

- 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

mixture of sand, silt, clay, and stones deposited by glacial ice. Areas underlain by basal till are characterized by smooth topography, as the till is a blanket deposit that generally conforms to the underlying bedrock topography.

Hydrology and Wetlands

The Unit includes the headwaters of the Penobscot River, beginning at the Canadian Border at about 2,100 feet in elevation. The South Branch of the Penobscot flow out of the southeast corner of the Unit, fed by a few smaller tributary streams that flow from the north across the Unit. About 300 acres at the south end of the Unit is occupied by an open wetland in a former impoundment area (more detail on this feature is provided below).

Natural Communities

Tolerant hardwood and mixed-wood forests dominate this unit, accounting for about 39% and 37% of the acreage, respectively. Despite the comparatively high elevation of this parcel, softwood stands account for only about 11% of the acreage. The forest is generally mature, with 74% of the forest in at least pole-timber class (30 feet tall).

Sugar Maple Forest is the most common forest type within the unit. Sugar maple is dominant in the overstory with scattered yellow birch, and canopy trees are mostly less than 75 years old and less than 15 inches in diameter. Many areas contain vegetation indicative of moderately rich (calcareous) substrate including ostrich fern (*Matteuccia struthiopteris*), sweet cicily (*Osmorhiza claytonii*), baneberry (*Actaea pachypoda*), and foamflower (*Tiarella cordifolia*).

The most notable ecological feature of this parcel is a ~300 acre open wetland along the South Branch Penobscot River. This open wetland was formerly part of an area flooded by the Kelly Dam. Aerial imagery from 1956 shows the Kelly Dam, which was used in log-driving, was active at that time. The dam washed out in the 1950s or 60s. This wetland is now predominantly Mixed Graminoid-Shrub Marsh, and is variously dominated by Canada bluejoint (*Calamagrostis canadensis*), tussock sedge (*Carex stricta*), meadowsweet (*Spirea tomentosa*) and speckled alder (*Alnus incana*). No non-native species were found in this wetland. This is an excellent example of habitat restoration, as natural wetland processes have largely recovered.



South Branch Penobscot River and the wetland occupying the former Kelly Dam impoundment.

Wildlife and Rare Animal Species

Sandy Bay has resident deer and black bear and a large moose population. The preponderance of hardwood forest supports a variety of songbirds. Representative species include eastern woodpeewee, black-throated blue warbler, blue jay, and white-breasted nuthatch. The former Kelly Dam impoundment area and a small area at the north end of the property are identified by MDIF&W as inland waterfowl and wading bird habitat. There are no mapped deer wintering areas on the property. No rare animals are known to be resident.

Access

Access at Sandy Bay is primarily via two management roads off Rt. 201. One road crosses the north end of the Unit; another crosses the south end and continues up the east side of the Unit. One road extends into the interior of the Unit. Old Kelly Dam Road (privately owned beyond two miles east of Rt. 201) follows the southern boundary of the Unit. Logging roads built for the past harvests have been “put to bed” after harvesting was complete.

Recreation and Visual Resources

There are no recreation facilities on the Unit. Hunters visit Sandy Bay in pursuit of deer, moose or bear. There are four bear bait sites on the Unit. Snowmobilers and ATV riders use the short segments of designated trail on the unit that are part of the regional trail systems that roughly parallel Rt. 201 and link the border crossing to areas to the south. The Unit comprises the visual backdrop east of the highway for travelers on the scenic byway. Map Figure 9 depicts the road system and ORV trails on and near the Unit.

Timber Resources

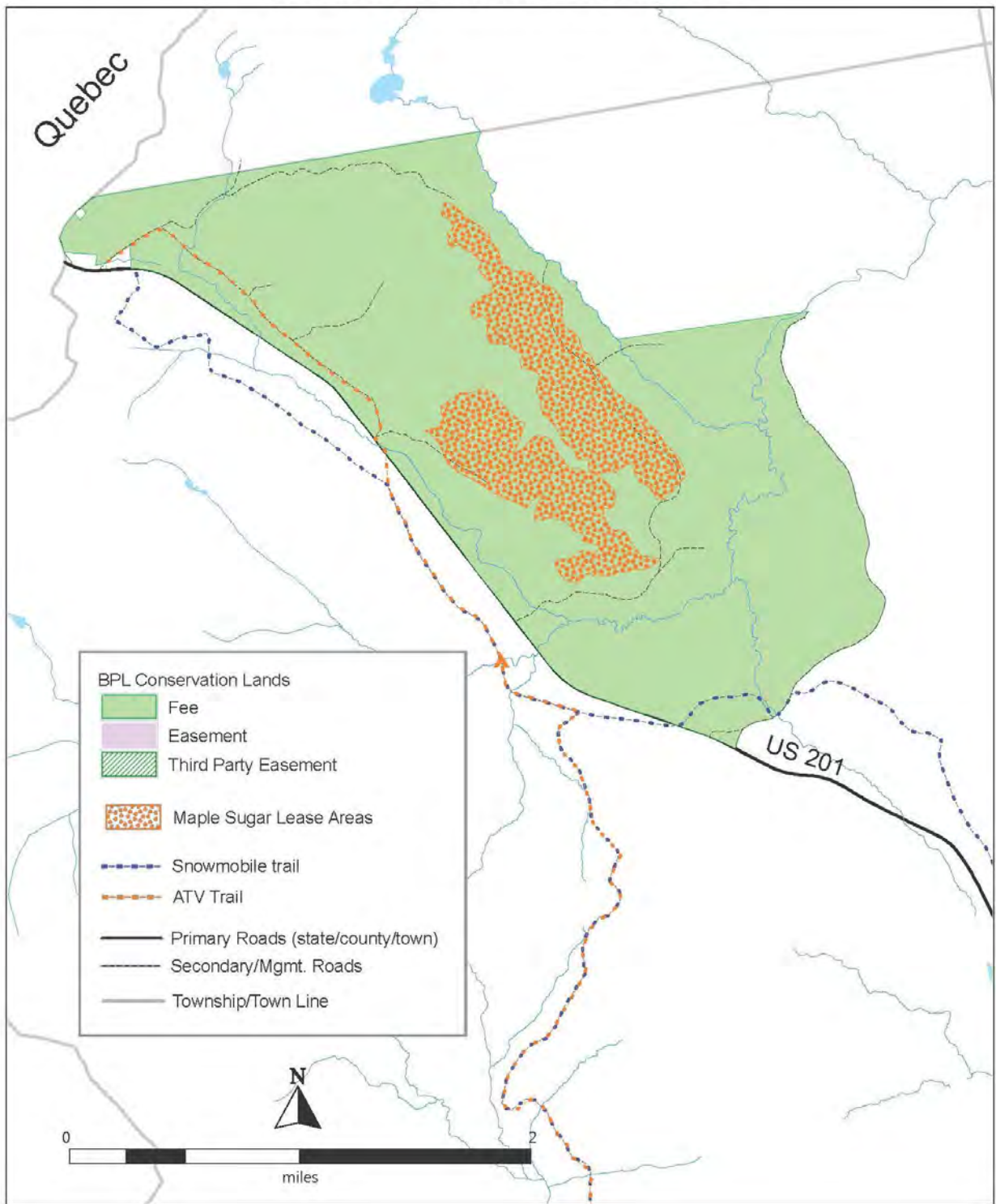
Sandy Bay was in commercial timberland company ownership for a number of decades prior to State ownership, and was extensively harvested in the 1970s. Almost all forested acres have been considered regulated, but the land includes nearly 300 nonforest acres, most in the flowage of the former Kelley Dam. Though essentially all acres are operable timberland, the lot includes some challenging topography, especially as related to the low mountain running through the middle. Soils on most acres range from somewhat poorly to well drained.

Two maple sugar leases have been established during the past several years, though the infrastructure is not yet fully in place, and additional such leases are contemplated. The current lease areas (see Map Figure 9) cover 300-400 acres in hardwood type; these acres should be deleted from the regulated forest as timber management will be limited to that appropriate for sugar bush maintenance once the tubing and other equipment is in place.

Harvest History

Much of the lot was heavily harvested during the 1970s, with most merchantable spruce and fir removed and much of the grade hardwood logs harvested as well. The first Bureau-managed harvest came in 1995-96 and was mainly an improvement harvest in hardwoods, yielding about 2,600 cords, over 80% of which was hardwood pulpwood. Harvesting resumed in 2011 and removed nearly 10,000 cords through the winter of 2014, with two main objectives. The first was the harvest of overmature softwoods, mainly fir, that have begun to fall apart. The second was the culturing of selected hardwood stands to improve their suitability for production of maple products.

Sandy Bay Unit Roads and Recreation Facilities



MAP FIGURE 9.



Collection tubing installed on one of the maple sugar leases.

Stand Type Characteristic and Stocking

Due to the heavy volumes removed in the 1970s plus the recent harvesting, the lot has about 20 cords per acre. Sugar maple is the leading species with 35% of tract volume, yellow birch, fir, and spruce share another 45%, with the remainder being red maple, paper birch, beech, aspen, and cedar. Even forty years later, the heavy cuts prior to State acquisition have left a legacy of modest tree quality on this forest, and browsing by a high moose population has limited the success of regenerating younger trees on many acres.

At present the regulated forest is 20% softwood types, 47% mixedwood, and 33% hardwoods. Withdrawal of perhaps half the hardwood acres for sugary leases would change these proportions to approximately 24% softwood, 57% mixedwood, and 19% hardwoods. The softwoods include a significant amount of understocked and limby fir-rich stands reminiscent of old field succession, along with the more usual spruce and fir stands. Some of this “old field” type has changed to mixedwood due to mortality in fir, but most mixedwood is of the spruce/fir-Northern hardwoods association. The hardwood acres are mainly the typical Northern hardwood type, though with a relatively minor component of beech.

Management Issues, Concerns and Opportunities

The Bureau of Parks and Lands will manage Sandy Bay 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 Sandy Bay lands.

Timber Management

The majority of Sandy Bay will continue to be managed as a multiple use working forest. Extensive heavy harvesting prior to State ownership has resulted in many acres holding lots of low-quality timber, presenting challenges for economic harvests on a tract far from many markets, especially those for low-value material. In addition, current sugary leases have changed the acreage on which the usual BPL timber management will occur, and potential future leases would extend this effect. At current per-tap rates, the financial trade-off with timber revenue

appears quite favorable. This relationship will need to be monitored whenever any additional sugary leases are proposed.

Management of lands where additional sugary leasing is proposed would continue to work toward stands with 60 or more healthy sugar maples 10” diameter and larger per acre on average. Management elsewhere, outside of the sugary lease areas, would target the maturing fir and spruce while continuing improvement harvests in all types.

A considerable portion of the forest is visible from Route 201, and timber harvests close to the highway would be high-visibility operations, so timber harvesting in these areas should be conducted with this in mind. The area along the highway warrants Visual Consideration - Class I secondary allocation; some portions of the higher ground outside the maple sugar lease areas (where tree removal is limited) are allocated to Visual Consideration - Class II, given the potential for visual impacts as observed by travelers on the highway.

Wildlife and Habitat Protection/Special Resources

No endangered or threatened wildlife is known to be present on Sandy Bay. The most significant wildlife habitats on the unit are within the large wetland in the former impoundment and minor riparian areas. Protection for these areas is typically provided by a Wildlife dominant allocation, based on the “specialized habitat” criteria described in the IRP. The allocation would be applied so encompass all of the former impoundment area and its outlet stream, and a 75-foot buffer zone around the small wetlands and in minor riparian zones associated with the Units small streams. No botanical resources on the Unit are of a significance that would justify Special Protection allocation.

Vision for the Sandy Bay Unit

The Sandy Bay lands are primarily forestland with significant timber and maple sugar production value, and with a substantial area of recovering wetland on the site of a former impoundment.

The Sandy Bay lands will provide a flow of forest products with a majority of the property managed as a multiple-use working forest for quality timber, respecting wildlife habitat needs. The two long-term maple sugar leases on 400 acres on each side of the central ridge will continue, with ongoing development of the lease areas progressing to full production capacity.

Protections will be provided with appropriate allocations for sensitive natural resources, such as wetlands and riparian habitats. Traditional dispersed recreation activities such as hunting and trapping will continue on these lands, as will snowmobile and ATV use on designated routes.

Resource Allocations for the Sandy Bay Unit

The following “allocations,” as shown on Map Figure 10 - Sandy Bay 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 510 acres as a dominant allocation within the former impoundment area and other wetlands as well as the minor riparian zone (75 feet) along the small streams on the property. A secondary Timber Management allocation is also designated for the riparian buffer areas along the streams, 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 the western margin of the unit along Rt. 201, recognizing the aesthetic value of the Canada Road Scenic Byway.
- Visual Class II areas will be defined as a secondary allocation in areas beyond the immediate foreground, such as interior views beyond the Class I area likely to be seen from Rt. 201 (i.e., the west side of the central high ground outside the lease areas).

Developed Recreation - Class I Areas (Dominant Allocation)

- All roads or trails designated for public motor vehicle use, snowmobile use, or ATV use.

Timber Management Areas (Dominant Allocation)

- All other areas not allocated above are designated Timber Management dominant (approximately 2,115 acres); encompasses about 80 percent of the Unit, excepting the portions allocated to Wildlife in the wetland and stream riparian areas and the public access roads.

Summary of Sandy Bay Unit Resource Allocations

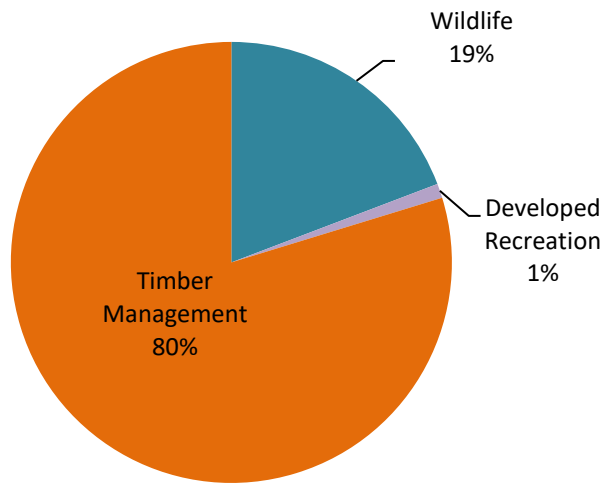
Allocation	Number of Acres			%
	Dominant	Secondary	Total	
Wildlife Management	510	Not applicable	510	19.2
Visual Consideration – Class I	0	70*	70	2.6
Visual Consideration – Class II	0	270*	270	10.2
Developed Recreation – Class I	30	NA	30	1.1
Timber Management	2,115**	210	2,325	87.6

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 low, overall, by 2%).

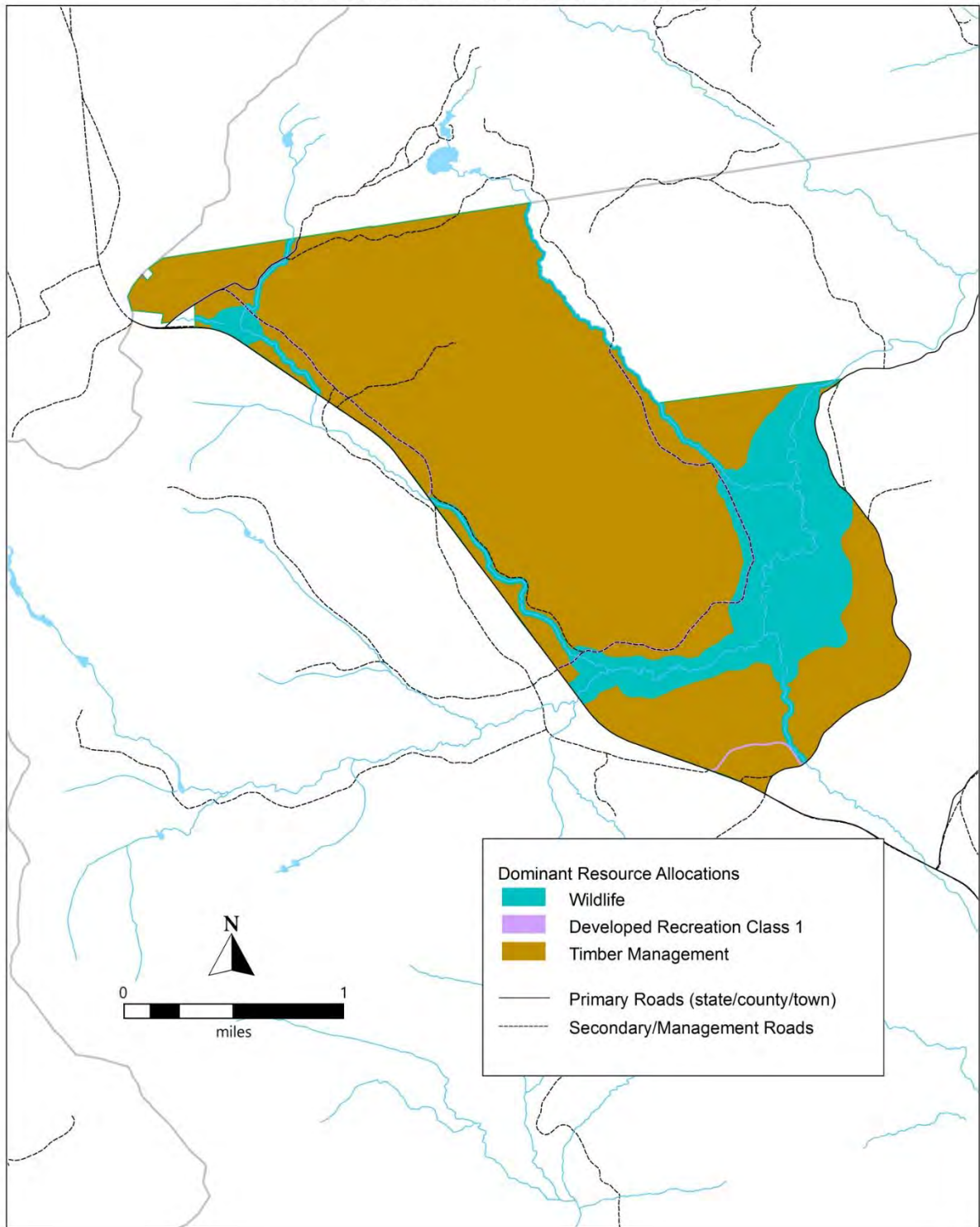
* Preliminary estimate, to be refined in the field as part of forest prescription process.

** Approximately 400 of these acres are included in two maple sugar leases. Timber management in these areas is conducted with the objective of improving sap production.

Sandy Bay Unit - Dominant Resource Allocations



Sandy Bay Unit Dominant Resource Allocations



MAP FIGURE 10.

Management Recommendations for the Sandy Bay Unit

Recreation

- The snowmobile and ATV routes on the margins of the Unit will continue as important segments of the regional trail networks connecting the Unit to Quebec and the Jackman area.

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.
- Timber management within the existing and any potential maple sugar lease areas will be directed at maintaining or improving forest conditions for sap production. Existing and any future lease areas will be deleted from regulated acres, and the regulated acres total for the unit will be adjusted accordingly.
- Timber management along Route 201, on the west margin of the Unit, will be subject to Visual Class I considerations, recognizing the visual sensitivity associated with the Scenic Byway. Due also to the visibility of much of the highest elevation lands from the byway (i.e., south and west facing slopes forming the background view for travelers on the highway), timber management on those areas are subject to Visual Class II considerations. (Note that a portion of the high elevation ground is within the maple sugar lease areas, and so will not be subject to timber harvesting outside that conducted to benefit maple sugar production.)