

## IV. Resources and Management Issues for Lands in the Tumbledown/Mt. Blue Region

### General Management Focus

The Bureau’s overall management focus for the Tumbledown/Mt. Blue Region is built upon the following management principles and objectives:

- 1) practice sound multiple use planning;
- 2) utilize exemplary, state of the art resource management practices that protect resources from over-use, avoid conflicting use, control exotic species, and continually add value to the resource base and visitor’s “back woods” experiences;
- 3) offer new recreation and educational opportunities where appropriate and compatible with the emphasis on more remote, dispersed, less developed activities, with or without vehicle access;
- 4) honor traditional uses wherever appropriate, and avoid restrictions on free and reasonable public access;
- 5) remain adaptable to changing environmental and cultural conditions through far-sighted planning, and cooperation and connectivity with adjoining landowners, and
- 6) conduct timber harvesting where appropriate in a manner that maintains or improves forest health and diversity, protects special natural features and visitor safety, enhances wildlife habitat, preserves the visual integrity of the landscape and produces a sustainable stream of high quality (over the long term) timber products; all within the Bureau’s legislative and regulatory mandates and budgetary and staffing constraints.

Over 96 percent of the Public Reserved Lands addressed by this Plan are forested. Of those forested lands, about 55 percent are probable regulated acres — those areas which the Bureau manages to yield a sustained flow of forest products and to improve the quality of the forest resource. (Probable regulated acres is based on aerial photography and topographic data; additional field work is required to make a final determination. Prior to that determination, any future timber harvests will only be in areas where the regulated status is not in question.) The table below summarizes the forested and regulated acres for the two reserved land units in the region. (Because by statute timber harvesting is permitted on park lands only for a limited number of purposes, those lands are not categorized as regulated and unregulated.)

<b>Summary of Forested and Regulated Acres in the Tumbledown/Mt. Blue Region</b>							
<b>Management Unit</b>	<b>Total Acres</b>	<b>Forest Acres</b>	<b>Regulated Acres (preliminary)</b>				<b>Unreg. Acres</b>
			<b>Total</b>	<b>HW</b>	<b>MW</b>	<b>SW</b>	
Tumbledown	10,389 <sup>1</sup>	10,026	5,500	4,290	825	385	4,526 <sup>2</sup>
Bald Mountain	167	150	70	70	0	0	80
<b>Totals</b>	<b>10,556</b>	<b>10,176</b>	<b>5,570</b>	<b>4,360</b>	<b>825</b>	<b>385</b>	<b>4,606</b>
<b>Percent</b>		<b>96.4</b>	<b>54.7*</b>	<b>78.3**</b>	<b>14.8**</b>	<b>6.9**</b>	<b>45.3*</b>
1. Includes the primary Tumbledown lands in T6 North of Weld and Phillips, as well as disjunct parcel in Weld. 2. Most of these acres are within high elevation areas and on inoperable steep mountainsides. * percent of forest acres ** percent of regulated acres. Key: HW = hardwood, MW = mixedwood, SW = softwood							

Timber harvests on the Public Reserved Lands in the region will supply forest products to local mills and be a source of employment for loggers, truckers, road construction, and others in related businesses. Timber harvests will also be an important source of timber revenue to support the Bureau's management program. The Bureau manages timber resources where allocated to provide a diverse forested environment and generate high quality-high value products to support Bureau operations and the local economy. Exemplary management that contributes to public values, including recreation and wildlife habitat, is the standard.

Detailed mapping of rare, threatened or endangered wildlife and rare or exemplary plants and natural communities on the Units covered by this Plan and the surrounding region is available from the Beginning with Habitat program (on online map viewer is available at <http://www.beginningwithhabitat.org/>).

### **Tumbledown Unit**

The following provides background information on the Tumbledown 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*

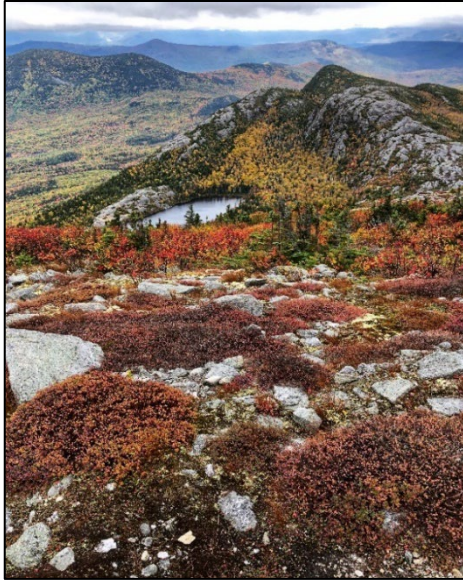
The Tumbledown Unit is 10,389 acres in size, comprised of 9,841 acres in Township 6 and 126 adjacent acres in Phillips; and a 422-acre non-contiguous parcel in Weld, all in southern Franklin County (see Map Figure 4, page 24). The Weld parcel borders MBSP.

The unit is dominated by a cluster of three mountains – Tumbledown, Little Jackson and Jackson Mountains – and Blueberry Mountain a bit further east. The terrain is gently to moderately sloping on the lower portions of those mountains, and also on West Mountain at the southwest corner of the unit, but rapidly steepens from the mid-elevations up to the summits, which rise about 2,000-2,500 feet above the surrounding terrain. At 3,568 feet, the summit of Jackson Mountain is the highest point on the Unit. There are two small ponds on the Unit, Tumbledown Pond (9 acres) and Jackson Pond (2 acres). Although the land is predominantly forested, there are small to medium sized wetlands scattered on the Unit. Most of the area had been harvested in the decades prior to state ownership but has not been harvested since the State's acquisition in the early 2000s. Large timberland owners (Billion Pines Enterprises, Bayroot) are the adjacent landowners to the north and east in Township 6. Adjacent landowners to the south in Township 6 and Weld and to the east in Phillips are primarily smaller Maine-based timberland owners. The Blueberry Bible Camp is an abutter south of Blueberry Mountain.

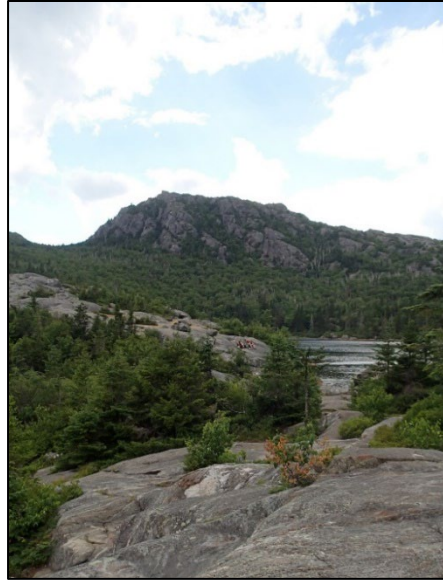
#### *Natural Resources*

##### **Natural Communities**

The primary parcels of the Tumbledown Unit support forest of all age classes characteristic of the region, with hardwoods generally occupying lower and middle slopes, softwoods on the higher elevations, and mixedwoods found on a variety of sites at both lower and higher



*Tumbledown Pond viewed from L. Jackson Mtn.*



*Tumbledown Peak and Pond.*

elevations. The parcel in Weld primarily supports hardwoods, with scattered mixedwood and softwood stands, including small cedar and pine stands.

The National Wetlands Inventory (NWI) includes a number of small wetlands (1-2 acres) distributed below some of the summits and on the lower ground south of the mountain ridges. Tumbledown Brook and other small streams flow off the south slopes of the Unit, flowing into West Brook, Bachelor Brook, and East Brook which flow into Webb Lake. Streams on the north slopes flow into Stockbridge Branch, which flows into the East Branch of the Swift River. The Weld parcel drains into East Brook, which forms its northern boundary.

### **Uncommon and Exemplary Natural Communities and Rare Plant Species**

Nearly the entire Tumbledown Unit falls within the cooperative Beginning with Habitat Program's *Tumbledown to Mount Blue Focus Area of Statewide Significance*. These are areas that biologists have identified as containing unusually rich concentrations of at-risk species and habitats. Important resources within the focus area include the multiple peaks over 2,700 feet, ridgelines, the high elevation ponds, and the largest example of an alpine ecosystem that has been documented in the state (~1,000 acres). Four rare or exemplary quality natural communities and four rare plant species have been documented within the focus area.

MNAP conducted a Natural Resource Inventory (NRI) in the plan area, based largely on field work conducted between 2012 and 2017, in anticipation of this planning effort. The following information is drawn from that report and the Beginning with Habitat Focus Area fact sheet. Additional details on the natural communities are available in the NRI Report prepared by MNAP (MNAP 2020).

The somewhat overlapping rare and exemplary communities, as mapped by MNAP, are depicted on Map Figure 2. An exemplary *fir - heart-leaved birch subalpine forest* is present on the summit of Jackson Mountain and on the ridgeline extending north from the summit. This community is characterized by balsam fir, or mixtures of fir and heart-leaved birch, forming a

dense canopy of somewhat stunted trees. Patches of heart-leaved birch and mountain ash are common where wind, fire, or landslides have created openings, along with a dense shrub layer of mountain ash, hobblebush, and regenerating fir. **Crowberry-bilberry summit bald** is found on the summits of Little Jackson and Tumbledown Mountains. Dwarf shrubs and stunted spruce or fir are the dominant features of this patchy vegetation, growing in thin soils in bedrock pockets. The tree layer is sparse (<25% cover) and includes balsam fir, red or black spruce. Dwarf shrub dominants vary and include black crowberry, sheep laurel, Labrador tea, and bilberry. Partially overlapping these areas is an exemplary **rock outcrop ecosystem** that includes the peaks of Little Jackson and Tumbledown Mountains and adjacent areas and extends down the south slope of Little Jackson Mountain. The south facing cliffs of Tumbledown Mountain are mapped as an exemplary **acidic cliff-gorge community**. Sparse vegetation, primarily fern and lichen with pockets of spruce, fir and birch on steep outcrops or cliffs of granitic or other acidic rock are characteristic of this community.

A small exemplary **red spruce-mixed conifer woodland** is present on the summit of Blueberry Mountain. A similar example is found on the summit of West Mountain. This community is a mixed canopy woodland (25-70% canopy closure) with red spruce and white pine the dominant tree species, and a sparse shrub and herb layer beneath.

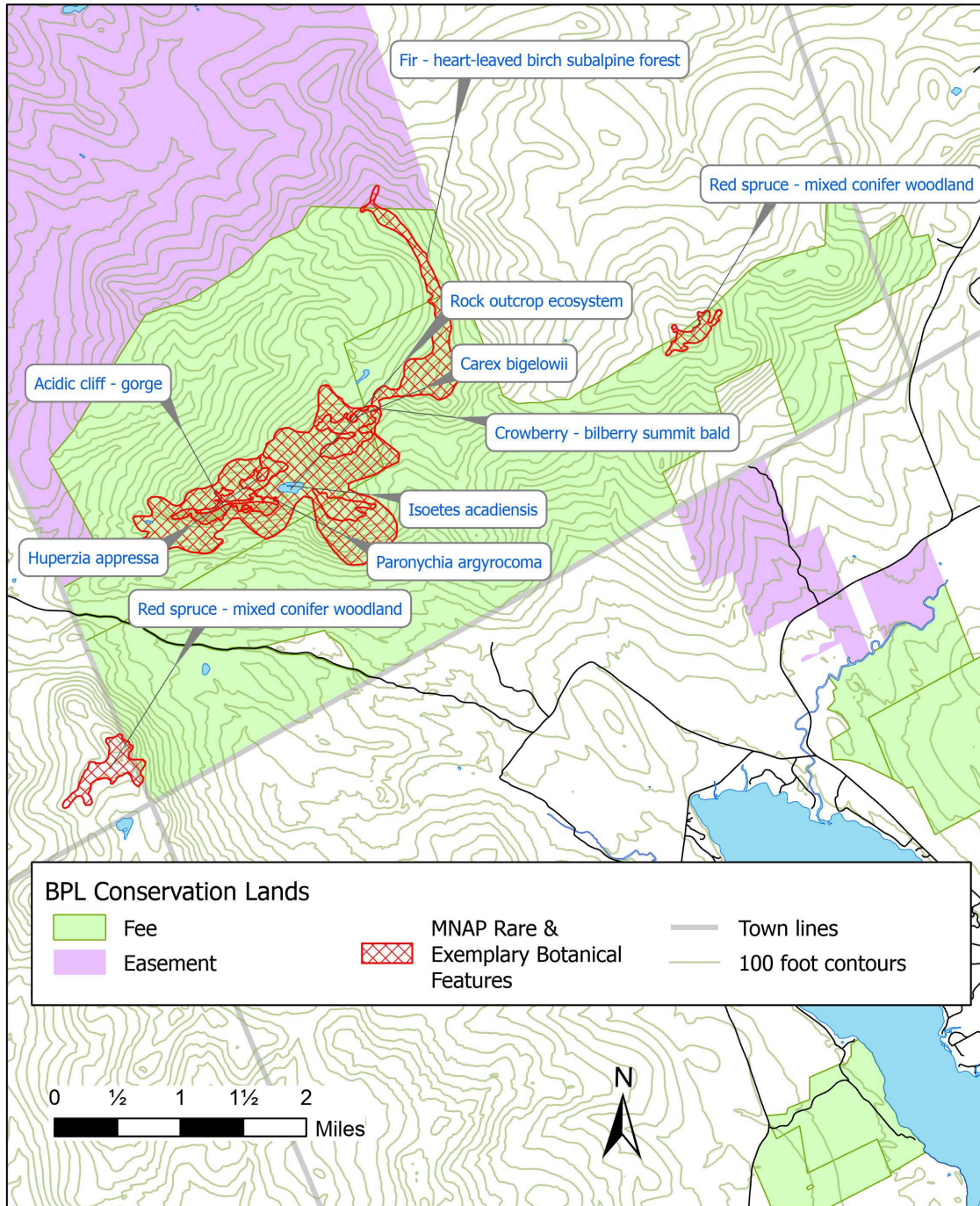
Four rare plants have been documented on the Unit, all within the alpine ecosystem. Acadian quillwort (*Isoetes acadiensis*) is an aquatic plant that lives submerged in shallow ponds and lakes and had been found in Tumbledown Pond. Only three populations of this species have been documented in Maine. Silverling (*Paronychia argyrocoma*) is a low-growing, tufted plant with white flowers that has been found on Tumbledown Mountain. It grows on ledges on bare gravel with little or no organic matter or soil. Appalachian Fir-clubmoss (*Huperzia appalachiana*) has also been found on Tumbledown Mountain and is restricted to the harsh, exposed conditions of Maine's highest mountains and a few coastal islands. There are less than a dozen known occurrences of this species statewide. Bigelow's Sedge (*Carex bigelowii*), found on Little Jackson Mountain, is the only sedge found commonly in alpine ridge communities and is often the dominant plant in certain patches. However, there are less than a dozen known occurrences in Maine, where it is at the southern extent of its range.

[The complete Beginning with Habitat Focus Area fact sheet, excerpted here, is available at <https://www.maine.gov/dacf/mnap/focusarea/factsheets.htm>. Fact sheets on Maine's natural community types are available at <http://www.maine.gov/dacf/mnap/features/commsheets.htm>.]

### Wildlife and Fisheries Resources

The forests of the Tumbledown Unit host common wildlife such as porcupine, moose, white-tailed deer, black bear, ruffed grouse, turkey, and red squirrel. The small streams and wetlands provide habitat for waterfowl, aquatic furbearers (beaver, otter and mink), and amphibians. The high elevation (above 2,700') subalpine forest (mainly spruce and fir) may be used as nesting habitat by a number of high elevation and/or coniferous forest specialist bird species, such as the spruce grouse, dark-eyed junco, bay-breasted warbler, black-backed woodpecker, white-throated sparrow, and blackpoll warbler. The mixedwood forest found on a range of elevations and the hardwood forest, generally on lower ground, are home to a wide variety of passerine bird species

# Tumbledown Public Land MNAP "Rare and Exemplary" Features



MAP FIGURE 2.

(e.g., black-capped chickadee, black-throated blue warbler, white-throated sparrow, cedar waxwing).

One 24-acre wetland on the Unit located beside Byron Road is designated as a moderate value inland waterfowl and wading bird habitat, a Significant Wildlife Habitat. There are no mapped deer wintering areas located on the Unit. Map Figure 3 depicts the Important Wildlife Features of the Tumbledown Unit.

Two species of Special Concern have been documented within the Tumbledown Unit. Northern spring salamander, listed as a species of Special Concern in Maine, is a specialist of clean, cold headwater streams which has been observed in Tumbledown Brook and is likely present in other places in the unit. Bicknell's thrush breeds in subalpine forest habitat dominated by stunted fir and spruce thickets. This species has been documented across the higher elevations on the Unit. (Most potential habitat in the state has not been surveyed, but mountain areas above 2,700 ft. are commonly mapped as important habitat for the species.)

Peregrine falcons have nested on the cliffs of Tumbledown Mountain since the 1990s, when IF&W conducted a hacking program during which young captive-reared falcons were released. Since that time, nesting pairs have successfully raised a number of fledglings. (Although federally delisted as Endangered, the resident peregrine breeding population is listed as Endangered in Maine.) IF&W biologists continue to monitor nesting on the cliffs.

Northern long-eared bat, federally listed as Threatened and listed as Endangered in Maine, may also be present, based on Maine Wildlife Action Plan habitat maps for the species, which indicate a high potential for habitat in Township 6.

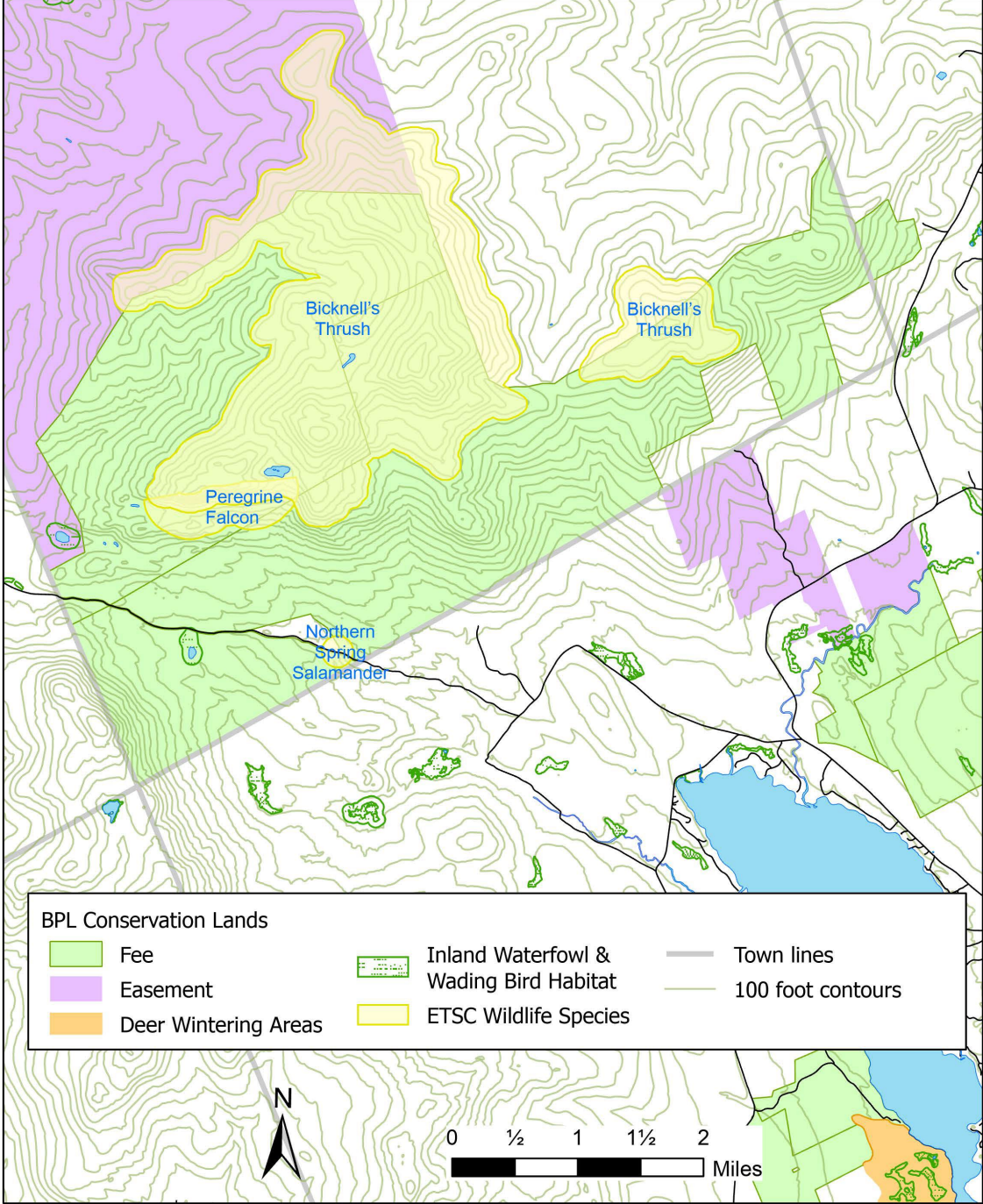
Habitat for native brook trout is present in all the perennial streams on the Unit, particularly where deeper pools provide pocket habitat. Tumbledown Pond is naturally fishless but is stocked with brook trout by IF&W (more details are provided under Recreation Resources).

### Recreation Resources

The remarkable mountain setting with a high elevation pond and spectacular views, all reachable with a relatively short hike, are the primary recreational attractions to the Tumbledown Unit. These features, all easily accessible within a few hours by car to a large portion of Maine's population, have made Tumbledown perhaps the most visited mountain in Maine. Visitor use estimates based on vehicle counts indicate several hundred people are on the trails, with many congregating at the pond and on the summits, on many summer weekends. (See Appendix D for a summary of the 2019 season data.) The limited trail counter data available confirm these observations.

**Hiking Trails.** A network of four main interlinked trails lead to Tumbledown Pond and Little Jackson Peak. These trails, which for the most part predate the Bureau's ownership, total 11.8 miles, including a connector trail and spur trail, as listed below. On the east part of the Unit is the Blueberry Mountain Trail, a 1.1-mile out-and-back route to the summit. The lower parts of several of the trails follow old roads and climb gradually. However, all include steep sections on the higher elevations, and are considered moderate to strenuous trails. The trails are maintained

# Tumbledown Public Land Important Wildlife Features



MAP FIGURE 3.

by the Bureau and Maine Conservation Corps trail crews. MNAP has designated a 5.5 mile loop using the Loop Trail, Brook Trail and Byron Road between the two trailheads as a Natural Heritage Hike; a six page guide to the hike is available on the Maine Trailfinder website.

Trail	Length (mi.)	Notes
Loop Trail	2.1	Upper trail is strenuous with very steep sections and rock scrambling; 0.2-mile spur to west peak of Tumbledown Mountain
Brook Trail	1.8	Shortest and most popular route, lower trail follows old road
Parker Ridge Trail	2.9	Follows old road then ascends exposed ridge, before descending to Tumbledown Pond
Little Jackson Trail & Connector	3.7	Terminates on open Little Jackson summit (3,460 ft.) with excellent views
Pond Link Trail	1.1	Connector between Little Jackson trail and Tumbledown Pond
Blueberry Mountain Trail	1.1	Out-and-back trail to peak (2,962 ft.) with 360 degree views from exposed ledges

There are additional unmarked and unmaintained trails connected to the maintained trails including a spur to the summit of Jackson Mountain, a loop around Tumbledown Pond, and a route down the north side of Jackson Mountain and along Stockbridge Branch (on an old road).

**Motorized Trails.** A designated club-maintained snowmobile trail follows the Byron Road across the Unit (the road is closed to traffic in the winter). This route connects two major trails, ITS 89 to the east (in Weld) and ITS 117 to the west (in Byron). There are no designated ATV routes on the Unit. However, an ATV route passes nearby to the north, following a road across the conservation easement lands in Township 6, along the East Branch Swift River.

Map Figure 4 depicts the major roads used to access the Unit and pedestrian and motorized trails.



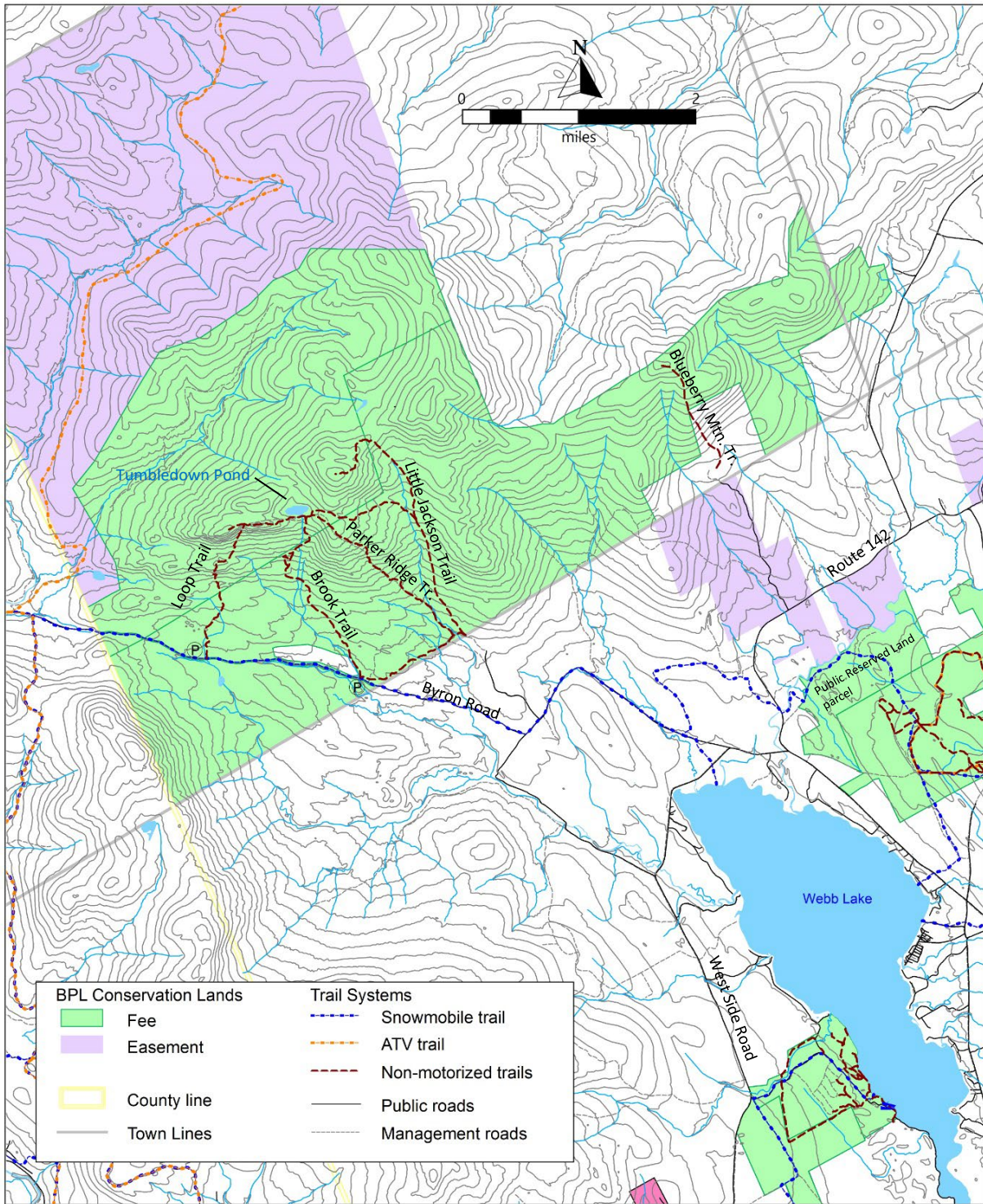
*Brook Trail trailhead kiosk.*



*Lower Brook Trail, on old road.*



## Tumbledown Public Lands Access and Recreation Facilities



MAP FIGURE 4.

As described above, Tumbledown Pond supports a native brook trout fishery, due to aerial stocking that has occurred since the 1960s. Special fishing regulations apply, including a prohibition on live bait. In the fall season (Oct. 1-Nov. 30), fishing is allowed with artificial bait only and all fish caught must be released at once. The pond is closed to ice fishing. Jackson Pond is shallow and fishless.

There are several well-known technical rock climbing routes on the south-facing cliffs of Tumbledown Mountain, established more than 50 years ago. Rock climbing webpages and guidebooks provide information on these and alternative routes, as well as bouldering locations below the cliffs. The primary routes are on the west peak, west of the Loop Trail. Informal trails to the climbing routes branch off the Loop Trail at about its midway point, where the trail crosses flat ledges. Climbing clubs are known to conduct outings to the cliffs. Summer and fall are the peak climbing seasons but winter climbing also occurs.

The good vehicular access to the Tumbledown Unit makes the area amenable to multiple forms of dispersed recreation such as hunting, sightseeing and wildlife viewing. Pedestrian access provided by the trail system and logging roads south of Byron Road and along Stockbridge Branch support these activities. There are no designated bear baiting sites on the unit.

The primary visual resources on the Unit are the more visible portions of the lower elevation lands surrounding the mountain ridges and summits. The forest on those lands is a prominent part of the scenic landscape viewed from those high vantage points.

#### Historic and Cultural Resources

No historic or archeological sites are known on the Tumbledown Unit. However, lands that now comprise the state of Maine, including the lands around Tumbledown and Mt. Blue State Park, were first inhabited by Indigenous peoples approximately 12,000-14,000 years ago, following the retreat of the last ice age. These original peoples are known as the Wabanaki, or People of the Dawn. Their descendants are present today among four federally recognized Maine Indian tribes: the Maliseet, Micmac, Penobscot, and Passamaquoddy.

The Byron Road through the Unit is part of what is known in the historical records as the “Great Cohos” or “Coos” Road. Developed in the late 1700s, this was an important route for settlers moving from the Kennebec River region to northwest Maine and northern New Hampshire and for traders bringing their goods south. The name “Coos,” which settlers gave to nearby Coos canyon as well as the road, is taken from the Wabanaki word for “pine trees.”

#### Timber Resources

Preliminary examination indicates perhaps 50-55% of the Unit may be suitable to be classified as regulated acres. Additional field work is required to make a final determination; in the interim, any future timber harvests will only be in areas where the regulated status is not in question.

#### **Harvest History**

Nearly all of the potential regulated area appears to have had partial harvesting, probably during the 10 years prior to state acquisition. It appears that the areas south of Tumbledown and Little Jackson Mountains were harvested less recently than the areas to the north. Harvests were more

frequent and heavier than on other BPL lands in the region. No timber harvests have occurred under the Bureau's ownership.

### **Stand Type Characteristics and Current Stocking**

Data from the 2011 statewide timber inventory on BPL lands provides preliminary information on the probable regulated acres, as follows. There is a diverse mix of tree species but hardwoods make up 75-80% of the volume, a considerably higher percentage than other BPL lands in the region. Broad forest types as percentage of probable regulated acres are as follows.

Tolerant hardwoods	67%
Intolerant hardwoods	11%
Mixedwood (2/3 are hardwood dominant)	15%
Softwoods	7%
Cedar and Pine	<1%

The top three hardwood species are paper birch (25%), yellow birch (13%), and sugar maple (12%). Beech and red maple account for 9% each. The top three softwood species are spruce (11%), fir (10%), and hemlock (4%).

Though reasonable stands were retained, as shown by the 2011 basal areas, it is likely that sawlogs and veneer were cut at rates higher than their share of the stands, perhaps a gentle highgrade that retained sufficient quality that 20 years post-harvest the overall quality should be fairly good. Outside of the slopes where softwood-leaning mixedwood and softwood types are dominant, soils should be fertile on most acres, able to produce quality hardwoods as well as spruce and pine. Overall stocking, based on the 2011 inventory, is estimated to be 22-23 cords per acre, modest by BPL standards, and fairly consistent across the broad forest types.

Tolerant hardwoods: Sugar maple is likely the most abundant species with yellow birch not far behind, and those two species probably make up nearly half the stocking. Paper birch, beech and red maple would be most of the rest, with scattered ash, oak and softwoods. Tolerant hardwood stands usually have few paper birch but here it might be as much as 15% of the stands. Much of the stocking is probably relatively young – under 100 years – with the older trees the ones not chosen by the most recent cutting.

Intolerant hardwoods: In most places, aspen is the top species in these stands, with paper birch next and other species behind. Here the data suggests that paper birch is much the dominant species in this type – over 50% of stocking – with aspen and red maple about even and the rest consisting of other tolerant hardwoods.

Mixedwoods: The hardwood-leaning mixedwood stands probably have a hardwoods component with the same relative species mix as the tolerant hardwood stands but with at least 25% of the stocking in softwoods. Softwoods are mostly spruce, fir and hemlock in that order of abundance. There are also scattered pines, mostly white pine but some red pine was tallied in 2011. These stands are likely to be on somewhat less fertile land than the tolerant hardwoods, and thus the trees are likely to be a bit smaller and lower quality.

The softwood-leaning stands probably will have less sugar maple and beech in the hardwood component and more red maple and paper birch while yellow birch remains about the same. The softwood component may have almost as much fir as spruce, along with hemlock, pines and a few cedar. Here also, lower fertility will mean somewhat lower quality in hardwoods but will have less effect on softwoods.

Softwoods: Most acres in softwood type are probably on the slopes or near water courses, though photography shows significant softwood acres south of the Byron Road. The hardwood component, less than 25% of stocking, is likely to be heavy to paper birch and red maple with significant yellow birch, but not much beech or sugar maple. The softwood mix should resemble than of the softwood-leaning mixedwood type.

Cedar/Pine: There's little cedar here and West Region cedar is often highly defective. The species may be more important to wildlife than for timber. The pine type acres are also very limited, and the better pine may be the scattered trees in other types. It should grow very well here, though the best may have gone in the harvests.

### LUPC Zoning

The Land Use Planning Commission (LUPC) applies zoning in the form of protection subdistricts on the lands within their jurisdiction, the purpose of which is to protect these area from inappropriate uses or development. All the Unit above 2,700 feet elevation is zoned P-MA (Mountain Area Protection subdistrict). The area within ½ mile radius of Tumbledown Pond is zoned P-RR (Recreation Protection subdistrict). Several steep areas on the south faces of Tumbledown and Little Jackson Mountains as well as a small area on the east face of West Mountain (south of Weld/Byron Road) are zoned P-SG (Soils and Geology Protection subdistrict). There are several small wetlands, some perched on high ground below the peaks and others at lower elevations, zoned P-WL1, 2, or 3 (Wetland Protection subdistricts). Timber harvesting is allowed on some of the lands within these zones only with special MFS permits.

### Leases

Since 2004, CMP has had a lease for a telecommunication facility on the summit of Jackson Mountain. The 25-year lease includes the right to access the site via ATV, snowmobile, or helicopter (LUPC rules allow motorized use on trails, and snowmobiling, within P-MA zones). The facility includes 16 solar panels and a helicopter landing platform. There is a ½ acre camplot lease on Jackson Pond, dating from before State ownership, accessed by the old road along Stockbridge Branch and an unofficial trail up the slope from the end of the road. The lease is renewable every five years. The camplot lease does not permit motorized access.

### Management Issues, Concerns and Opportunities

The Bureau will manage the Tumbledown 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 Tumbledown lands.

## **Timber Management**

About half of the Tumbledown lands will be managed as a multiple use working forest. The approximately 5,500 acres of regulated forest 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. No harvest will occur on ground above 2,700 feet elevation. Access is good throughout the Unit, with development of the forest management road system essentially complete south of the mountains. The road on the north side of the Unit paralleling Stockbridge Branch would need to be rebuilt.

Where timber is the dominant use or is included among secondary uses, management will favor high value (both for timber and wildlife) species such as sugar maple, yellow birch, spruce and pine. The objectives will include growing high value timber products, chiefly sawlogs and veneer, while maintaining visual integrity and enhancing the diversity of wildlife habitat and stability of the forest. Management should seek to reduce the fir component while leaving as much spruce as feasible. Paper birch can be managed for boltwood and veneer, it and other hardwoods for sawlogs/veneer. Oak and white pine should be encouraged where possible.

Paper birch is notable both for its high percentage of stocking on the probable regulated acres, and attractive appearance on the landscape, presumably appreciated by many visitors. As an early successional and shade intolerant species, it would gradually decrease in the forest in areas with no or only very light harvesting. Some treatments should aim to maintain a significant paper birch component, which will also benefit yellow birch and probably sugar maple.

Terrain (slope and rocks) as well as the extensive hiking trail network between the Byron Road and the mountains will limit access to some operable areas. Economics will play a part in which acres are feasible to manage for timber.

In summary, specific timber management issues and objectives include:

- Given that many acres will have timber as the dominant or an important secondary use, management will work toward maintaining good growth on quality trees, especially spruce and pine, while ensuring both vertical and horizontal diversity.
- Manage the softwood stands to increase the proportion of spruce.
- Manage to retain a significant paper birch component.
- Areas along the Byron Road and visible from the peaks and ridges will be managed to retain visual integrity.

## **Recreation Management**

### *Camping at Tumbledown Pond*

Camping at the pond has been occurring for many years and appears to have increased in the past decade or so, prior to the closure that was enacted in 2020 in response to the Covid-19 pandemic. The 2019 season Environmental Steward reported that 15-20 camping groups were typical on a busy mid-summer weekend night. Several large camping groups of 10 or more people were a common occurrence during the summer. Some groups appear to be motivated to visit for a “party” atmosphere rather than a backcountry experience.

These overnight visitors have created several campsites and stone fire rings in the woods in the vicinity of Tumbledown Pond and have built fires in other open locations on the exposed bedrock. (Open fires are not permitted on BPL lands outside of approved campsites.) This uncontrolled camping has resulted in substantial and steadily expanding vegetation damage and loss, soil erosion, and development of numerous “social trails” as well as large fire scars on prominent rock faces. Trash is frequently left behind by campers, and human waste is often not properly disposed of (there are no privies available near the pond).

The Bureau recognizes the special value and appeal to the public of camping at this relatively accessible yet uniquely attractive high elevation pond location. However, the amount and type of camping activity occurring, and the building of fires, will only worsen the environmental damage and adverse aesthetic impacts over time and is not appropriate in this environmentally sensitive and highly scenic setting. The Bureau is also concerned that the experience of hikers is harmed by the aesthetic degradation and by encountering the numerous campsites that may be in use when they visit the pond area.

It is imperative that steps be taken to halt vegetation damage and loss, soil erosion and other adverse impacts on this special environment and to allow natural recovery to begin. Additionally, the Bureau believes that recreation management at Tumbledown should be focused on providing a high-quality backcountry experience for day-users, who comprise the great majority of visitors. Lastly, the considerable ongoing investment of Bureau resources to properly manage camping at Tumbledown Pond, including staff time and capital expenses, may not be justified given the relatively few visitors who benefit and the presence of many competing needs and priorities.



*Campsite near pond, with debris and vegetation damage visible.*



*User-created fire ring near pond.*

Given the above considerations, the Bureau proposes the following approach to addressing this issue, with four primary components:

1) Prohibition of Camping at Tumbledown Unit – The Bureau will prohibit camping at Tumbledown, making permanent the temporary closure that was enacted in 2020. The closure will be enforced by BPL staff, with the assistance of other resource agencies and law enforcement as required. Given the historic popularity of this activity, the Bureau anticipates that enforcement of this prohibition will require a greater on-site presence and visibility of

recreational rangers or other staff, particularly during the first several summer seasons. This issue is addressed below under Administrative Issues.

2) Restoration of Impacted Areas – The Bureau will work to remove user-built fire rings, close unneeded social trails and begin the process of restoring the former campsites, fire pits and trails in the vicinity of Tumbledown Pond. This program may include temporarily blocking off restoration areas to allow them to heal without disturbance.

3) Information and Education – This component will involve multiple means of informing the public and visitors to Tumbledown about the permanent prohibition on camping at Tumbledown Pond, and recommendations for other backcountry hike-in camping opportunities on the public lands. These could include on-site signage, printed materials, messages published through media outlets, articles in the Bureau newsletter, postings on Bureau webpages, and the use of social media. Also, the Bureau could expand efforts to educate visitors about BPL rules and low-impact “Leave No Trace” behaviors to employ at Tumbledown, and in the sensitive high-elevation environment in particular. These would supplement the on-site efforts currently made each season by Recreation Rangers and MCC Environmental Stewards under the direction of MBSP.



*Environmental Steward providing information at Webb Lake Association's Lake Day event (2019)*

4) Potential Future Development of Campsites Elsewhere on the Unit – The Bureau will consider developing campsites at Tumbledown outside the high-elevation zone, after a period of five years when the first mandated plan review is scheduled. This hike-in camping opportunity would be based on a limited number of campsites constructed on the lower or mid-slopes of Tumbledown and/or Little Jackson Mountain. The sites would be accessed from the existing trailheads and hiking trails, with spur trails to the campsites as needed. Privies would be installed to serve the campsites.

These sites could provide the opportunity to campers to experience the high elevation and scenic pond environment – with the added necessity of a 20-30 minute hike from the campsites to the pond – while avoiding the resource degradation and other adverse impacts near the pond. This

type of camping opportunity could also facilitate a shift in the camping experience and culture away from the prevalent large-group “party” mode that has been observed at Tumbledown Pond.

### Technical Rock Climbing

The Bureau’s primary concern regarding rock climbing at Tumbledown is potential disturbance of nesting peregrine falcons. Human disturbance (e.g., hiking and rock climbing) during the nesting season can cause nest (eyrie) failure. Since reintroduction, peregrines have nested at various locations along the cliffs and ledges from the west side of Tumbledown Pond to the western ridgeline forming Tumbledown Mountain. Some preferred nesting sites are known to be in proximity to climbing routes. For the past two years, nests were established between the Loop Trail and the west end of Tumbledown Pond (referred to by climbers as the “East Peak slabs”).

The IRP states that managers may close an area or a portion of an area to climbing to protect nesting birds or other natural resources. Written notice stating the basis for the closure or restriction would be posted in locations where it would be visible to climbers. IF&W management guidance includes prohibiting climbing on the cliff and hiking near the cliff rim within ¼ mile of peregrine eyries during nesting season, which is from March 15<sup>th</sup> until five weeks after the last bird has fledged (which typically is in August). Closures are recommended during the nesting season. Falcons are especially disturbed by nearby activity on the cliff or on trails that are line-of-sight from the nest or perches.

IF&W reports that peregrine falcons have experienced mixed success in recent years at Tumbledown, fledging two chicks in 2019 but likely experiencing nest failure in 2020. BPL and IF&W will continue to monitor nesting peregrines at Tumbledown and will consider temporary closures of climbing areas or routes if deemed necessary.

### Glade Skiing

The Granite Backcountry Alliance (GBA), a New Hampshire-based backcountry skiing non-profit organization, has presented a preliminary proposal to develop glade skiing opportunities at Mount Blue and at Tumbledown. GBA has been developing backcountry skiing opportunities on publicly accessible land in New Hampshire and Western Maine since 2016 through the creation, improvement and maintenance of ski glades. A recent project is at nearby Rumford Whitecap mountain, on land trust and ski resort property. Creation of the glades involves thinning the forest to reduce the density of trees and establish skiable routes. GBA describes the thinning as low-impact and sustainable, and with low visual impact as the overall landscape and stand structure is not changed. Thinning targets trees 3 in. diameter and less and low hanging limbs to create glades 30-50 feet in width.

GBA has looked to the plan area for this type of winter recreation opportunity due to the desirable terrain (Mount Blue was once considered for ski resort development, before the creation of the State Park) and the presence of related human-powered winter recreation (Nordic skiing and snowshoe trails) at MBSP. GBA has specifically identified potential glade skiing zones on the south slopes of Little Jackson, Jackson, and/or Blueberry Mountains.

Chief among the Bureau’s management concerns are access, safety, potential impacts on wildlife and other resources, and integration with other winter recreation. Regarding access, there are no



management roads open to the public on the public land in the areas of interest and Byron Road is closed to vehicles in the winter, as is Morgan Road leading from Byron Road to a parking area at the base of Little Jackson Mountain. Any access that may be feasible via other roads would require agreements with abutters. A potential wildlife impact of particular significance is alteration of Bicknell's thrush preferred habitat. This habitat is found within softwood stands on the mid and upper slopes of the mountains (Map 3 presents the generalized mapping of this habitat by IF&W). The Bureau notes that GBA has addressed Bicknell's thrush habitat and other ecological concerns in conjunction with prior projects, as recorded in the proposal. Nevertheless, the Bureau prefers to avoid vegetation removal and thinning in the higher elevation areas which we propose in this plan to designate as Special Protection and Backcountry Recreation – Non-mechanized zones, with no timber harvesting.

Taking into account the lack of winter access and the other concerns mentioned, the Bureau has determined that the Unit is not a good fit for this proposed development. It should be noted that an undeveloped backcountry skiing opportunity is available via existing natural glades and provide an alternative to the more developed glade skiing opportunities proposed. The Bureau remains open to considering the glade skiing concept at other public reserved lands where winter access is available.

### **Wildlife and Habitat Protection**

Significant Wildlife Habitats, defined by Maine's Natural Resource Protection Act, include the peregrine falcon nesting areas described above and inland waterfowl and wading bird habitat. Among the Specialized Wildlife Habitats on the unit are wetlands and riparian areas. Protection for these areas is typically provided by a Wildlife dominant allocation, based on the "Significant Habitat" and "Specialized Habitat" criteria described in the IRP. On this unit, major portions of the Significant Wildlife Habitats as well as a portion of the riparian habitat (e.g., surrounding Tumbledown Pond), will be allocated to Special Protection – Natural Area due to the regionally significant ecological resources found there, or to Backcountry Non-mechanized Recreation due to LUPC P-MA (Mountain Area Protection subdistrict) zoning. Timber management is not allowed in the Special Protection and Backcountry Non-mechanized areas.

In the remaining wetland and riparian areas, the Wildlife allocation would be applied so as to demarcate a 75-foot buffer zone around those areas. (Minor riparian zones are generally designated around flowing water bodies upstream from the point where such water drains less than 50 square miles.) Any trail construction or other recreational development in these areas would need to be carefully planned to minimize potential impacts to these important habitats. Timber management is allowed in riparian zones to promote wildlife habitat.

It should be noted that the habitat for the two species of Special Concern, Bicknell's thrush and Northern spring salamander, would also be protected by the allocations described above.

### **Sensitive Natural Community/Rare Plants Protection**

The problems of soil loss, erosion, vegetation damage, etc. described above under the Recreation Management heading appear to pose the greatest threat to sensitive natural communities and rare plants primarily in the Tumbledown Pond area. These resource impacts also occur to some

degree on the mountain peaks in association with the hiking trails and off-trail activity near the trails.

It is hoped that prohibition of camping at the pond will slow and eventually reverse some of the most severe impacts. However, day use of the pond area and trail use will remain high, and therefore some impacts will continue. The Bureau will continue to monitor the situation and take steps to minimize impacts, for example, through visitor education, trail marking and physical barriers aimed at encouraging hikers to stay on the designated trails and not create social trails. Expanded efforts to educate visitors about BPL rules and low-impact “Leave No Trace” behaviors in the sensitive high-elevation environment, mentioned above, are an important component.

### Administrative Issues

#### **Hiking Trail Maintenance**

The 12.5 miles of hiking trails on the Unit receive regular maintenance throughout each hiking season by BPL staff and others under BPL direction. This includes routine maintenance such as brushing out/lopping branches and small growth, removal of blowdowns and cleaning out of water bars. More extensive work is conducted as needed, such as constructing rock steps and (in the case of a section of the Brook Trail) rerouting damaged trail. The very high use levels and steepness of the trails will continue to present challenges in maintaining stable, sustainable, safe and enjoyable trails.

In 2020, a Maine Conservation Corps crew conducted a detailed inventory and condition assessment of the hiking trails at Tumbledown, identifying a number of maintenance needs. Guided by this data, the Bureau will continue to conduct maintenance on the trails, as staffing and resources allow, to maximize safe and sustainable recreation access. Federal funding for trail work from the Recreational Trails Program is currently being pursued.

#### **On-Site Management Presence**

Increasing on-site management presence at Tumbledown Pond is critical to the success of the proposed new camping policy. This would support the proposed increased education efforts while also helping to enforce the new camping policy. Some visitors will come to the Unit unaware of the change in policy; those visitors will need to be made aware of the new rules and perhaps also be informed about alternative camping opportunities at Tumbledown, MBSP, or elsewhere. Given staffing challenges within the Bureau, it is likely that the assistance of other State agencies, increased MCC staffing, working with local non-profits to train volunteer “trail wardens,” or some combination of these will be required.

## **Vision for Tumbledown Public Land**

*Situated in relatively easy reach to a large proportion of the State's population and featuring one of the most attractive and accessible mountain hiking destinations on the Public Reserved Lands, the Tumbledown Unit combines extensive forestlands surrounding mountain summits and ridges that attract heavy public use and which also host several high value natural communities. Hiking is supported by more than a dozen miles of blazed and maintained trails.*

*The Tumbledown lands will provide a flow of forest products with just over half of the property managed as a multiple-use working forest for quality timber, respecting wildlife habitat needs and visual quality, particularly as perceived from the mountain summits and ridges. Timber harvesting will not occur above the 2,700-foot elevation.*

*Protections will be provided with appropriate allocations for sensitive natural resources, such as exemplary natural communities, wetlands and riparian habitats.*

*Tumbledown Pond and vicinity and all the higher ground on the Unit will continue to be managed for a semi-remote recreation experience, with well-maintained trails. The primary aim will be to balance the high level of use the pond area and other parts of the Unit accessible by trail will continue to attract, with the need to minimize – and, if possible, reverse – the resource impacts occurring on the Unit. Consistent with this desired recreation experience and with resource protection goals, camping will be prohibited.*

*In the future, the Bureau will consider adding opportunities to camp at a limited number of designated campsites on lower ground but within a short hike of the pond, served by new sanitary facilities. The Lands division of the Bureau will work with MBSP, other state agencies, and other partners to increase the on-site management presence, particularly during the transition to the new “no camping” regime.*

*The Bureau will coordinate with IF&W to monitor technical rock climbing for potential impacts on nesting peregrine falcons, in conjunction with IF&W monitoring of active nests. Traditional dispersed recreation activities such as hunting, trapping, and fishing will continue on the Unit.*

### **Resource Allocations for the Tumbledown Unit**

The following “allocations,” as shown on Map Figure 5 - Tumbledown 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 Area – Natural Area (Dominant Allocation)**

- An area totaling approximately 1,135 acres encompassing the several exemplary natural communities mapped by MNAP.

#### **Backcountry Recreation – Non-Mechanized Area (Dominant Allocation)**

- An area totaling approximately 1,125 acres encompassing additional terrain above 2,700 feet elevation but outside the areas designated Special Protection.

- Backcountry Non-Mechanized would apply as a secondary allocation in the areas with a Special Protection dominant allocation.

#### **Wildlife Management Areas (Dominant Allocation)**

- A total of about 1,650 acres as a dominant allocation in the following areas: (1) the portions of the Bicknell's thrush and peregrine falcon significant habitat mapped by IF&W that is not included in the above allocations; (2) the minor riparian zone (75 feet) along perennial streams; and (3) the portions of Inland Waterfowl and Wading Bird Habitat (IWWBH) areas and other wetlands outside the above riparian zones.

Timber Management is a secondary use in the significant habitat and riparian buffer areas, subject to wildlife, recreation, and visual resource concerns.

#### **Remote Recreation Areas (Dominant and Secondary Allocation)**

- Remote Recreation would apply as a dominant allocation to the portions of the Unit that are within 0.5 mile of Tumbledown Pond (based on the LUPC P-RR zone), and areas within 500 feet of the designated hiking trails, where not included in the above allocations (about 560 acres).
- Remote Recreation would apply as a secondary allocation in the significant habitat areas and riparian areas with a Wildlife dominant allocation.

#### **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 road (Byron Road) and areas around the hiking trails in conjunction with the Remote Recreation buffers described above.
- 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 summits and ridgelines and background hillsides viewed from public use roads or water bodies, or interior views beyond the Class I area likely to be seen from a road or trail; the portions of the south slopes of Tumbledown, Jackson and Little Jackson Mountains and the area south of Byron Road that may be harvested are included in this allocation.

#### **Developed Recreation - Class I Areas (Dominant Allocation)**

- The Brook Trail and Loop Trail parking areas (about 2 acres).

#### **Timber Management Areas (Dominant Allocation)**

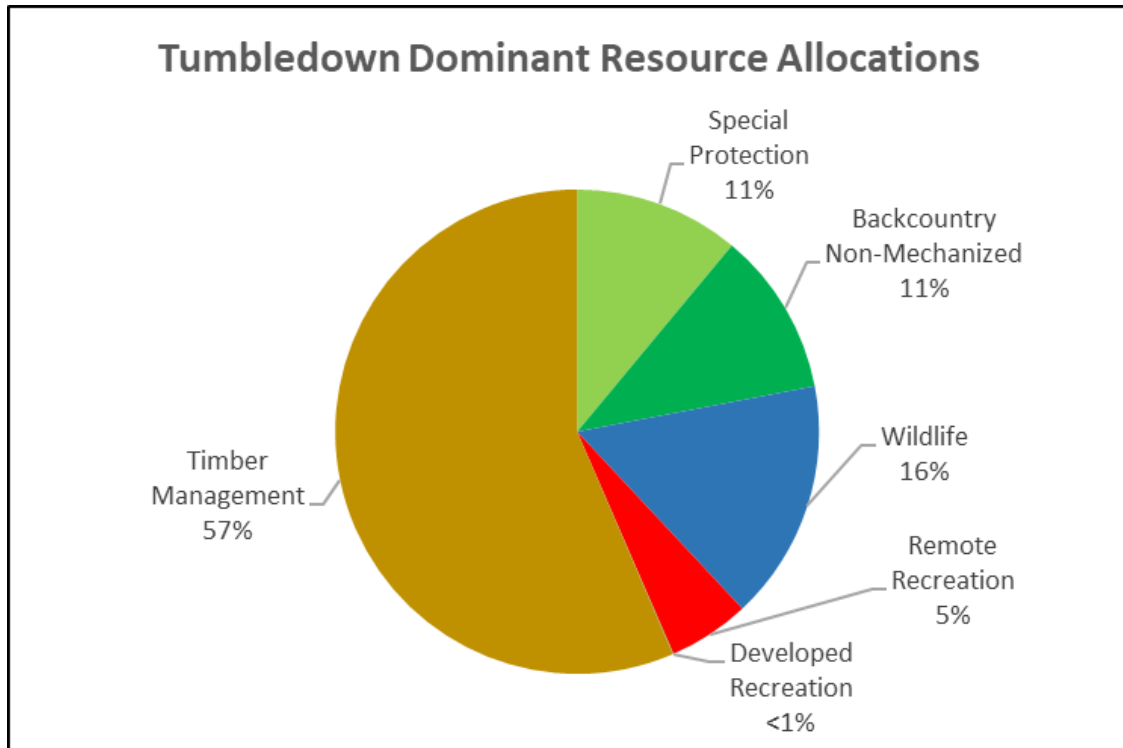
- All other areas not allocated above are designated Timber Management dominant (approximately 5,805 acres). Recreation will be recognized as an important secondary use within the timber dominant allocation. *Note that timber harvesting will not occur on all Timber Management dominant acres, some of which may in the future be classified as unregulated due to terrain, inaccessibility, etc.*

### Tumbledown Unit Allocation Summary

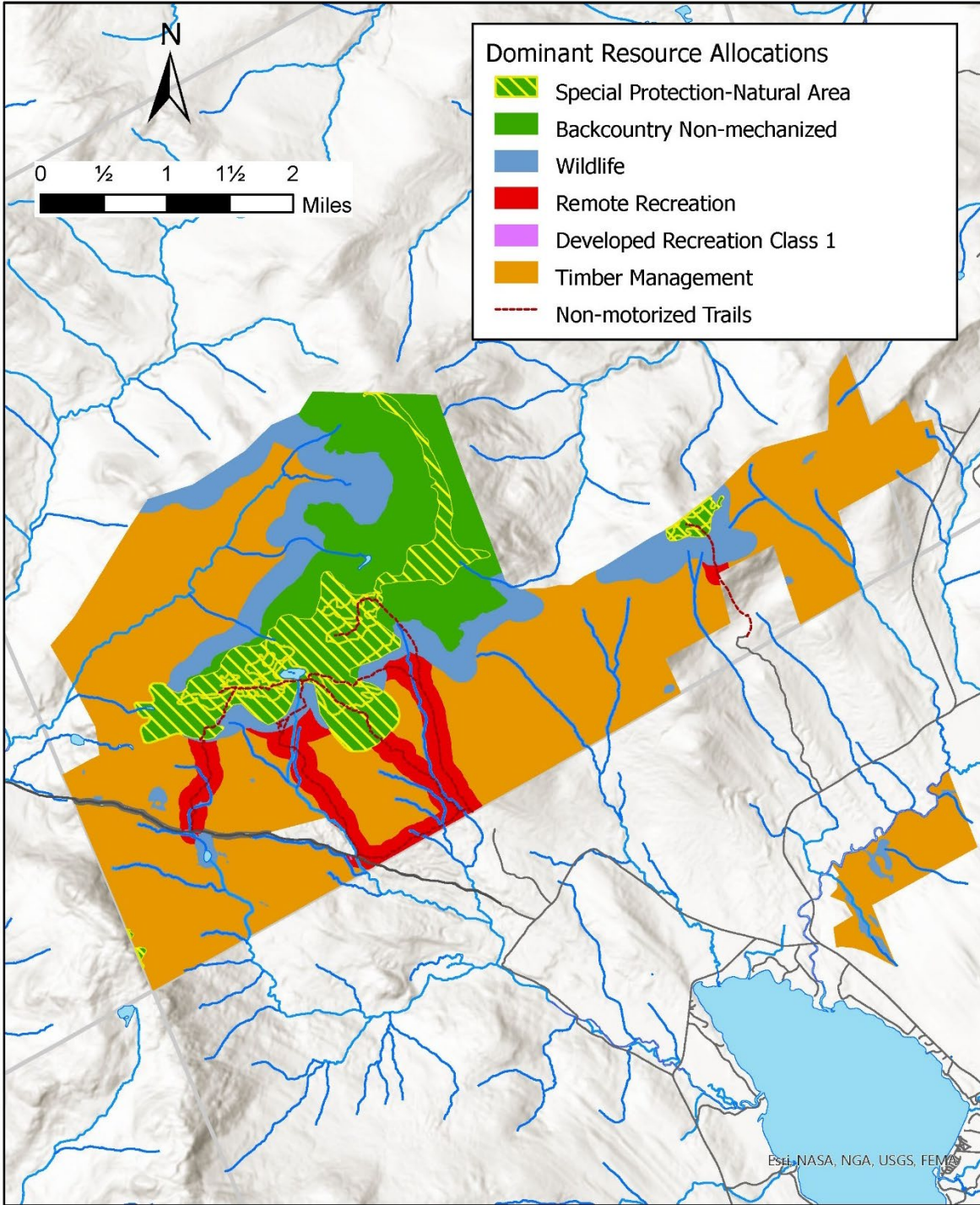
Allocation	Number of Acres			%
	Dominant	Secondary	Total	
Special Protection – Natural Area	1,135	Not applicable	<b>1,135</b>	<b>11.0</b>
Backcountry Non-mechanized	1,125	1,135	<b>2,260</b>	<b>22.0</b>
Backcountry Motorized	0	Not applicable	<b>0</b>	<b>0.0</b>
Wildlife Management	1,650	Not applicable	<b>1,650</b>	<b>16.1</b>
Remote Recreation	560	1,650	<b>2,210</b>	<b>21.5</b>
Visual Consideration – Class I	0	585*	<b>585</b>	<b>5.7</b>
Visual Consideration – Class II	0	4,130*	<b>4,130</b>	<b>40.2</b>
Developed Recreation – Class I	5	Not applicable	<b>5</b>	<b>&lt;1.0</b>
Timber Management	5,805	2,150	<b>7,955</b>	<b>77.4</b>

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 the forest prescription process.



# Tumbledown Public Land Dominant Resource Allocations



MAP FIGURE 5.

### Management Recommendations for the Tumbledown Unit

While allocations define the general management direction, management recommendations define specific actions to be taken during the course of the 15 year Plan period in response to identified management issues.

## **Recreation**

### Camping at Tumbledown

- Implement a permanent closure of camping on the Unit.
- Work to remove user-built fire rings, close unneeded social trails and facilitate the natural restoration of the former campsites, fire sites and trails and to protect remaining relatively undisturbed areas and soils/vegetation in the vicinity of Tumbledown Pond.
- Inform the public and visitors to Tumbledown, using both materials posted on-site and a variety of printed and electronic media, about the closure and provide recommendations for other backcountry hike-in camping opportunities on the public lands.
- After a period of five years, consider developing hike-in campsites at Tumbledown outside the high-elevation zone. A limited number of campsites could potentially be constructed on the lower or mid-slopes of Tumbledown and/or Little Jackson Mountain.

### Interpretation and General User Education

- Continue and, if staffing and other resources allow, expand efforts to educate visitors about BPL rules and low-impact “Leave No Trace” behaviors to employ at Tumbledown, and in the sensitive high-elevation environment in particular.
- As a means of accomplishing the above, develop trailhead interpretive panels with both natural history and minimum impact messaging.

### Trail Maintenance and Parking

- Continue -- and increase as resources allow -- annual trail maintenance work, in particular targeting problem areas identified in a recent detailed field assessment conducted by MCC. Supplemental funding from the federal Recreational Trails Program (RTP) and other sources will be pursued.
- Develop plans to expand parking at the Brook Trail and/or Loop Trail trailheads, to reduce roadside parking.

### Technical Rock Climbing

- Coordinate monitoring of nesting peregrine falcons with IF&W and confer regarding potential nest disturbance.
- Partner with the climbing community to address any disturbance that may be occurring, e.g., informing climbers what routes to avoid, and when, to eliminate or reduce disturbance, and to inform climbers of any temporary closures that may be necessary during the nesting season.
- Post signage at the base of climbing routes to inform climbers on actions to avoid disturbance of falcons. Temporary closures of climbing areas or routes would also be posted at that location. Closures would typically be based on the peregrine nesting season (March 15 until five weeks after the last bird has fledged).

## **Wildlife/Rare or Exemplary Ecosystems and Habitats**

- Avoid development of new hiking trails or trail reroutes and campsites within IF&W-mapped peregrine falcon habitat, to minimize opportunities for disturbance.
- Due to the sensitivity of Northern spring salamander to environmental stresses such as temperature change and stream siltation, recommendations for management of the species should be addressed when planning timber harvests and in conjunction with development of campsites or parking. Specifically, disturbances to the riparian areas surrounding streams, including changes to the canopy, should be minimized to maintain shading and protect water quality.
- In addition to the closure of camping and removal of campsites recommended above, development of new hiking trails or trail reroutes should be avoided, if possible, within the mapped exemplary ecosystems; if no good alternative exists, MNAP should be consulted on proposed trail routes.

## **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.
- Management will work toward maintaining good growth on quality trees, especially spruce and pine, while ensuring both vertical and horizontal diversity. Softwood stand will be managed to increase the proportion of spruce. Management of hardwood stands will aim to retain a significant paper birch component.
- A 100-foot buffer zone on each side of Byron Road will be subject to Visual Class 1 considerations. In addition, harvesting within areas allocated to Remote Recreation will be light and will seek to mimic harvests in Visual Class I areas, aimed at retaining the appearance of an essentially undisturbed forest.
- The portions of the Unit visible from the summits and ridgelines will be subject to Visual Class II considerations.

## **Administrative Issues**

### Signage and Visitor Information

- Assess signage and visitor information provided at trailhead parking area for possible improvements and additions, including providing information on the new camping regime and low-impact behaviors (as recommended above).

### On-Site Management Presence

- The Bureau should consider options for increasing the on-site management presence at Tumbledown during the peak use season, to supplement the current Park Ranger and Environmental Steward staffing.
- Explore working with MFS and IF&W to provide an enforcement presence at the pond to deter unauthorized camping and fires, with the expectation that enforcement will be most needed in the first few years, as the public gains awareness and becomes accommodated to the new camping prohibition.



- Additional aspects to consider regarding enforcement of camping and fire prohibitions include:
  - Need and potential for enforcement that includes the authority to write summons (as issued in past seasons for illegal fires by MFS Rangers).
  - Need to ensure BPL or other staff are on-site every weekend day.
  - Need for periodic overnight stays at Tumbledown Pond (as have occurred with Park Ranger and Environmental Stewards in some past seasons).

## **Mount Blue State Park**

This section provides background information on the MBSP property, including the acquisition history and general character of the land base; recreation resources; ecological resources and natural communities; wildlife resources; and history and culture. This is followed by a summary of the management issues that the Plan will seek to address through the Vision and management recommendations for the Park.

### *Acquisition History and Character of the Land Base*

MBSP is Maine's largest State Park and is comprised of 8,200 acres of public land in two sections, the Webb Lake area and the Center Hill/Mount Blue area. About half of the total acres were acquired in 1955 as a gift from the U.S. Department of Agriculture. Those lands included about 400 acres on Webb Lake that now host the campground, beach and other developed facilities, ~3,200 acres in Weld at Center Hill and Mount Blue, and ~1,310 acres in Avon on Mount Blue.

The first addition to the park occurred in 1967, when the State purchased a 17-acre shoreline parcel on Webb Lake. In 1988, the State purchased an 84-acre parcel near Center Hill in Weld. A major expansion of the park occurred in 2001-02, when the State acquired 2,844 acres: a 376-acre parcel adjacent to the campground/beach parcel, the 2,324-acre Hedgehog Hill parcel between Center Hill and Mount Blue, and a 144-acre parcel in Temple, on Gammon Ridge south of Mount Blue. The last addition occurred in 2004 with the acquisition of 354 acres; a 96-acre parcel in Weld and a 258-acre parcel in Avon on the east side of Mount Blue.

The topography of the Center Hill/Mount Blue area is mainly gently rolling, with an area of low ground surrounding Fran Brook between Center Hill and Hedgehog Hill. The slopes of Center Hill (particularly on the south) and Mount Blue are moderately steep to steep. The 3,187-foot summit of Mount Blue is the highest elevation in the park, 2,516 feet above the elevation of Webb Lake. Several small streams drain the area, mainly flowing into East Brook and Houghton Brook which flow into Webb Lake.

The topography of the Webb Lake area is gently sloping toward the lake. Swett Brook runs near to the north boundary and drains into Webb Lake at the northwest corner of the park property. The park is largely covered with second growth forest and plantations on former farms and homesteads and areas previously harvested for timber (additional details are provided below).