shoreline campsite (in the AWW) to the central ridgeline of the peninsula.

Map Figure 13 depicts the road system used to access the Chamberlain Unit tracts as well as the roads and recreation resources on the tracts and adjacent sections of the AWW.

The tracts are also used for dispersed activities, particularly hunting. Hunting activity is concentrated on a few of the tracts, particularly Indian Pond and Soper Mountain, due to good road access. There are eight bear bait sites on the Unit managed by NMW; NMW leases additional bait sites on the commercial forestland surrounding the Unit.

Two snowmobile routes connect Big Eagle and Chamberlain Lakes; one follows Indian Stream and Lock Dam Road across the north end of the Indian Pond tract; a segment in the AWW follows the stream below Lock Dam. Another route follows the tramway portage trail across the Bear Mountain ecoreserve. Riders also use a short section of trail across the south end of the Allagash Mountain tract (following the old road) to reach Allagash Lake. There are no ATV routes on the tracts.



MAP FIGURE 13.

Timber Resources

The five tracts on which timber management will be conducted as a primary use are addressed here. From largest to smallest in regulated acres, those five are Indian Pond (2,033 acres), Otter Pond (1,739 acres), Soper Mountain (1,019 acres), Allagash Mountain (553 acres), and Lost Pond (358 acres).

Harvest History, Stand Type Characteristics and Stocking

<u>Indian Pond</u>: Bureau harvests began in 1991 and continued through 1996, skipping 1995, producing 11,300 cords. Over 90 percent of the harvest was softwoods, nearly all spruce and fir, covering nearly 60% of tract acres but not extending to the tract's southerly one-third. A second entry was made 2009 through 2013, which treated 95% of regulated acres and produced 28,600 cords. This volume was 74% spruce-fir (85/15 spruce-to-fir), 18% hardwood pulp, 4% pine, and 2% each hardwood logs and cedar. Though a half million board feet of pine was cut, plus 200+ cords of pine pulp, the pine component is significantly greater at present than before the harvest. This harvest was somewhat heavier than is the Bureau average, mainly because of the large amounts of mature to declining red spruce, plus lesser volumes of overmature fir. Fortunately, softwood regeneration is abundant throughout, though with a greater proportion of fir than was in the overstory.

Broad forest types are 60% softwood, 36% mixedwood, and just 4% hardwood. Stocking in 2017 is about 18 cords per acre, 50% spruce, 20% white pine, 9% yellow birch, and 6% each for red maple and cedar. Fir was not abundant prior to the most recent harvest and most of it was removed in that treatment. Quality of softwoods is generally good, except only fair for cedar, but there is still a significant amount of mature spruce with flattening tops, though trees like that have been targeted for harvest. The older pines have long limb-free sections, while those which colonized the old fields have more limbs, the poorer quality trees mostly being taken during the most recent cuts. Hardwood quality is fair to poor, but with some of the larger trees being good quality and the sapling/small pole hardwoods being generally higher quality than those in the overstory.

<u>Otter Pond</u>: Winter harvests in 1992-93 yielded 2,742 cords, about 85% softwoods, nearly all spruce and fir. The 2015 harvest occurred during summer and fall, producing 5,157 cords, and was 53% softwoods, also mainly spruce and fir. Only 11% of the hardwood volume was sawlogs and veneer, as the objective for all species was to increase the proportion of high value trees, especially important in hardwoods.

Topography is gently sloping to flat, and soils include considerable area of moderately well drained, with the remainder more to the wetter side than to the drier. Broad timber types for the 1,739 regulated acres are about 60% mixedwood and 40% softwood, with less than 50 acres of hardwood type. Current stocking appears to be very close to the BPL-wide average of 23.5 cords per acre. Composition is 50% spruce, 25% split between yellow birch and cedar, with red maple, sugar maple, and fir all 5-7%. Most stands are mid-age with a significant majority dominated by mature trees. While there are few acres of young stands, there are abundant young trees, as most acres hold considerable stocking of seedlings and saplings. Overall tree condition is generally good, and with most being long-lived species, should remain so during the planning period.

<u>Soper Mountain</u>: Other than the Allagash Mountain tract, this tract probably has the most varied topography of any of the Chamberlain Lake parcels on which timber will be managed, though the total elevation change within the lot is only about 300 feet, peaking along the east lot line and nearly as high at the south line. Prior to 1984 the lot was managed by Seven Islands Land Company, which had done only light harvests in the ten years prior to management coming to the State. The spruce-fir resource suffered considerable damage and mortality from the 1970s-early 1980s budworm outbreak. The 1987 prescription noted a great amount of dead and downed fir and spruce, and the harvest of 1988-89 found this, and much of the standing dead, to be no longer merchantable. That harvest covered 590 acres and produced 4,330 cords, 93% softwoods with nearly all of that spruce-fir. The 2008 harvest treated 706 acres with 8,575 cords being removed, about 72% softwoods, mainly spruce and fir but 16% of softwood was cedar shingle stock.

Given the effects of the budworm outbreak and resultant harvests, current stocking is at 16.2 cords per acre, lower than the BPL average. Spruce is 33% of that volume, yellow birch 22% (and abundant in sapling-pole regeneration), cedar 12%, and both sugar and red maples with 10%. With the recent harvest having targeted low quality and/or mature trees, overall quality is good, both in the overstory and understory.

<u>Allagash Mountain</u>: The 553 regulated acres—which exclude the ledgey summit and surrounding inoperable terrain covering nearly 30% of the tract—are about evenly divided among softwood, mixedwood, and hardwood types. The most recent timber harvest came some years before State acquisition in 1984. The hardwood stands include some very large sugar maple, and all regulated acres appear to be well stocked, with volumes of 25-30 cords per acre. Terrain is often steep but operable.

<u>Lost Pond</u>: This tract shares about 1.6 miles of boundary with the restricted zone of the AWW along Chamberlain Lake. Despite the lake's proximity, the gentle slopes and AWW buffer almost fully block any view of the lot from the water. Timber types are 70% softwood and 30% mixedwood. Terrain is gently sloping to flat, and soils moist to wet, mostly better for softwoods than for hardwoods.

Harvesting in 1991-92 produced 4,770 cords, 92% softwoods. In 2013-14 a second BPL entry yielded 5,500 cords, 84% softwoods. The earlier harvest yielded some modest quality aspen and paper birch sawlogs. No logs were cut in 2013-14, as any decent quality hardwoods were retained. The high harvest volume, significantly greater than growth, was warranted by overmature spruce and fir, and by abundant desirable regeneration up to 30 feet tall that needed to be released. The current volume is 16.2 cords per acre, and is 40% spruce, 21% yellow birch, 12% white pine, and 10% red maple.

Management Issues, Concerns and Opportunities

The Bureau of Parks and Lands will manage the Chamberlain Unit for multiple uses including outdoor recreation, wildlife habitat, scenic, historic 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 Chamberlain tracts.

Timber Management

Although AWW Visible Areas do not apply here, visual resource management is important near the AWW, as discussed below for the relevant parcels. Harvesting within the one-mile outer zone of the AWW should be timed to avoid the busiest canoeing season (defined for the purposes of this Plan as May15-September 15). See Appendix D for a map of the one-mile zone in relation to the Chamberlain Unit parcels.

<u>Indian Pond</u>: Management must be done with respect to the high visibility of many forest acres, plus extensive boundary shared with the AWW restricted zone. However, slopes facing Big Eagle Lake are mostly gentle enough that harvest activity will not be visible from the water. Nearly the entire tract lies within the AWW one-mile zone. The heavy warm-season use of the AWW makes noise from logging equipment a potential issue. Deer populations are currently low, but managing for cover and travel corridors is important for potential increases.

There is more than sufficient spruce in the regeneration to allow for a spruce-dominated overstory in future decades, with fir being taken in early commercial entries. Extensive precommercial thinning was done in 2017, favoring spruce, with the intention of accelerating the forest into softwood deer cover. The total volume from the two harvests is just under 40,000 cords, which is greater than the 34-year net growth; Therefore, barring some unanticipated event that warrants a salvage, timber harvests during the planning period will be modest.

<u>Allagash Mountain</u>: The entire tract is within the AWW one-mile zone. Visual impact is an important consideration on slopes facing Allagash Lake. The lake's riparian buffer is all within the AWW restricted zone. Access requires lengthy travel over abutters' land.

<u>Soper Mountain</u>. All but the southeast corner of the tract lies within the AWW one-mile zone. Many acres of the west slope are visible from Big Eagle Lake. Access requires lengthy travel over abutters' land, and the main access road now dead-ends at the NW corner of the lot, since the removal of the bridge over Smith Brook. The relatively low stocking means that little harvesting is likely during the planning period, unless warranted by natural events.

<u>Otter Pond</u>: Nearly 85% of the tract (all but the southeast corner) lies within the AWW one-mile zone. Management must be done with respect to the extensive proximity to the AWW restricted zone along Allagash Lake and Allagash Stream. While the gentle terrain helps in visual management, the warm-season use of the AWW makes noise management also an issue. Also, access requires lengthy travel over abutters' land.

<u>Lost Pond</u>: The entire tract lies within the AWW one-mile zone. Recent heavy harvests plus abundant regeneration means that harvests are unlikely during the planning period, unless natural events warrant. Access requires lengthy travel over abutters' land, and though perhaps half the acres could support summer harvests, that access includes considerable length of winter-only road.

Wildlife and Habitat Protection/Special Resources

As described above, no endangered or threatened wildlife is known to be present on the Chamberlain Unit. The most significant wildlife habitats on the unit are within the wetlands and

riparian areas. Protection for these areas is typically provided by a Wildlife dominant allocation, based on the "specialized habitat" criteria described in the IRP. MDIF&W protocols for protection of bald eagle nest sites will be followed whenever timber harvesting or other activities are planned for the vicinity of a nest.

The Wildlife allocation is applied so as to demarcate a 330-foot buffer zone along the west shore of Indian Pond and around Otter Pond, and a 75-foot buffer zone around wetlands, waterbodies less than 10 acres, and in minor riparian zones. (Minor riparian zones are generally designated around flowing water bodies upstream from the point where such water drains less than 50 square miles.) As stated previously, timber management is allowed in riparian zones to promote wildlife habitat, with the silvicultural treatment used dependent on resource conditions and wildlife habitat objectives. See Appendix C for a summary of the designation criteria for Wildlife dominant areas.

The only zoned deer yard on these parcels is within the ecological reserve, therefore active management of the habitat is precluded.

The only botanical resources on the Unit of a significance that would justify Special Protection allocations are within the existing Chamberlain Lake Ecological Reserve, which by policy are allocated to Special Protection, and on the Boot and Pump Handle peninsulas. During the development of this plan, after consideration of various management options, the Bureau made the determination to propose adding the Boot and Pump Handle peninsulas to the Chamberlain Lake Ecological Reserve. In September 2020, the Ecological Reserve Scientific Advisory Committee voted unanimously to support this proposal.

Recreation Resources

Most AWW paddlers embarking on multiple-day trips from the Indian Stream access walk their loaded boats down the stream from the parking area to the shore of Eagle Lake. However, some boaters – particularly those who are older and/or with some physical limitations, and local campowners who have permits to store a boat on the shore for up to two weeks – prefer to use the boardwalk. The AWW and AWW Advisory Council have proposed that the gate on Lock Dam Road at Indian Stream, at the unit boundary, be moved up the road to a point just past the boardwalk (about 1,000 feet) to shorten the distance that boaters are required to carry boats and/or gear from the parking area to the shore. BPL Lands Northern Region believes it would be necessary to construct a turnaround and parking area at the new gate location, otherwise some visitors will likely park in the road in front of the gate rather than moving their vehicles to the existing parking area after unloading.

Administrative Issues

Access and Road Maintenance

The Bureau may conduct maintenance on the roads leading to the parcels in this Unit, in consultation with NMW and private landowners. as required to maintain recreation access.

As at Telos and Round Pond, it is a major concern for the Bureau for all management efforts at Chamberlain that its activities do not result in conflicts with AWW management objectives. As regards roads, the Bureau has closed and barricaded management roads where they approach the AWW (1/4 mile from the highwater mark), and particularly roads that come near campsites.

Vision for the Chamberlain Unit

The Chamberlain Unit consists of a group of eight dispersed forestland parcels on Chamberlain, Big Eagle and Allagash Lakes, with significant ecological, wildlife, timber and recreational values. All of the parcels abut the AWW restricted zone along much of their boundaries, requiring special care to avoid actions that could diminish the AWW wilderness setting or experience. Most of the parcels will provide a flow of forest products in the long-term, although harvesting will be limited on nearly all those parcels during this 15-year plan period. Those parcels will be managed as multiple-use working forest for quality timber, respecting wildlife habitat needs and accommodating the existing day hike and carry-in trails.

More than one-third of the acres will continue to be managed as the Chamberlain Lake (Bear Mountain) Ecological Reserve, with the addition of the Boot and Pump Handle peninsulas. The newly-built day-hike trail to the historic locomotives will be maintained and the trail head on an abutter's property will be enhanced in cooperation with the abutter. AWW will continue to maintain the Tramway portage trail that crosses the reserve.

Protections will be provided with appropriate allocations for sensitive natural resources, such as exemplary natural communities, wetlands and riparian habitats. The portion of the zoned deer wintering area on the public lands will be protected with a Special Protection allocation applied to the Ecological Reserve in which it lies.

Traditional dispersed recreation activities such as hunting and trapping will continue on the unit. A foot path will be maintained to Allagash Mountain fire tower from the AWW ranger station on Allagash Lake and the Bureau will maintain the tower to preserve its recreational and educational/historical value. AWW will continue to maintain the fire tower trail and the day hike trail on the Pump Handle parcel. Existing designated snowmobile routes between Big Eagle and Chamberlain Lakes will continue.

The Bureau will take steps to enhance signage on the Unit and provide other visitor information disseminated through maps and brochures. Road and bridge improvements will be conducted as resources allow; any work on the surrounding primary haul roads and secondary management roads will be conducted in conjunction with private forest landowners as appropriate.

Resource Allocations for the Chamberlain Unit

The following "allocations," as shown on Map Figure 14 – Chamberlain Dominant Use Allocations, define general management objectives and direction for specific areas within the Unit. (Secondary allocations are not shown on the map.) See Appendix C for a description of designation criteria and management direction for the various allocation categories.

Special Protection Areas (Dominant Allocation)

• The Chamberlain Lake Ecological Reserve totaling approximately 3,490 acres (2,610 acres on the Bear Mountain peninsula, 274 acres on the Woodman Brook peninsula on the east side of Big Eagle Lake, and 605 acres on the Boot and Pump Handle peninsulas on the west side of Big Eagle Lake, newly added to the reserve).

Wildlife Management Areas (Dominant Allocation)

• A total of about 665 acres as a dominant allocation within the major riparian zones (330 feet) on Indian Pond and Otter Pond and minor riparian zones (75 feet) along the perennial streams in the Unit, as well as small wetlands and mapped inland waterfowl and wading bird habitat that are outside the ecological reserve area. 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.

Remote Recreation Areas (Dominant and Secondary Allocation)

- A Remote Recreation dominant buffer is applied to areas within 500 feet of the existing Allagash Mountain fire tower trail, totaling about 70 acres.
- As a dominant allocation within the portions of the parcels that are within 500 feet of the normal highwater mark (based on the LUPC P-AL zone), adjacent to the AWW Restricted Zone on the Indian Pond, Lost Pond, Allagash Lake and Otter Pond parcels. These are primarily narrow strips along the Unit boundaries, most less than 100 feet wide, and total about 174 acres. A wider buffer (~750-1,000 feet from the highwater mark) is applied along the north boundary of the Indian Pond parcel, the west boundary of the Soper Mountain parcel and the north and west boundary of the Otter Pond parcel to correspond with the LUPC P-UA (Unusual Area) protection subdistrict in those areas.
- Remote Recreation is a secondary allocation in the riparian areas with a Wildlife dominant allocation, as described above.

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

Visual Consideration Areas (Secondary Allocation)

- <u>Visual Class I</u> areas (generally areas where foreground views of natural features that may directly affect the enjoyment of viewers) will be defined as a secondary allocation on the ground for areas around the Allagash Mountain trail, along the road/snowmobile trail on the Indian Pond parcel, along the Indian Pond shoreline, as well as within the Remote Recreation dominant buffer zones that abut the AWW Restricted zone.
- <u>Visual Class II</u> areas will be defined as a secondary allocation in areas beyond the immediate foreground, such as background views of forest canopies from ridgelines and background hillsides viewed from public use roads, or interior views beyond the Class I area likely to be seen from a road, trail or water body; in the Chamberlain Unit, this includes Eagle, Chamberlain and Allagash Lakes, and Otter and Indian Ponds.

Timber Management Areas (Dominant Allocation)

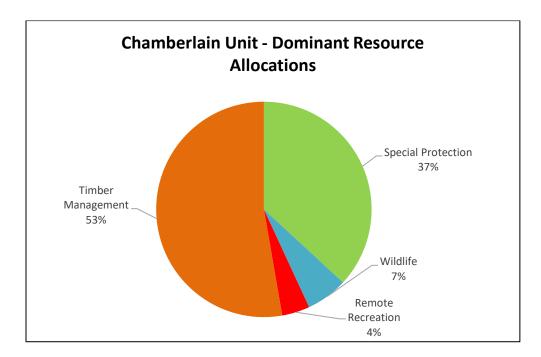
• All other areas not allocated above are designated Timber Management dominant (approximately 4,985 acres); includes a majority of all but the Bear Mountain ecoreserve parcels and the two Eagle Lake peninsula parcels, excepting the areas allocated to Remote Recreation and Wildlife. Recreation will be recognized as an important secondary use within the timber dominant allocation.

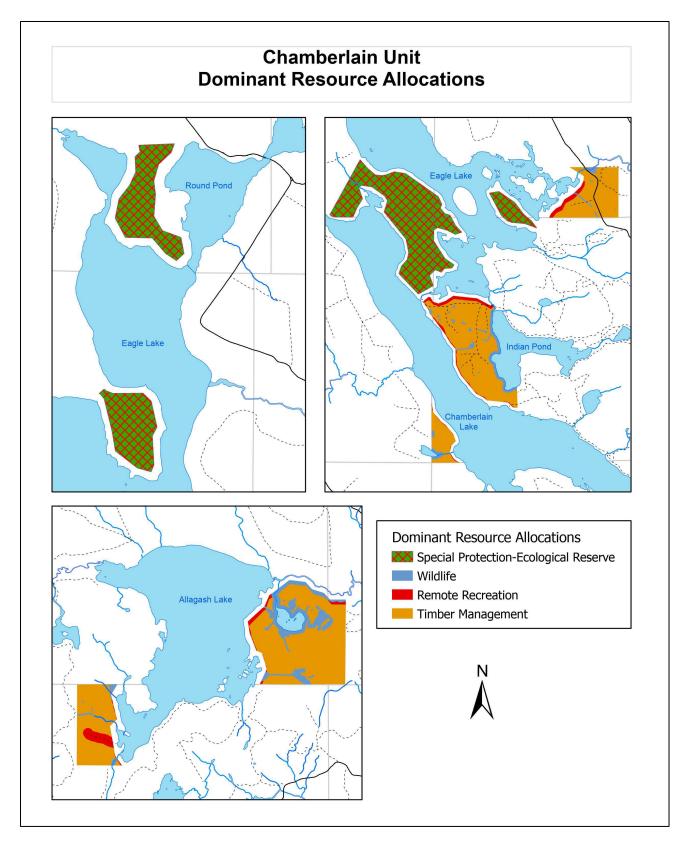
Allocation	Number of Acres			
	Dominant	Secondary	Total	%
Special Protection	3,490	Not applicable	3,490	36.9
Wildlife Management	665	Not applicable	665	7.0
Remote Recreation	335	665	1,000	10.6
Visual Consideration – Class I	NA	505*	505	5.3
Visual Consideration – Class II	NA	260*	260	2.7
Developed Recreation – Class I	0	Not applicable	0	0.0
Timber Management	4,985	1,000	5,985	63.2

Chamberlain Unit Allocation Summary

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.

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





MAP FIGURE 14.

Recreation

• Continue coordination with AWW staff for the maintenance of the Allagash Mountain fire tower trail, Tramway portage trail and Lookout trail; reroute steep portions of the fire tower trail.

Public Access and Management Roads

• The Bureau will conduct maintenance on some access roads off the parcels to facilitate harvesting, as needed, when they have not been maintained recently by the landowners.

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 on most acres with a long-term focus primarily on mature quality timber. Even-aged management will be applied in certain areas where it will benefit forest stand condition and regeneration.
- Because of the presence of the AWW adjacent to all of the tracts where timber management will occur, certain areas nearest the AWW will be subject to Visual Class I considerations and other areas will be subject to Visual Class II considerations.

Gero Island / Chesuncook Unit

This section provides background information on the Gero/Chesuncook Unit, including the general character of the land base; ecological resources and natural communities; wildlife resources; history and culture; 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 Gero/Chesuncook Unit consists of 3,180-acre Gero Island at the north end of Chesuncook Lake and the 736-acre Chesuncook tract on the northwest shore of the lake. The Chesuncook tract and several parcels on Gero Island were acquired from Great Northern in 1975. The remainder of Gero Island was acquired from Dyer Resources in 1984. The east part of Gero Island was an original public lot, now partially flowed by the lake.

The Chesuncook tract includes a portion of the village itself at the north end of the parcel and extends south about two miles to the town line, and about half a mile inland. The acquisition included several undeveloped camplots in the village and Graveyard Point, at the north end of the tract; however, about 60 other developed and undeveloped lots in the village were not included in the acquisition. Two former leased camp lots on the shoreline south of the village were sold in the 1990s. The primary improved roads in the village -- Main Street, High Street, and Lake Street -- are owned by Piscataquis County.

The lot hosting the historic village church/community center and adjacent parsonage is leased by BPL to the Union Evangelical Church. The structures were gifted by the State to the UEC in 2014. One remaining camplot lease is located at the far south end of the village, adjacent to a private camplot. In past years, a lot near the church had been leased for a garden plot; that lease expired a number of years ago, but the Bureau mows the lot periodically to keep it open.

Natural Resources

Communities, Hydrology and Wetlands

Outside of Chesuncook Village, the Unit is nearly entirely forested, with no ponds and little wetlands. There are no perennial streams on the tracts. Most of Gero Island was harvested in the 1920s, and a portion of the southeast side of the island was cut again following a spruce budworm outbreak in the 1980s. Areas along the southwestern shoreline were cleared and were used for pasture or other agricultural land use (visible from air photos from the 1950s). Spruce budworm has had a profound impact on the island's forest, creating a multi-aged structure within mixedwood stands. Stands with an abundance of fir were preferentially damaged by budworm; consequently, more uniform stands of black spruce/red spruce and white pine/red spruce emerged with less damage. Significant windthrow has occurred on the island in recent years.

The forests on the Chesuncook tract are a matrix of hardwood, mixedwood and softwood stands. The northern third of the tract has reverted to forest from historic agricultural uses. Additional details on these stands are provided below under Timber Resources.

Exemplary Natural Communities and Rare Plant Species

Gero Island was designated an ecological reserve in 2000. During an inventory in the 1990s, two forest stands on the island were identified as exemplary natural communities: one a *Spruce - Fir Flat* on poorly drained soils in the south-central portion of the island, and the other, a *White Pine - Mixed Conifer Forest* stand in the northeastern part of the island. This latter stand supports very large white pine trees exceeding 40 inches in diameter. During a recent inventory, it was recognized that much of the island contains late successional forest characteristics present in these stands, including large diameter trees and coarse woody debris. Except for an area where the budworm salvage harvests occurred in the 1980s and old farm fields, Gero Island has been mapped as an exemplary *Spruce - Northern Hardwood Forest Ecosystem*. Forest tracts of this size that have been unmanaged for over 100 years are unusual in the region. As of 2014, the median tree age on 23 forest monitoring plots on the island was 102 years.

A population of the rare slender rush (*Juncus subtilis*), a state endangered plant, has been documented on the north shore of Gero Island. This inconspicuous, low creeping rush is at the southern limit of its range in Maine. In New England, this plant only occurs in Maine and currently there is only one other site where it is known within the state. Map Figure 15 depicts these resources.

Wildlife and Fisheries Resources

These tracts provide habitat for a number of species typical of Maine's North Woods. Other than a small area of inland wading bird and waterfowl habitat mapped by MDIF&W along the west

shore of Gero Island and small wetlands in the interior of the island (see Map Figure 16), there is little specialized habitat in the Unit.

No endangered or threatened wildlife are known to be present or been recorded on the tracts, although lynx may be presumed to be present. A bald eagle nest has been recorded near the north shore of Gero Island.

Chesuncook Lake (23,000 acres) has been designated a "Class 1A" lake, with statewide significance. Fisheries, wildlife, botanical, cultural and physical resources are all rated as "outstanding" per the 1987 Wildland Lake Assessment. MDIF&W has established special fishing regulations for the lake. The lake is open to ice fishing Jan. 1 – March 31.

History and Culture

Chesuncook Village arose in the 1840s as a frontier village supporting logging operations in the area. Henry David Thoreau visited in 1853 and wrote a detailed account. Great Northern Paper Company purchased the tract including the village in 1929, excluding some lots that had already been sold, and provided housing for its workers there. The last log drive conducted by Great Northern on the West Branch Penobscot system occurred in 1971. The village and the surrounding area (560 acres now encompassing both State-owned and private property) was placed on the National Register of Historic Places in 1973.

The Bureau has maintained an historic bunkhouse at Graveyard Point, the last of several built by Great Northern on the site, and it was occasionally used by the Bureau to house seasonal workers. However, the structure is now in need of major repairs to the sills and supporting timbers. The structure is no longer useable and is unsafe to occupy. Due to warpage of the structure, the doors cannot be closed and further weather deterioration is likely.

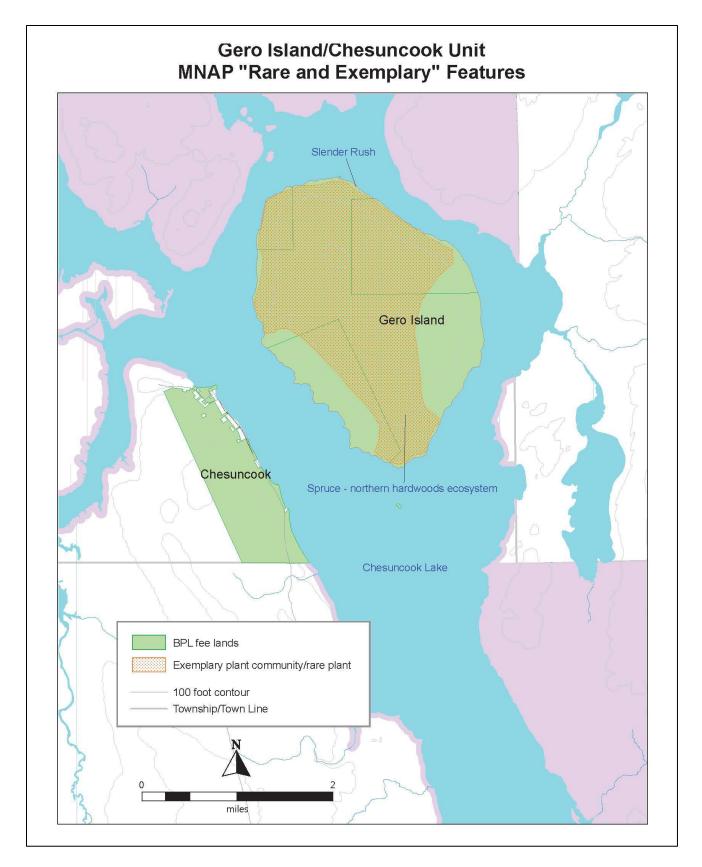


Bunkhouse at Graveyard Point

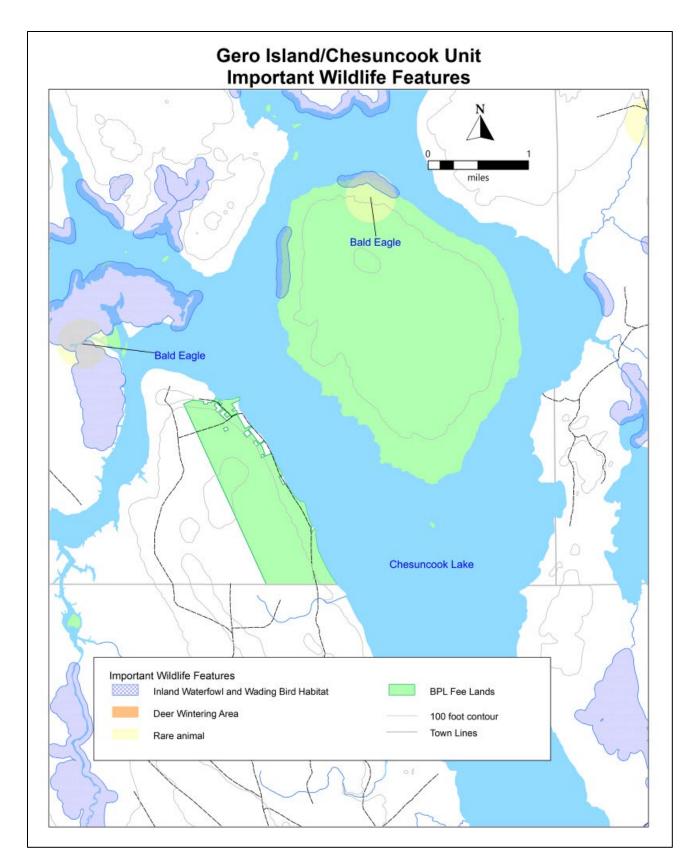


Church/Community Center in the Village

The centerpiece of the village has been Chesuncook Lake House, a lodging establishment originally built in 1864 and formerly part of the State's ownership. (The operator of the lodge purchased the buildings on the lot in 1986 and the 3.5-acre lot in 1993. In 2008, the adjacent 3-



MAP FIGURE 15.



MAP FIGURE 16.

acre agricultural lease lot was sold to the current owners and proprietors of Chesuncook Lake House.) The structure burned in March 2018 and is in the process of being rebuilt. Three rental cabins are also on the premises.

A cemetery is located just off the primary entrance road a short distance inland from the village, with a mowed path in from the road. Interred there are several people with historic ties to Gero Island and the village, including members of the Gero family, for whom the island is named, and Ansel B. Smith, who owned the Chesuncook parcel and subdivided it in 1922 to create the current village lots and streets. The cemetery was relocated from Graveyard Point in 1916 when the lake was enlarged due to the construction of Ripogenus Dam. The half-acre parcel is owned by the county.

Access and Recreation Resources

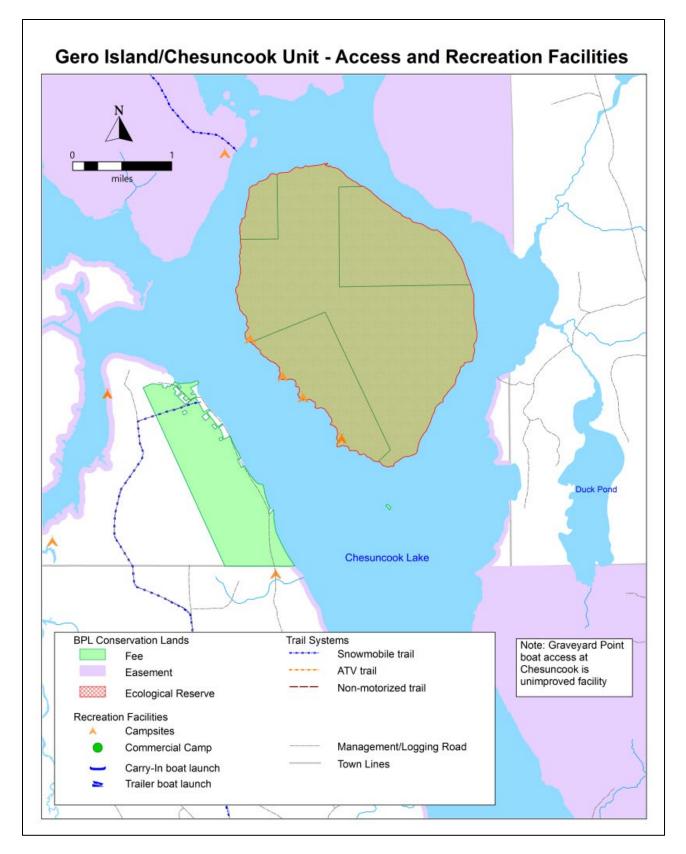
Road access to the Chesuncook tract is via the NMW Golden Road and Pine Stream Road, which branches off the Golden Road about seven miles west of the Caribou checkpoint. A management road was improved and extended into the village from the west about 10 years ago. It is about a 65-mile drive from Millinocket to the village. Formerly, vehicle access to the village was via a 4WD road that entered the south end of the parcel and followed the lakeshore, becoming improved Lake Street in the village. This road still exists but is not maintained. The improved roads in the Village – Lake, Main and High Streets – were not included in the acquisition and remained in Piscataquis County ownership. BPL and the county have upgraded these improved roads.

The only recreation facilities on the Unit are four boat-access campsites on the west shore of Gero Island, and an unimproved gravel boat launch with a seasonal float at Graveyard Point, all of which are managed by BPL's Parks division as part of the Penobscot River Corridor (PRC). Parks has also installed interpretive signage at Graveyard Point. Much of the Chesuncook Lake shoreline outside the Unit, on which an easement was acquired in 2006, is also managed as part of the PRC, with several additional boat-access campsites. The PRC map and brochure produced by the Bureau provides the public information on these recreation opportunities.

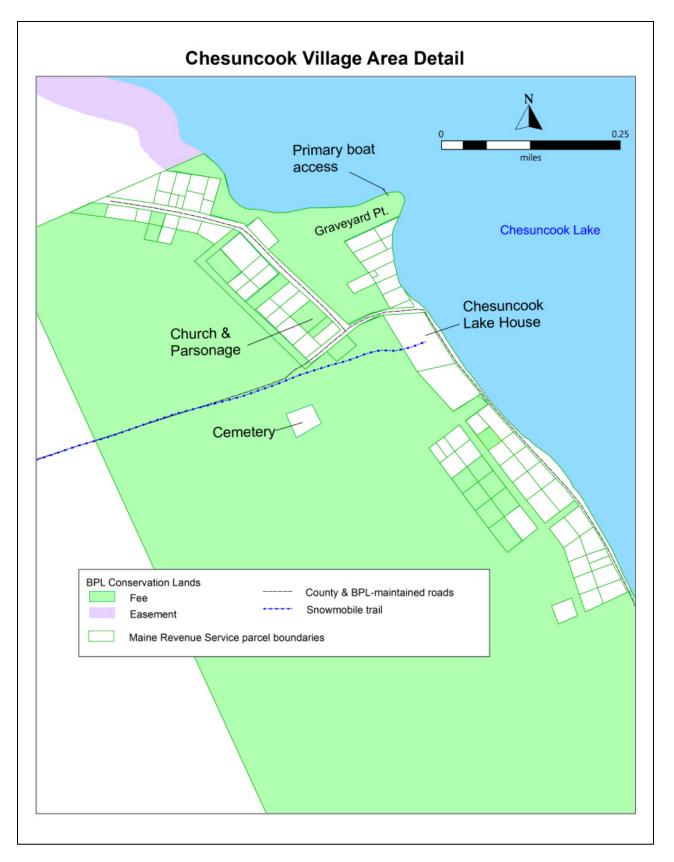
The Chesuncook Lake House provides year-round lodging, and a seasonal floating boat dock in a cove near the lodge. The cove is also an FAA-designated seaplane base. A snowmobile route comes into the village from the west on the primary access road; the Chesuncook Lake House is a popular destination and overnight stopover for riders. The route continues north across the lake and on to Allagash and Chamberlain Lakes. There are no ATV routes on the Unit, although ATVs may be used on the county-maintained roads in the village.

Map Figure 17 depicts the road system used to access the Chesuncook tract as well as the recreation resources on the tract and on Gero Island and vicinity. Map Figure 18 provides a more detailed depiction of the village and vicinity.

The Chesuncook parcel is also used for dispersed activities, particularly hunting and trapping. There are no bear bait sites on the Unit.



MAP FIGURE 17.



MAP FIGURE 18.



PRC campsite on Gero Island.



Gravel boat access at Graveyard Point.

Timber Resources (Chesuncook parcel only)

Harvest History, Stand Type Characteristics and Stocking

Topography of the Chesuncook parcel is gently sloping and soils range from well drained down to somewhat poorly drained. The forest is younger than that on Gero, though its predominant spruce-fir-intolerant hardwood composition resembles areas on the southwest side of the island, probably reflecting harvests 60-80 years ago and/or old hay field returning to forest. Forest types on the 641 regulated acres are 30% softwood, 45% mixedwood, and 25% hardwood.

The tract has had two major harvest entries, the first in 1993-94 yielding 6,100 cords, about 55% softwoods. The second, spanning 2008-11 (skipping 2009) produced just under 7,000 cords, about 45% softwoods. This later operation included some fairly heavy partial overstory removals where beetle damaged/killed spruce and mature/overmature fir and aspen were the predominant species. Current volume is low by BPL standards, about 16 cords per acre, 25% spruce, 15-16% each of fir, aspen, and pine, with red and sugar maples splitting another 15%.

Management Issues, Concerns and Opportunities

The Bureau of Parks and Lands will manage the Gero/Chesuncook Unit for multiple uses including outdoor recreation, wildlife habitat, historic, 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 Unit.

Timber Management

Because of the high component of mature short-lived species such as fir and aspen on the Chesuncook parcel, the regulated acres have had harvests since 1985 that are significantly greater than net growth, resulting in lower stocking than is the rule on BPL-managed forests. The above-growth harvests mean that little timber is likely to be cut during the 15-year planning period, though unanticipated events could make salvage harvests desirable.

The extensive frontage on Chesuncook Lake plus the village area at the north end of the tract make careful visual management critical. Fortunately, the land is gently sloping, so maintaining visual integrity from the lake should not be especially difficult.

Wildlife and Habitat Protection/Special Resources

As described above, no endangered or threatened wildlife is known to be present on the Unit, and there are few significant wildlife habitats on the unit other than small wetlands and the riparian zone along the lake shore. Protection for these areas is typically provided by a Wildlife dominant allocation, based on the "specialized habitat" criteria described in the IRP. MDIF&W protocols for protection of bald eagle nest sites will be followed whenever timber harvesting or other activities are planned for the vicinity of a nest.

The Wildlife allocation is applied so as to demarcate a 330-foot buffer zone along the shore of Chesuncook Lake on the Chesuncook parcel, outside of the Developed Recreation area in the village. As stated previously, timber management is allowed in riparian zones to promote wildlife habitat, with the silvicultural treatment used dependent on resource conditions and wildlife habitat objectives. 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 within the ecological reserve, which by policy is allocated to Special Protection.

Recreation Resources

BPL has historically had an agreement with the operators of the Chesuncook Lake House regarding use of the state and county-owned shoreline in the cove. The Bureau's primary concern has been that the general public be able to use the site for boat launching, in conjunction with Lake House's seasonal boat dock and boat storage; use of the primary launch site at Graveyard Point is at times made difficult by strong winds. BPL needs to reestablish this agreement and develop a lease for the dock in the cove.

Administrative Issues

Access and Road Maintenance

The Bureau may conduct maintenance on the roads leading to the Chesuncook parcel, in consultation with NMW and private landowners, as required to maintain recreation access. The Bureau needs to develop a maintenance plan for the roads and named streets on the Unit, in collaboration with Piscataquis County. Whether or not the gate on the road into the parcel is closed, as some village residents desire, would have implications for future investments in maintenance of the road.

Potential Sale of Chesuncook Village Lots

The Bureau has been approached from time to time by individuals interested in purchasing existing leased lots or undeveloped camplots in the village. In most cases, there appears to be little public value in the lots, most of which are less than 0.5 acre and abut one or more private camplots. Therefore, the Bureau may be willing to sell such lots for fair market value. Authorization from the Maine legislature would be required to sell any lots.

Vision for the Gero Island/Chesuncook Unit

The Gero Island/Chesuncook Unit consists of a large forested island in Chesuncook Lake and a smaller parcel on the adjacent lakeshore to the west, primarily forestland but including a portion of the historic Chesuncook Village. The island has significant ecological, wildlife, and recreational values, while the Chesuncook parcel has primarily timber value, outside the village area. Although harvesting will be limited during this 15-year plan period, the Chesuncook parcel will be managed as multiple-use working forest for quality timber, respecting wildlife habitat needs, the historic nature of the Village and taking into consideration visual impacts on campowners and the PRC.

Gero Island will continue to be managed as part of the ecological reserve system; a Special Protection allocation will protect sensitive natural resources, such as exemplary natural communities, wetlands and riparian habitats.

Parks will continue to maintain the campsites on the island as part of the PRC, as well as the facilities at Graveyard Point. Traditional dispersed recreation activities such as hunting and trapping will continue on the unit. The existing designated snowmobile route across the Chesuncook parcel, part of the route extending north to Allagash and Chamberlain Lakes, will also continue.

Road and bridge improvements will be conducted as resources allow; any work on the surrounding primary haul roads and secondary management roads will be conducted in conjunction with private forest landowners as appropriate. Road improvements in the village will be conducted in coordination with Piscataquis County.

Resource Allocations for the Gero Island/Chesuncook Unit

The following "allocations," as shown on Map Figure 19 – Gero Island/Chesuncook Dominant Use Allocations, define general management objectives and direction for specific areas within the Unit. (Secondary allocations are not shown on the map.) See Appendix C for a description of designation criteria and management direction for the various allocation categories.

Special Protection Areas (Dominant Allocation)

• The Gero Island Ecological Reserve totaling approximately 3,175 acres.

Wildlife Management Areas (Dominant Allocation)

• A total of about 60 acres as a dominant allocation within the major riparian zone (330 feet) on Chesuncook Lake. (Note that the only wetlands and mapped inland waterfowl and wading bird habitat that are within the ecological reserve area). 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.

Remote Recreation Areas (Secondary Allocation)

• Remote Recreation is a secondary allocation in the riparian areas with a Wildlife dominant allocation, as described above.

Developed Recreation Areas (Dominant Allocation)

• Developed Recreation is applied as a dominant allocation in the immediate village area, including Graveyard Point.

Visual Consideration Areas (Secondary Allocation)

• <u>Visual Class I</u> areas (generally areas where foreground views of natural features that may directly affect the enjoyment of viewers) will be defined as a secondary allocation on the ground for areas around the primary access and shoreline roads, the village, and the camplots.

Timber Management Areas (Dominant Allocation)

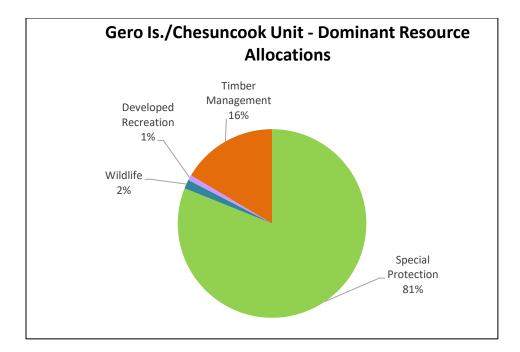
• All other areas not allocated above are designated Timber Management dominant (approximately 645 acres); includes a majority of the Chesuncook parcel, excepting the areas allocated to Developed Recreation and Wildlife. Recreation will be recognized as an important secondary use within the timber dominant allocation.

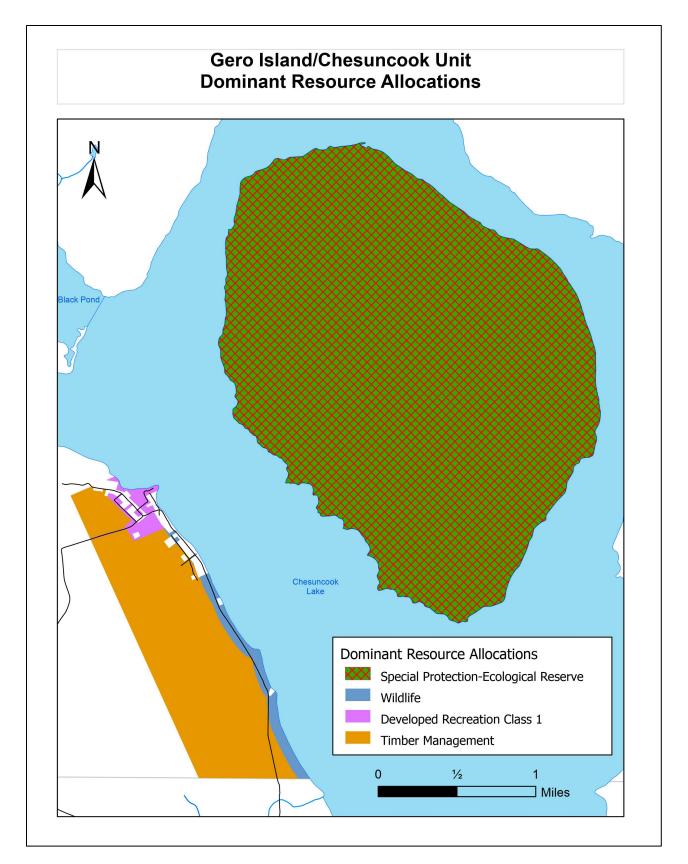
Number of Acres			
Dominant	Secondary	Total	%
3,175	Not applicable	3,175	81.1
60	Not applicable	60	1.5
0	60	60	1.5
NA	50	50	1.3
NA	0	0	0
35	Not applicable	35	<1.0
645	60	705	18.0
	Dominant 3,175 60 0 NA NA 35	DominantSecondary3,175Not applicable60Not applicable060NA50NA035Not applicable	Dominant Secondary Total 3,175 Not applicable 3,175 60 Not applicable 60 0 60 60 NA 50 50 NA 0 0 35 Not applicable 35

Gero Island/Chesuncook Unit Allocation Summary

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.

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





MAP FIGURE 19.

Recreation

• Continue coordination with PRC staff for the maintenance of the Gero Island campsites, and the Graveyard Point boat access.

Public Access and Management Roads

- Develop a maintenance plan for the roads and named streets within the Chesuncook parcel, in collaboration with Piscataquis County.
- Develop a lease for the Chesuncook Lake House seasonal dock and use of the cove on the lakeshore near the facility, in conjunction with public use.

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 presence of the historic village and of the PRC adjacent to the Chesuncook tract, certain areas nearest the village and the lakeshore will be subject to Visual Class I considerations.

Administrative Issues

- The Bureau will consider selling remaining leased lots to lessees and undeveloped camplots to abutting landowners, with any such proposals evaluated on a case-by-case basis. A third-party appraisal would determine fair market value. Any such sales that the Bureau wishes to pursue would be presented to the legislature for approval.
- The Bureau will evaluate whether to repair or remove the Graveyard Point bunkhouse, in coordination with the State Historic Properties Office. If repair is not reasonably practical or is cost prohibitive, the Bureau will seek to remove it as an attractive hazard.

Allagash Lots

The Allagash Northwest (NW), Northeast (NE), Southwest (SW), and Southeast (SE) lots are original public lots, renamed from their former township designations when the town of Allagash was incorporated, encompassing the four townships in which the lots lie. Together, the lots total 3,736 acres. All have been managed primarily for timber production and dispersed recreation for several decades.

The NW and NE lots are accessed from Rt. 161 and Allagash village via the NMW Little Black checkpoint, and the SW lot via the Allagash checkpoint. None of the lots have recreation facilities, other than snowmobile and ATV routes crossing the NE lot. A seasonal sled dog trail crosses the SW lot. Local firewood permits have been issued on three of the four lots.