



Department of
Environmental
Conservation

HIGH PEAKS WILDERNESS COMPLEX

Including

AMPERSAND PRIMITIVE AREA
JOHNS BROOK PRIMITIVE AREA
TAHAWUS PRIMITIVE AREA
MACINTYRE PRIMITIVE AREA

and Hiking Trail Portions of the

MT. VAN HOEVENBERG INTENSIVE USE AREA

Proposed Final Amendment

to the

1999 High Peaks Wilderness Complex Unit Management Plan

and

2004 Dix Mountain Wilderness Area Unit Management Plan

River Area Management Plan

for the

Opalescent River

NYS DEC, REGION 5, DIVISION OF LANDS AND FORESTS

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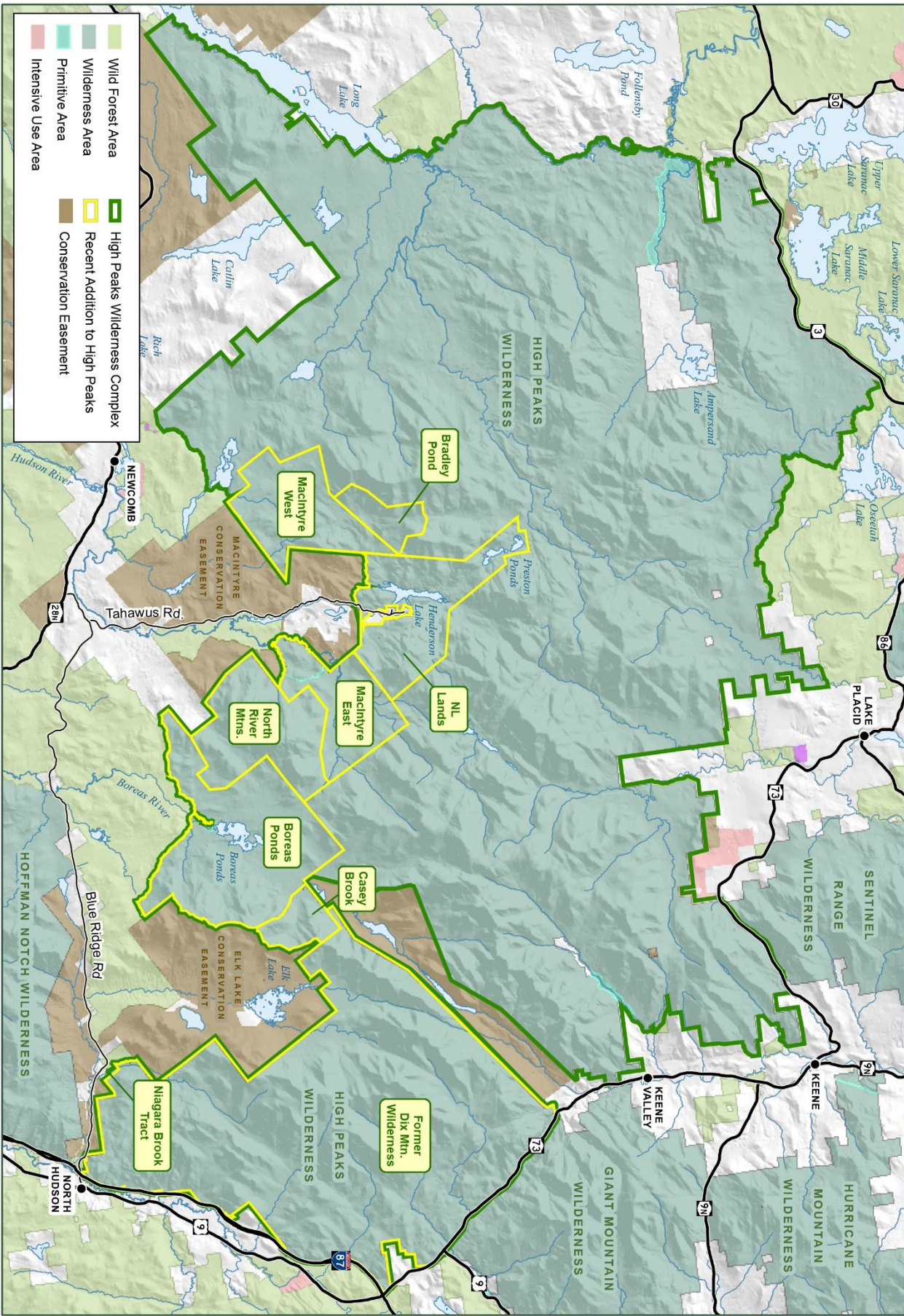
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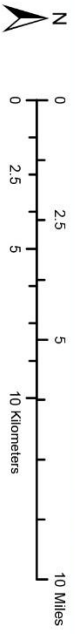
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High Peaks Wilderness

Overview



	Wild Forest Area		High Peaks Wilderness Complex
	Wilderness Area		Recent Addition to High Peaks
	Primitive Area		Conservation Easement
	Intensive Use Area		



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I. Introduction

A. Purpose of the Amendment

Since the adoption of the High Peaks Wilderness Complex Unit Management Plan (UMP) in 1999, over 84,000 acres of land have been added to the High Peaks Wilderness Area. This comprises 33,200 acres of lands acquired by the State of New York since 1999—including the Boreas Ponds Tract—as well as nearly 51,000 acres of exiting Forest Preserve lands that were previously part of different management units.

The most recent additions to the unit occurred in March 2018, when Governor Andrew Cuomo approved a land classification package that added all or portions of the Boreas Ponds, MacIntyre East, MacIntyre West, and Casey Brook Tracts to the High Peaks Wilderness Complex. In the same classification package, the previously-named Dix Mountain Wilderness was merged with the High Peaks Wilderness Complex due to its newly-formed connection to the original High Peaks via the acquisitions of the Boreas Ponds and Casey Brook Tracts. A UMP for the Dix Mountain Wilderness was adopted in 2004 and continues to guide the New York State Department of Environmental Conservation (Department or DEC) management of the area and is incorporated into this document by references, additionally this UMP amendment provides proposals to connect existing recreational facilities to new facilities on the recently acquired lands.

As both the largest and most recent parcel to come into public ownership, and because of the allure of the property's namesake, the Boreas Ponds Tract has garnered significant attention from local government, interest groups and the public alike. To accommodate this public interest in a manner that protected the property's natural resources, the Department provided limited public access to the tract soon after it was acquired by the State. This included parking in several locations, bicycle and equestrian opportunities on a limited number of existing roads, and informal camping, hiking and paddling throughout the tract.

The purpose of this UMP amendment is to propose additional recreational opportunities and facilities on these recently-classified wilderness lands in a manner that maximizes the protection of the wilderness resource and public enjoyment and appreciation of the Forest Preserve. The amendment also contains several proposals related to accessing from the north at locations that have special safety and natural resource protection issues.

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The designation of Wilderness Area Lands requires the management proposals to be consistent with the definition of Wilderness found in the Adirondack Park State Land Management Plan (APSLMP). The 1999 High Peaks Wilderness Complex UMP also makes clear the importance of having a UMP:

Without a UMP, wilderness area management can easily become a series of uncoordinated reactions to immediate problems. When this happens, unplanned management actions often cause a shift in focus that is inconsistent and often in conflict with wilderness preservation goals and objectives. A prime objective of wilderness planning is to use environmental and social science to replace nostalgia and politics. Comprehensive planning allows for the exchange of ideas and information before actions, that can have long-term effects, are taken. A written plan stabilizes management despite changes in personnel or the influences of multiple administrative units where several managers and/or disciplines have different perceptions on how wilderness should be managed. In view of tight budgets and competition for monetary resources, plans that clearly identify management objectives and actions have demonstrated greater potential for securing needed funding.

Proposals in this UMP amendment, their implementation, and ongoing management of the unit will continue to allow the High Peaks Wilderness Complex to become a wilder and naturally driven place while enhancing the publics' wilderness experience.

As explained in further detail in the following sections of this plan, these management actions are proposed:

- Establishing hiking and skiing opportunities within the newer tracts as well as providing connections to portions of the existing High Peaks Wilderness lands;
- Establishing rules and outreach efforts to effectively educate and inform the public about the High Peaks Wilderness and all the new lands added, including the former Dix Mountain Wilderness Area Lands, so that both the natural resources and wilderness experience of the users can be protected;
- Providing access for persons with disabilities to hand carry launches and designated primitive campsites at several locations;
- Enhancing paddling opportunities, including providing a hand carry launch on Boreas Ponds, Henderson Lake and Chapel Pond;

- Designation of various primitive camping opportunities throughout the tract including roadside, backcountry, and water access.

The High Peaks Wilderness Complex includes the core connected lands classified as Wilderness in addition to Primitive Areas mentioned in the 1999 HPWC UMP, in addition to several Primitive Areas added since then including:

- Tahawus Primitive Area which is the approximately 1.3 acres and includes Henderson Lake Dam, the access road and lands adjacent to the river.
- MacIntyre Primitive Area (west) which is approximately 3 acres and includes a 50' Right of Way "jug handle" road that leaves the Conservation Easement Lands and then reenters it.
- MacIntyre Primitive Area (east) which is approximately 8 acres and includes a right of way over the Conservation Easement Lands, connecting to a second conservation easement that is landlocked by Wilderness and the Opalescent River.

This UMP Amendment also proposes the construction, upgrades and management of the hiking trails that will be built on the Mt. Van Hoevenberg Intensive Use Area, accessing Mt. Van Hoevenberg from the north and east as well as the Cascade Mountain Trail. Given the access to these wilderness locations across the Intensive Use Area, DEC wants to ensure that the user experience is consistently managed. DEC will work with the Olympic Regional Development Authority (ORDA) to manage these trail segments.

Across the southern boundary of the High Peaks Wilderness Complex there are interfaces with the Vanderwhacker Mountain Wild Forest, Camp Santanoni Historic Area and five major conservation easements. This UMP amendment doesn't dictate management on those adjacent lands, however DEC land managers work together to help achieve a spectrum of recreational opportunities and wilderness experiences that interact across classification boundaries. For example, the 2018 Vanderwhacker Mountain Wild Forest UMP amendment incorporates multiple access points and connections that were also planned in this UMP Amendment.

The adjacent conservation easements lands are critical components of the complex planning approach for these public lands and provide for enhanced public access and preservation of natural resources. The Department's land managers will work with conservation easement landowners, through the development of Recreation Management Plans (RMPs), to develop proposals on those lands.

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This document also serves as a River Area Management Plan pursuant to the New York State Wild, Scenic and Recreational Rivers System Act (WSSRA) and its implementing regulations (6 NYCRR Part 666). The Opalescent River is designated as a Wild River where it passes through the High Peaks Wilderness Complex. Any proposals found in this amendment that fall within the River Areas (½ mile from the bank of each designated river) are compliant with the WSSRSA and its implementing regulations.

B. Planning Area Overview

Description of Unit

The High Peaks Wilderness Complex lies within the counties of Essex, Franklin and Hamilton in the Adirondacks. Including the recently classified Forest Preserve parcels the unit is made up of approximately 275,460 acres.

In the 2018 land classification package, approximately 9,118 acres of the southern portion of the Boreas Ponds Tract were classified as Wild Forest and added to the Vanderwhacker Mountain Wild Forest while the remaining 11,411 acres of the northern lands, along with the Casey Brook Tract's 1,490 acres, were added to the High Peaks Wilderness Area. The Wilderness and Wild Forest boundary is generally 500 feet north of Gulf Brook and Boreas roads. A 75-foot wide corridor that follows the northern spur of Boreas Road to within 0.1 miles of the Boreas Ponds Dam was classified as Wild Forest. Located in the towns of North Hudson, Newcomb and Elizabethtown in Essex County, this newly classified portion of the HPWC is bounded largely on the south by the Vanderwhacker Mountain Wild Forest and Elk Lake Conservation Easement, to the east by the Adirondack Mountain Reserve Conservation Easement and the former Dix Mountain Wilderness Area (now part of the High Peaks Wilderness Complex) and to the north by the existing High Peaks Wilderness.

The MacIntyre East tract was also classified in a manner similar to the Boreas Ponds Tract, with approximately 1,604 acres of the southern part of the parcel classified as Wild Forest and added to the Vanderwhacker Mountain Wild Forest, while the remaining 4,418 acres to the north was classified as Wilderness and added to the High Peaks Wilderness Complex. The entire Wilderness section is bounded on the east by the existing High Peaks Wilderness Area, to the south by Upper Hudson Woodlands Conservation Easement. To the west it is bounded by private lands and to the north the High Peaks Wilderness.

The MacIntyre West Tract is bound on the east by the Tahawus Conservation Easement, to the north, west and south by High Peaks Wilderness lands.

Both the MacIntyre East and West tracts have a primitive corridor to preserve deeded private access.

Portions or all of eight other acquisitions and one reclassification were also added to the High Peaks Wilderness Area in the 2018 land classification package. Only minimal recreational facilities are proposed for these tracts at this time. The following acreages indicate how much of each tract was added to the High Peaks Wilderness only:

- The 4,445-acre **MacIntyre West Tract** was purchased in 2015 and is located in Essex County, Town of Newcomb, west of the Tahawus Road and boards conservation easement to the east and High Peaks Wilderness to the south and west. To the north is the Bradley Pond tract that was also added to Wilderness.
- The 12-acre **Niagara Brook Tract** was part of the larger Finch acquisition and was sold to the State of New York in 2009. This tract is located on both the north and south side of Blue Ridge Road approximately 3.5 miles west of the Adirondack Northway in the Town of North Hudson, County of Essex. The tract is bounded by Vanderhacker Mountain Wild Forest and the former Dix Mountain Wilderness Area (now High Peaks Wilderness) to the north and private lands to the south.
- The 1,717-acre OSI Bradley Pond Tract, formerly a Finch parcel, was purchased by the State of New York in 2013 from The Open Space Institute. The parcel is located in Essex County, Town of Newcomb. The tract located south of Bradley Pond on the south eastern flank of Santanoni Mtn. It is bordered on the south by the MacIntyre West Tract and to the east the NL Property.
- The 6,816-acre **NL Lands**, formerly a National Lead parcel, was purchased from the Open Space Conservancy in 2007. The tract is in Essex County in the town of Newcomb and includes Henderson Lake the Preston Ponds as well as lands to the northwest of Mt Adams, Lake Jimmy and Mt Adams. It is bordered by the High Peaks Wilderness on the west, north and east. The MacIntyre East tract to the southeast, Mountain Endeavors LLC (Former Tahawus Mine) to the south and OSI lands to the south.
- The 4,510-acre **MacIntyre East Tract** is located in Essex County, Towns of Newcomb and North Hudson straddling the Opalescent River. The parcel is bordered to the northwest by the NL Lands Tract, north and east by High Peaks Wilderness and to south by the North River Mountains Tract. To the southwest it is bordered by conservation easement and Mountain Endeavors LLC (Former Tahawus Mine) to the east.

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- The 6,261-acre **North River Mtns Tract** is between the MacIntyre East Tract and Boreas Ponds Tract. It is bordered to the east by conservation easement in Essex County towns of Newcomb and North Hudson. This tract was previously part of the Vanderwhacker Mountain Wild Forest.
- The 11,399-acre **Boreas Ponds Tract** is located in the Town of North Hudson in Essex County south of the High Peaks with the Adirondack Mountain Reserve bordering it to the north east and Casey Brook Tract and Elk Lake Conservation easement to the east. The southern boundary is 500' north of the Gulf Brook Rd in the Vanderwhacker Mountain Wild Forest. To the west it is bordered by the North River Mtns Tract.
- The 1,450-acre **Casey Brook Tract** located at the southeastern end of the Pinnacle Mtn Range in the Town of North Hudson, Essex County. It is bordered to the north and east by the former Dix Mountain Wilderness Lands, to the south by the Elk Lake Conservation easement and to the west by Boreas Ponds tract and to the northwest by the Adirondack Mountain Reserve.
- The former Dix Mountain Wilderness consists of 45,208 acres of Forest Preserve in the towns of Elizabethtown, Keene and North Hudson, Essex County. The Unit is roughly bounded on the north by State Route 73, on the east by the Adirondack Northway (Interstate Route 87), on the south by Blue Ridge Road (County Route 2) and on the west by Elk Lake Preserve and AMR lands.

Location and Access

Boreas Ponds Tract:

The main access to Boreas Ponds is via Gulf Brook Road, which extends from Blue Ridge Road to the vicinity of LaBier Flow. This Forest Preserve entrance is approximately 5.5 miles from Northway exit 29, and approximately 17 miles from the hamlet of Newcomb. The Blue Ridge Parking Area is located about 300' in from Blue Ridge Road and can accommodate trailered vehicles or up to 10 cars. This lot also serves as overflow parking for the Fly Brook Parking Area, and is the only open parking area on Gulf Brook Road during the winter months and mud season. The Fly Brook Parking Area is located approximately 3.4 miles from Blue Ridge Road and can accommodate trailered vehicles or up to 20 cars.

Andrew Brook Road is located on the north side of Blue Ridge Road approximately 6.5 miles from Northway exit 29 and 16 miles from the hamlet of Newcomb. The parking area here is located approximately 500 feet up Andrew Brook Road and can accommodate trailered vehicles or up to 5 cars.

The eastern side of the Boreas Ponds Tract is bounded by Elk Lake Road, which is a town maintained road. Two parking areas exist here, the first one being north of Blue Ridge Road approximately 1.8 miles and the second being 2.6 miles. The first parking area can support three cars and the second can support trailed vehicles and up to eight cars

MacIntyre Tract, OSI Bradley Pond Tract and former NL Lands:

The main entrance to the MacIntyre East Tract and portions of the NL Lands is via East River Trailhead, located off the Upper Works Road in Newcomb, approximately 3 miles north of the junction with the Tahawus Road. The trailhead and first 0.4 miles of the existing East River Trail are on the OSI owned lands which the Department is currently working with OSI on a Conservation Easement for.

The main entrance to MacIntyre West Tract and OSI Bradley Pond Tract is via the Bradley Pond Trail, which is located off the Upper Works Road in Newcomb, approximately 2 miles north of the junction with the Tahawus Road. The existing Bradley Pond Trailhead serves hikers going to the Santanoni Mountains. This trail goes about 2 miles to a gate at the Forest Preserve boundary and access into the MacIntyre West Tract. The trail to Bradley Pond turns off 1.8 miles from the parking lot and provides access to the OSI Bradley Pond Tract.

The main entrance to the former NL Lands Tract is via the Upper Works Trailhead at the end of the Upper Works Road in Newcomb. The trailhead and first 0.4 miles of existing Calamity Brook Trail are on the OSI Easement lands. North of Henderson Lake outlet access on existing trails can bring you to Henderson Lake or north toward Preston Ponds.

C. Public Participation and Planning Process

Article 27, Section 816 of the Executive Law (known as the Adirondack Park Agency Act) mandates the Department to develop, in consultation with the Adirondack Park Agency (APA), individual unit management plans for each unit of land under its jurisdiction classified in the Adirondack Park State Land Master Plan (APSLMP).

The Department began work on this UMP amendment for High Peaks Wilderness Complex in 2018. A planning team, appointed by the Regional Director including staff from Fisheries, Wildlife, Forest Rangers, Lands and Forests, Operations, and staff from the Adirondack Park Agency has gathered and tracked information on various resources and areas over the years.

Unit Management Plan and Amendment

This document is the second amendment to the original March 1999 High Peaks Wilderness Complex Unit Management Plan. The previous amendment, adopted in 2000, proposed a trail to Little Porter Mountain.

Interim Access Plan

In August 2016, the Department released an Interim Access Plan for the entire Boreas Ponds Tract, including lands that would later become part of the High Peaks Wilderness Area. The purpose of this plan was to provide limited public access to the property during the interim period between State acquisition and the adoption of a UMP amendment that will authorize additional recreational opportunities.

Scoping/Kickoff Meeting

A public scoping meeting was held on Tuesday April 3, 2018 at the Newcomb Central School in Newcomb NY. Several stations were set up where the public provided sketched proposals on maps and written comments. There was also an opportunity for interested persons to present their thoughts publicly to the Department and the attendees of the meeting. The public comment period following the meeting was open until April 20, 2018. Various ideas were submitted to the Department both at the meeting and through written comments during the public comment period. Several comments about environmental protection and potential recreational opportunities of the area were submitted and considered.

Draft Unit Management Plan Amendment

The Department released the High Peaks Wilderness Complex Draft Unit Management Plan Amendment May 10, 2018 at the Adirondack Park Agency Meeting. During the public comment period from May 10th to June 27th three public comment meetings were held. The first was held on May 23, 2018 at 10:00 am at the DEC headquarters, 625 Broadway, Albany NY; the second was May 23, 2018 at 6:00 pm at the Newcomb Central School in Newcomb NY; and the third was June 21, 2018 at 6:00 pm at the Olympic Conference Center in Lake Placid NY. During these meetings a presentation summarizing the major proposals within the Vanderwhacker Mountain Wild Forest and High Peaks Wilderness Area was given, which was followed by an opportunity for interested persons to present their thoughts on the plans publicly to The Department

and the attendees of the meeting. Several stations were also set up where the public had an opportunity to provide sketched proposals on maps and written comments.

D. General Guidelines and Objectives for Management of the Unit

All land covered by this Unit Management Plan amendment is Forest Preserve, and as such, must be managed in a manner consistent with Article XIV, Section 1 of the New York State Constitution. The UMP, and the management recommendations found within, have also been developed pursuant to and consistent with relevant provisions of the following:

- Adirondack Park State Land Master Plan (APSLMP);
- Environmental Conservation Law (ECL);
- Executive Law;
- Department rules, regulations, policies and procedures,
- State Environmental Quality Review Act (SEQRA); and
- Wild, Scenic and Recreational Rivers Act (WSRRA)

Each sub-section of this UMP amendment contains objectives related to specific uses and/or subjects. The following objectives will apply to the implementation of this UMP as a whole:

- Prepare a work plan for each construction project;
- Consult the Adirondack Park Agency (APA) on projects in accordance with the current DEC/APA Memorandum of Understanding;
- Comply with all applicable laws, regulations, and policies;
- Develop long-term partnerships with communities and other stakeholders for the stewardship of the unit.
- Monitor impacts to natural resources within the unit, and where needed, develop appropriate measures to address those impacts.

This UMP amendment will provide the guidance necessary for staff to manage the area in a manner that protects the environment while at the same time providing for suitable outdoor recreation opportunities for the public. Without the development and future implementation of the UMP amendment, sensitive environmental resources of the unit could be impacted negatively which would result in a decrease in the public enjoyment of such resources. Management of the unit pursuant to a UMP allows the Department

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to improve public use and enjoyment of the area, avoid user conflicts and prevent overuse of the resource.

What the UMP Amendment Does Not Do

The proposed management actions identified in this UMP amendment are primarily, with some limited exceptions, confined to lands and waters that have been added to the High Peaks Wilderness Complex since the completion of the original UMP in 1999, in addition to portions of hiking trail proposals that start on the Mt. Van Hoevenberg Intensive Use Area which primarily serve the High Peaks Wilderness Complex. Activities on private property or nearby State lands that are not in the High Peaks Wilderness Complex are beyond the scope of this document and will generally be discussed only as they relate to uses and impacts in the High Peaks Wilderness Complex.

In addition, this UMP cannot suggest changes to Article XIV, Section 1 of the New York State Constitution or conflict with statutory mandates or DEC policies. All proposals must conform to the guidelines and criteria set forth in the APSLMP and cannot amend the APSLMP itself.

II. Natural Resources

A. Soils

From a management prospective, the key characteristic of soil is its erodibility. Highly erodible soils that are subject to intensive use or modified to remove stabilizing elements, such as vegetation, can result in significant soil loss, downslope/downstream sedimentation, and poor trail conditions. All facilities will be laid out to avoid running slopes, and will be constructed and hardened in a manner to avoid erosion to the greatest degree possible.

The vast majority of the soils in the Boreas Ponds Tract are very well drained, rocky, boulder soils, that can be susceptible to erosion. Some of the low-lying areas are poorly drained. The soils in the area are an important factor to consider when developing trails. When constructing trails, well-drained soils are preferred while long running slopes should be avoided to minimize erosion. The bouldery nature of these soils can sometimes hinder bicycle and snowmobile trail layout, but this further emphasizes the need for proper trail placement and sustainable construction.

The northern portion of the MacIntyre tracts and along the outside perimeter of the property is well-drained soil of various types. The bulk of the property lies in the river bottom and is comprised of the Rumney-Burnt Vly Complex and Podunk very fine sandy loam. Both of these are poorly drained and prone to flooding, making trail layout and construction challenging.

B. Topography

The northern portions of the MacIntyre tracts, Boreas Ponds Tract, former NL Lands and the Casey Brook tracts are rolling terrain that generally gains in elevation as you move north. Where the Opalescent River crosses into Wild Forest is the lowest section of the properties, starting at around 1,775 feet in elevation with Henderson Lake at 1,814 feet and Boreas Ponds at 1,975 feet in elevation. Rist Mountain rises to 3858 feet in elevation between the Opalescent and Boreas Drainages with 3,776 foot Boreas



II. Natural Resources

Mountain to the east. On the western side of the new lands the eastern slopes of the Santanoni Mountains rise to 3,500 feet at the old boundary to 4606 foot Santanoni Peak. Overall the topography lends itself well to having a balance of upland hardwood forests as the elevation gains and lowland boreal wetland forests in the drainages and low lying areas throughout the tract.

C. Water Resources

Watercourses

Across the new lands added to the High Peaks Wilderness Complex there are 5 large watersheds represented. In the northwest the Cold River, which feeds into the Raquette River comes from Upper Preston Ponds flowing north. The MacIntyre and most of the Boreas ponds tracts are both part of the Hudson River Watershed, which includes the Opalescent and Boreas Rivers. Casey Brook Tract, a small portion of Boreas and the northern portion of the Dix Mountain Wilderness are part of the Ausable River Watershed while the eastern Dix Wilderness is the source of the Boquet River watershed and west of the range includes The Branch River, which feeds into the Schroon River.



Santanoni Brook on MacIntyre West

As mentioned in the Introduction, pursuant to the Wild, Scenic and Recreational Rivers System Act (WSSRA), the Opalescent River is designated as a Wild River where it passes through the HPWC.

Ponded Waters

Boreas Ponds Tract:

The High Peaks Wilderness Complex portion of the Boreas Ponds Tract includes the northern half of LaBier Flow. This in its natural state is the Boreas River, however in the late 1800's a flush dam was constructed on the southern end of what is now LaBier flow by Finch Pruyn. Firm records of an exact year the dam was constructed do not seem to exist, but anecdotal information suggests it may have been in place and used as early as 1889, 27 years prior to the construction of the better-known Boreas Dam. The flush dam was used many times over the years to help flush logs down the Boreas River,

eventually bringing them to Glens Falls where they were utilized by the Finch Pruyn mill. This was eventually replaced with the more permanent steel dam still present today. The water level fluctuates throughout the year but LaBier Flow consists of approximately 25 acres of ponded water on the Boreas River.

Originally 3 distinct ponds prior to any impoundments, Boreas Ponds now covers 350 acres and provides stunning views of the mountains from the water and impressive wetland buffers along its shores. In 1915-1916 the Boreas Ponds Dam was built by Finch Pruyn to move logs down the river. Loggers would use Boreas Dam and LaBier Dam together, with logs loaded on the ice above both. When the time was right, both dams would be opened at the same time, so by the time LaBier was almost flushed the Boreas flush would come through. Boreas Dam was reconstructed in 1935 used into the late 1940s/ early 1950s for floating logs.

North of Boreas Ponds is White Lily Pond, which is a shallow 15-acre pond. This heavily wooded pond provides a nice view of Cheney Cobble from out on the pond.

MacIntyre Tract:

Lake Andrew sits to the west of Mount Andrew and at 16 acres is the source of Sucker Brook which flows into Newcomb Lake to the south.

Nine acre Bradley Pond and its wooded shoreline has been viewed as hikers went up to the Santanoni Range from the Bradley Pond Trail. Dramatic rises along the wooded slopes above the pond provide amazing views.

Former NL Lands:

Henderson Lake is a 235-acre impoundment with a maximum depth of 70 feet. The dam is of earthen construction with a concrete spillway. The outlet stream flows into the Hudson into the Hudson River. From the lake the views to the north are spectacular.

The 72 acre Upper Preston Pond and 55-acre Lower Preston Pond provide a similar feel to Henderson Lake but are more remote and smaller in size. Prior to the Duck Hole Dam failure paddlers would portage from Henderson Lake to Upper Preston Ponds to Duck Hole paddle the 3 bodies of water.

Lake Jimmy:

At 33 acres Lake Jimmy isn't the largest pond in the area but it boasts a unique story of the trail that crossed it. For years the wooden causeway on Lake Jimmy brought hikers to Mount Adams, Allen Mountain, Hanging Spear Falls and beyond to Upper Twin

II. Natural Resources

Brooks Trail and Uphill Lean-to. The trail now skirts north of the pond and time will slowly reclaim the wooden walkway.

Wetlands

The APSLMP (2016, page 20) defines a wetland as:

“...any land that is annually subject to periodic or continual inundation by water and commonly referred to as a bog, swamp, or marsh, which is (i) one acre or more in size, or (ii) located adjacent to a body of water, including a permanent stream, with which there is a free interchange of water at the surface, in which case there is no size limitation, and which (iii) meet the technical definition of 578.3(r) of the Adirondack Park Agency Rules and Regulations”.

As is true for much of the Adirondack Park, wetlands in the unit are common in the low-lying, flat areas between hills and mountains where runoff from steep slopes and groundwater seepage collects and is sometimes confined before entering drainage systems. These areas are commonly referred to as headwater wetlands and are often the origins of streams. Many of these headwater wetlands have been created, expanded, and modified by beaver dams. In most cases, the dams raise the water level, flooding adjacent upland areas. Depending on the length of time the dams are maintained, these upland areas can eventually become wetlands, creating hydric soils and supporting water tolerant vegetation. Remnants of the upland community are often apparent in these wetlands and may include dead trees such as spruce and fir. Other wetlands within the tract occur along the floodplains of streams and rivers and within and adjacent to deep-water habitats of ponds.

Forested evergreen wetlands, typically dominated by balsam fir and spruce, are the most prevalent wetland cover type on the Boreas Ponds and MacIntyre tracts of the High Peaks Wilderness Complex. Significant examples of these lowland Boreal Communities are along the Opalescent, and Boreas Rivers.

The largest high elevation peatland in New York State, Marcy Swamp is located on the Boreas Ponds Tract upstream of Boreas Ponds. The headwaters of the Hudson River and Ausable River start in the middle of this five-mile wetland that lies between Boreas Ponds and Upper Ausable Lake.

Additionally, there is a wetland complex that extends along the entire length of White Lily Brook.

On MacIntyre West drainages of Santanoni Brook and Sucker Brook have extensive wetland networks.

On MacIntyre East Dudley Brook flows through a high elevation wetland saddled between Allen Mountain and Cheney Cobble. It sits above 2,000 feet in elevation.

Wetlands of the High Peaks Wilderness Complex present both opportunities and challenges to the public. They have great aesthetic value and offer considerable opportunity for study and general education. For visitors, the expanses of open space provided by wetlands supply much-needed visual contrast to the heavily forested settings that dominate much of the unit. Because they constitute one of the most productive habitats for fish and wildlife, wetlands afford abundant opportunities for fishing, hunting, trapping, and wildlife observation and photography. On the other hand, wetland areas are generally ecologically sensitive and are not conducive to heavy recreational use. Trails placed adjacent to wetlands are often plagued by seasonal wet spots and locations for new facility development (e.g. trails, primitive campsites, and lean-tos) are often limited by the presence of wetlands.

Other important ecological functions of wetlands include water quality improvement, stormwater attenuation, nutrient cycling, and habitat for threatened and endangered species. In their capacity to receive, store, and slowly release rainwater and meltwater, wetlands protect water resources by stabilizing flow rates and minimizing erosion and sedimentation. Many natural and man-made pollutants are removed from water entering wetland areas. Some of the threatened and endangered species and species of special concern which may occur in wetlands in the unit include the common loon, bald eagle, osprey, tiger beetle, snaketail and clubtail dragonflies and bog turtle. Wetlands also may contain a number of rare, threatened and endangered plants including the swamp pink and numerous sedges.

Aquatic Invasive Species

With over 2,300 lakes and ponds, 1,500 miles of rivers, 30,000 miles of brooks and streams, the Adirondack region is particularly vulnerable to the introduction of aquatic invasive species (AIS). AIS can cause harm to the environment, human health, and the economy of a region, and can arrive via many pathways, including intentional introduction (aquaria dumping), cargo transport, and shipping ballast. Once established, AIS can spread rapidly through connecting waterways or by “hitchhiking” not only on the propellers, trailers, rudders, motors, etc. of the vessels of recreational boaters and anglers but also on equipment (trailers, waders) and non-motorized watercraft (kayaks, canoes, and floats).

II. Natural Resources

In 2010 the Department and the Adirondack Park Agency developed Inter-Agency Guidelines for Implementing Best Management Practices for the Control of Terrestrial and Aquatic Invasive Species on Forest Preserve Lands in the Adirondack Park (see appendix A). These Guidelines provide a template for the process through which comprehensive active terrestrial and aquatic invasive species management will take place on Forest Preserve lands in the Adirondack Park. The Department shall be responsible for management of terrestrial and aquatic invasive species on Forest Preserve lands while the Agency will be responsible for providing review of, and advice on, APSLMP compliance and permit jurisdiction. The Guidelines are a dynamic document and are periodically revised to reflect new invasive species threats, continuing inventory of the Forest Preserve, and evolving invasive species management techniques.

Efforts should be made to restore and protect the native ecological communities in the High Peaks Wilderness through early detection and rapid response efforts to eradicate or control existing or newly identified invasive species populations. Adoption of the Guidelines and implementation through the UMP and site specific work planning process, gives the Department the basic tools needed to preserve, protect and restore the natural native ecosystems of the Forest Preserve.

This UMP proposes several water access sites for the launching of non-motorized watercraft.

Proposed Management

Objectives

- Prevent the introduction and spread of AIS into and within the Adirondack region;
- Protect native aquatic species and their habitats;
- Protect water-based recreational resources and economy;
- Educate recreational watercraft operators on steps they need to take to prevent the spread of AIS and help them understand new regulations requiring them to take such precautions at all public waters;
- Foster a sense of responsibility in watercraft operators so they take steps to help stop the spread of AIS;
- Protect New York citizens' investment in publicly-owned waters.

Action Steps

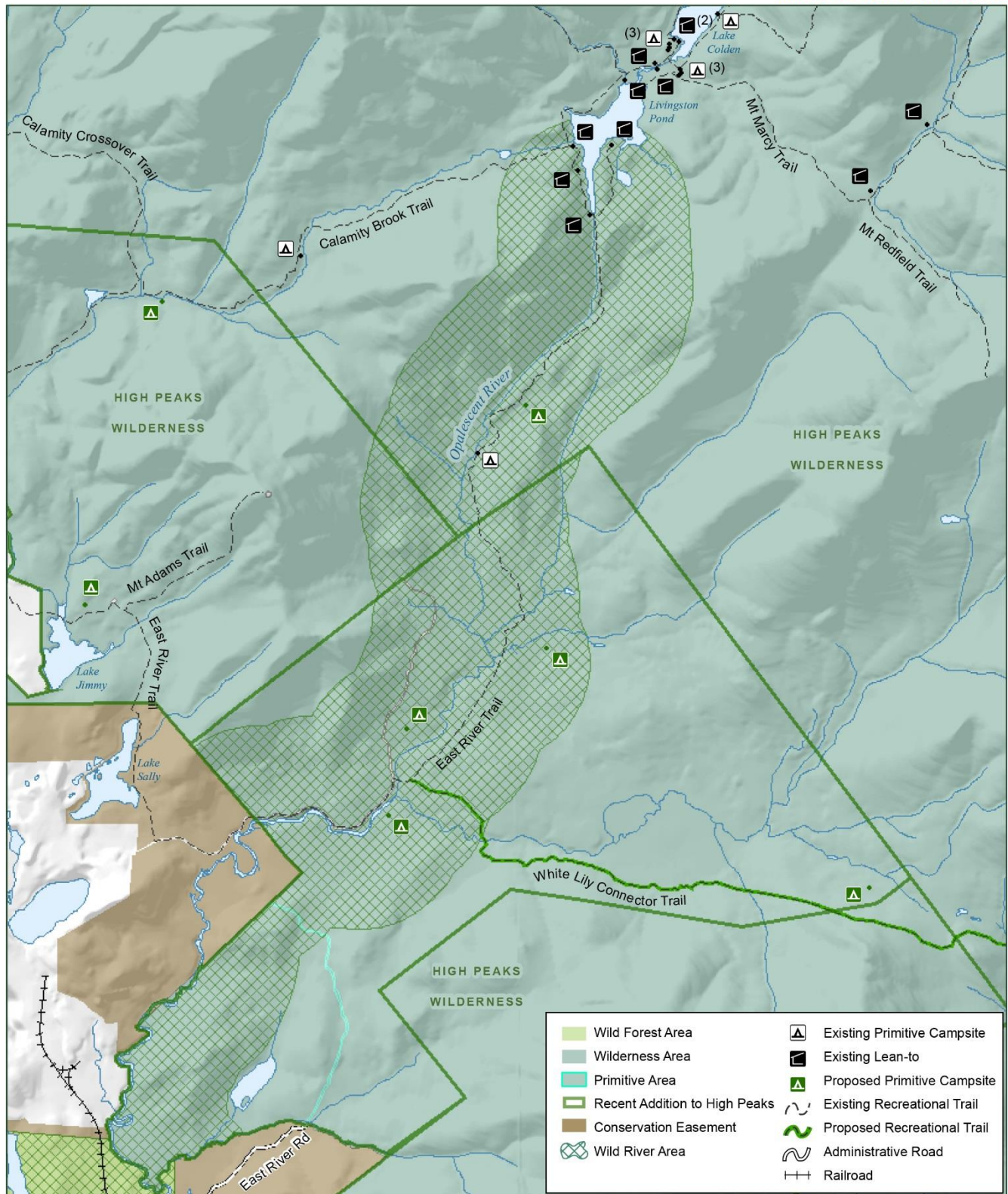
- Take aquatic invasive species spread prevention actions within the unit. These measures will vary based on location within the following spectrum:

- Make printed materials available at water access locations
- Post signs about the dangers of spreading AIS
- Provide information regarding nearby boat decontamination stations
- Manage aquatic invasive species pursuant to *Inter-Agency Guidelines for Implementing Best Management Practices for the Control of Terrestrial and Aquatic Invasive Species on Forest Preserve Lands in the Adirondack Park*.
- Partner with those organizations involved in fighting invasive species on Forest Preserve lands.
- Train Department staff to identify and document the location of aquatic invasive species.
- When Department staff or partner organizations are engaged in on-site outreach and education, ensure they have proper training for the prevention of AIS
- Work towards a complete comprehensive inventory of the presence and extent of aquatic invasive species in the unit.

II. Natural Resources

High Peaks Wilderness

Wild, Scenic,
and Recreational Rivers



D. Vegetation

General Inventory

The lands within the tracts are mostly forested. Plant communities vary depending on past timber harvesting and environmental factors. The historical management of these tracts for a sustainable supply of timber is apparent throughout.



The tracts lie in the ecological transition zone between the temperate deciduous forest and the true boreal forest. The predominant, broad naturally occurring vegetative types include northern hardwoods, mixed hardwoods, and lowland boreal communities. The influence of logging over the past century has brought visible effects on the vegetative cover.

Rare, Threatened and Endangered Plants and Ecological Communities

In 2000-2001, scientist Jerry Jenkins was commissioned by The Nature Conservancy for Finch, Pruyn & Co. to complete a biological survey (mainly flora) on Finch-owned lands in the Adirondack Park. Several sites along the Opalescent and Hudson rivers were inventoried, revealing several notable communities and species. The upland sites above the river banks are alluvial forests, while the majority of the lowlands along the river bottom are lowland boreal forests. Open wetland complexes ranging from 5 to 50 acres are scattered throughout the lowland forests as well. The floodplain here is generally 0.2 to 0.5 miles wide, well developed, and has several oxbows. Most wetland communities were sedge-shrub-sphagnum, but one was a low nutrient white cedar-delicate sedge bog which is a rare wetland type in the Adirondacks, and was noted as being the most unusual wetland examined in the Jenkins Survey. Some of the most notable species were arethusa (*Arethusa bulbosa*), pickerings reedgrass (*Calamagrostis pickeringii*), two-seeded sedge (*Carex disperma*), Michaux's sedge (*Carex michauxiana*), few-flowered sedge (*Carex pauciflora*), low sedge (*Carex paupercula*), slender-flowered sedge (*Carex tenuiflora*), bog honeysuckle (*Lonicera villosa*), alder buckthorn (*Rhamnus alnifolia*), and pylaes sphagnum (*Sphagnum pylaesii*).

II. Natural Resources

The survey also lists a significant “spruce swamp” on the western side of the Boreas Ponds tract as having a moderately high diversity of bryophytes and some significant mosses and liverworts. These include the NYS rare *Campylium radicale*, and uncommon *Hylocomnium umbratum* and *Rhytidiadelphus squarrosus*.

Terrestrial Invasive Species

The negative impacts of invasive species on natural forests, terrestrial and aquatic communities are well documented. Colonization and unrestrained growth of invasive species cause the loss of biodiversity, interruption of normal hydrology, suppression of native vegetation, and significant aesthetic, human safety and economic impacts. Terrestrial and aquatic invasive species have been identified at increasing rates of colonization along roadsides in campgrounds, and in water bodies of the Forest Preserve. Some of these species have the potential to colonize backcountry lands, lakes and ponds and degrade natural resources of the Forest Preserve.

The Department is a member and will continue to collaborate with other partners of the Adirondack Park Invasive Plant Program (APIPP) (Adirondack PRISM) to support education, inventory, research, control protocol, and control of invasive species. An inventory and analysis of the current distribution of invasive species on Forest Preserve lands will provide the necessary information on the present extent of invasive exotics and provide the basis for long term decision making.

As mentioned under Aquatic Invasive Species, the Department and the APA have developed Inter-Agency Guidelines for Implementing Best Management Practices for the Control of Terrestrial and Aquatic Invasive Species on Forest Preserve Lands in the Adirondack Park (see appendix A). The Guidelines are a dynamic document and are periodically revised to reflect new invasive species threats, continuing inventory of the Forest Preserve, and evolving invasive species management techniques.

Efforts should be made to restore and protect the native ecological communities in the High Peaks Wilderness through early detection and rapid response efforts to eradicate or control existing or newly identified invasive species populations. Adoption of the Guidelines and implementation through the UMP and site specific work planning process, gives the Department the basic tools needed to preserve, protect and restore the natural native ecosystems of the Forest Preserve.

Forest Health

A combination of many factors can influence the health of a plant community. Physical factors tend to be weather related with notable examples being lightning fires, ice

damage, severe winds, and flooding. Biological factors are variable and include the effects of disease and insects on the forest environment. Insects and diseases that affect trees are constant natural forces that shape the forest. While many insects and diseases have negligible or beneficial impacts to forest health, some, especially those involving invasive exotic species, can be especially damaging.

Several insects and diseases have impacted forest communities within the region and/or New York State in recent years and continue to pose a threat the health of forests within unit:

Beech Bark disease – Beech bark disease is an important insect-fungus complex that has caused extensive mortality of American beech throughout portions of the Adirondacks. The primary vector, a scale insect, *Cryptococcus fagi*, attacks the tree creating entry sites for the fungus, *Nectria coccinea var. faginata*. Changes in the percent of beech in the cover type can stimulate shifts in animal populations that utilize beech mast extensively as a food source. On the other hand, dead and/or dying beech trees may benefit other wildlife species by providing abundant nesting, feeding, and potential den locations.

Emerald Ash Borer (*Agilus planipennis*) – This exotic, introduced beetle bores into and kills otherwise healthy ash trees. The white ash trees in the forest are a minor component although their value to wildlife and scenic quality should be evaluated to improve interpretations of value loss following EAB infestations which currently seem inevitable.

Hemlock woolly adelgid (*Adelges tsugae*) – This aphid-like insect attacks North American hemlocks, and can be easily identified by the white woolly masses they form on the underside of branches at the base of the needles. Juvenile hemlock woolly adelgid feed on the tree's stored starches, and remain in the same spot for the rest of their lives, continually feeding and developing into adults. Their feeding severely damages the canopy of the host tree by disrupting the flow of nutrients to its twigs and needles. Tree health declines, and mortality usually occurs within 4 to 10 years.

Native to Asia, Hemlock woolly adelgid was introduced to the western United States in the 1920s. It was first observed in the eastern US in 1951 near Richmond, Virginia after an accidental introduction from Japan. Hemlock woolly adelgid has since spread along the East Coast from Georgia to Maine and now occupies nearly half the eastern range of native hemlocks. Hemlock woolly adelgid was first discovered in New York State in 1985 in the lower Hudson Valley and on Long Island. Since the initial infestation, hemlock woolly adelgid has continued to spread north to the Capitol Region and west, through the Catskill Mountains and the Finger Lakes Region, into western NY.

II. Natural Resources

In the summer of 2017, hemlock woolly adelgid was discovered on the Forest Preserve in the Town of Lake George, the first known occurrence in the Adirondack Park. Due to the limited extent of the infestation, the Department and its partners were able to eradicate the insect in this location. As a result of the Lake George infestation, monitoring efforts have increased throughout the southern Adirondacks.

Balsam Woolly Adelgid (*Adelgaes piceae*) - The balsam woolly adelgid, a pest of true firs, was introduced into the United States from Europe or Asia around the turn of the century. Since that time it has spread throughout the United States and Canada.

Forest Tent Caterpillar (*Malacosoma disstria*) - The forest tent caterpillar, a native insect, may be found wherever hardwoods grow. Outbreaks have occurred at 10 to 15 year intervals with the last widespread outbreak in the late 1970's. Portions of St. Lawrence County were moderately to severely defoliated in 2003 through 2005, with additional outbreaks reported in northeast Jefferson, Herkimer, Fulton and Hamilton Counties. Favored hosts are sugar maple and aspen with birch, cherry, and ash also being eaten.

Gypsy moth (*Lymantria dispar*) – This introduced invasive insect forest defoliator has been a resident of the region for over a century. The insect periodically causes extreme defoliation in red oaks and has caused some scattered mortality. Heavy infestations of caterpillars can be a severe nuisance to forest users and the hairs on the caterpillars can be a serious human health risk due to allergic reactions.

Oakwilt (*Ceratocystis fagacearum*) - This fungus develops in the xylem, the water carrying cells of trees. All oaks are susceptible to the fungus, but the red oak group (with pointed leaf tips) often die much faster than white oaks (rounded leaf tips). Red oaks can take from a few weeks to six months to die and they spread the disease quickly. White oaks can take years to die and have a lower risk of spreading the disease.

White pine decline – This disease is caused by several agents of which the most notable are white pine blister rust (WPBR), *Caliciopsis* canker, *Armillaria* root disease, and several needle casts and blights. White pine decline has recently been listed as a northeastern forest decline priority as several mature and maturing pine stands are suffering significant levels of decline on a variety of sites from Maine to Pennsylvania. Transition forests around wetlands seem particularly vulnerable to white pine decline agents as these stands seem to suffer more from seasonal droughts.

Spruce decline – There are several insects and diseases that can contribute to severe decline symptoms in spruce stands following drought, competition, extreme weather or other site related stressors. These agents rarely cause severe decline or mortality

although bark beetles can be found in local outbreaks that may expand to a few acres of tree mortality.

Proposed Management

Objectives

- Allow natural processes to freely operate to ensure that the succession of native plant communities is not altered by human use.
- Prevent the establishment of non-native invasive vegetation.
- Educate natural resource managers, elected officials and the public about the threat of invasive species and ways to prevent their introduction and transport into the unit.
- Incorporate information in staff training and citizen licensing programs for hunting, fishing, and boating; and through signage, brochures, and educational materials; and included in information centers, campgrounds, community workshops, and press releases.
- Protect known locations of sensitive, rare, threatened, and endangered plant species.
- Promote programs and studies that identify rare ecological communities.

Action Steps

- Where applicable, manage invasive species and forest pests pursuant to Inter-Agency Guidelines for Implementing Best Management Practices for the Control of Terrestrial and Aquatic Invasive Species on Forest Preserve Lands in the Adirondack Park.
- For beech bark disease, conduct aerial surveys with periodic ground checks to determine the extent and expansion of beech decline and mortality.
- For emerald ash borer, survey every three years for the presence of symptoms via aerial reconnaissance and when appropriate, conduct ground surveys to verify presence. Collect photographic and/or bark sample evidence and forward to the Forest Health Diagnostic Laboratory for confirmation.
- For hemlock woolly adelgid, survey high priority hemlock stands annually by employing citizen science surveys and influencing existing professional survey activities. Develop a priority plan for any potential mitigation efforts needed to preserve specific hemlock stands. The plan should prepare for potential mitigation impacts on local and regional forests after the hemlock woolly adelgid presence has been confirmed.

II. Natural Resources

- For balsam woolly adelgid, periodically survey for the extent and expansion of true fir decline symptoms and where symptoms are evident, collect damaged twig samples and/or photographs and forward them to the Forest Health Diagnostic Laboratory.
- For forest tent caterpillar, employ annual surveys or influence other professional survey activities to assess the population by evaluating visible defoliation. Develop a maple regeneration value inventory to assign priorities for further monitoring or more intensive sampling to predict defoliation and subsequent maple regeneration impacts.
- For white pine decline, employ annual surveys or influence other professional survey activities to assess the extent of white pine decline symptoms. Collect damage evidence materials from impacted sites and forward to the Forest Health Diagnostic Laboratory for evaluation. Prepare damage agent evaluation and prognosis reports for specific white pine stands.
- For spruce decline, periodically survey for the extent and expansion of spruce decline symptoms and where symptoms are evident, collect damaged twig samples and/or photographs and forward them to the Forest Health Diagnostic Laboratory.

E. Wildlife

Existing Conditions

Mammals

A wide variety of mammal species inhabit the Boreas Ponds and MacIntyre tracts, which are representative of the High Peaks region and central Adirondacks. However, survey data are mostly lacking for mammals in these tracts. The Department has conducted moose and carnivore surveys in the Boreas Ponds area and results of these efforts are summarized below.

Large and Medium-sized Mammals

Large and medium-sized mammals known to occur within these tracts include white-tailed deer, moose, black bear, coyote, raccoon, red fox, gray fox, bobcat, fisher, American marten, river otter, mink, striped skunk, long-tailed weasel, short-tailed weasel, beaver, muskrat, porcupine, and snowshoe hare (Saunders 1988). Of these species, white-tailed deer, black bear, coyote, raccoon, red fox, gray fox, long-tailed

weasel, short-tailed weasel, bobcat, and snowshoe hare can be hunted. Additionally, these species (with the exception of white-tailed deer, black bear, and snowshoe hare) along with fisher, American marten, mink, muskrat, beaver, and river otter can be trapped. Hunting and trapping activities are highly regulated by NYSDEC, and the Department's Bureau of Wildlife collects annual harvest and survey data on many of these species.

White-tailed deer

Important big game species within the area include white-tailed deer and black bear. Relative abundance of white-tailed deer is generally low in the High Peaks and central Adirondacks, which is related to decreased productivity in mature second-growth forests and harsher winter conditions (temperature, snow depth) at higher elevations. From early spring (April) to late fall (November), deer are distributed generally on their "summer range". When snow accumulates to depths of 20 inches or more, deer travel to their traditional wintering areas. This winter range is characteristically composed of lowland spruce-fir, cedar or hemlock forests, and to a lesser degree, a combination of mixed deciduous and coniferous cover types. Often found at lower elevations along water courses, this habitat provides deer with protective cover from adverse weather and easier mobility in deep snows (see Critical Habitat section).

Black bear

Black bears are essentially solitary animals and tend to be dispersed throughout the High Peaks region. The Adirondacks support the largest black bear population in New York State (4,000 to 5,000 bears). Hikers and campers in this region are likely to encounter a bear, and negative interactions between black bears and humans, mainly related to bears stealing food from humans, have been a regular occurrence in the High Peaks for at least twenty years. In 2005, a new regulation was enacted, requiring all overnight campers in the Eastern High Peaks Management Zone (Zone C; <https://www.dec.ny.gov/outdoor/33889.html>) to use bear-resistant canisters for food, toiletries, and garbage. In other areas of the Adirondacks, the DEC recommends the use of bear resistant canisters as well.

Moose

Moose entered the state on a continuous basis in the 1980s, after having been absent since the 1860s. Currently, the moose population in the Adirondacks is estimated to be approximately 400. In the northeastern United States, moose use seasonal habitats within boreal and mixed coniferous/deciduous forests. The southern distribution of moose is limited by summer temperatures that make the regulation of body temperature

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difficult. Moose select habitat primarily for the most abundant and highest quality forage (Peek 1997). Disturbances such as wind, fire, logging, tree diseases, and insects create openings in the forest that result in regeneration of important hardwood browse species such as white birch, aspen, red maple, and red oak. Typical patterns in moose habitat selection during the summer include the use of open upland and aquatic areas in early summer followed by the use of more closed canopy areas (such as upland stands of mature aspen and white birch) that provide higher quality forage in late summer and early autumn. After the fall rut and into winter, moose intensively use open areas again where the highest biomass of woody browse exists (i.e., dormant shrubs). In late winter when browse quantity and quality are lowest, moose will use closed canopy areas that represent the best cover available within the range (e.g., closed canopy conifers in boreal forest). From late spring through fall, moose commonly are associated with aquatic habitats such as lakes, ponds, and streams. However, use of aquatic habitats can vary geographically over their range. It is believed that moose use aquatic habitats primarily to forage on highly palatable plants, however, moose may also use these areas for relief from insects and high temperatures.

The Bureau of Wildlife has conducted aerial moose surveys in the Adirondacks during the winters of 2015-2018. During the winters of 2015 and 2016, staff surveyed 11 transects that were partially within the Boreas Ponds and MacIntyre tracts; however, no moose were observed during these surveys.

American marten

American marten populations in New York State are geographically-isolated within the higher elevations of the central Adirondacks (in general, $\geq 2,000$ ft.). In this area, martens use a variety of second-growth and old-growth forest stand types (deciduous, mixed, and coniferous) that are structurally complex (heavy canopy cover, downed woody debris). Structural complexity influences all aspects of marten life history, including acquisition of prey, rearing kits, escaping avian and mammalian predators, and thermoregulation. Additionally, these higher elevations are characterized by harsh abiotic conditions (low temperatures,



American marten detected with a camera trap near Boreas Ponds, 2015.

deep snowpack) and low productivity that favor martens over other carnivores that prey on and compete with them (for example, fisher, coyote, and fox). Recent research using species distribution models have revealed that most of the central Adirondacks (approximately 3,500 mi²) represent suitable marten habitat. Moreover, the High Peaks and West Canada Lakes region contained the largest core areas of high-quality marten habitat (i.e., greatest probability of use). Bureau of Wildlife staff have conducted carnivore surveys using track plates and camera traps within the Boreas Ponds tract and detected American martens, fishers, weasels, and coyotes.

Small Mammals

The variety of habitats that occur within the Adirondack region are home to an impressive diversity of small mammals. These mammals inhabit the lowest elevations to those as high as 4,400 feet (Southern bog lemming). Most species are found in forested habitat (coniferous, deciduous, mixed forest) with damp soils, organic muck, or soils with damp leaf mold. However, some species (e.g., hairy-tailed mole) like dry to moist sandy loam soils and others (e.g., white-footed mouse) prefer the drier soils of oak-hickory, coniferous, or mixed forests. Small mammals of the Adirondack region are found in alpine meadows (e.g., long-tailed shrew), talus slides and rocky outcrops (e.g., rock vole), grassy meadows (e.g., meadow vole, meadow jumping mouse), and riparian habitats (e.g., water shrew). It is likely that many, if not most, of the small mammal species listed below inhabit the Boreas and MacIntyre tracts (Table 1). An exception may be the Northern bog lemming; a species whose southernmost range extends just into the northern portion of Adirondack Park; only one recently-verified specimen exists (Saunders 1988). All listed species are known to occur within Adirondack Park.

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Table 1. Small mammal species recorded within Adirondack Park (data based on museum specimens; Saunders 1988). Number of towns represents the number of towns in which each species was recorded.

Common Name	Scientific Name	Number of Towns
Star-nosed mole	<i>Condylura crestata</i>	6
Hairy-tailed mole	<i>Parascalops breweri</i>	11
Short-tailed shrew	<i>Blarina brevicauda</i>	31
Pygmy shrew	<i>Sorex hoyi</i>	1
Long-tailed shrew	<i>Sorex dispar</i>	7
Smoky shrew	<i>Sorex fumeus</i>	18
Water shrew	<i>Sorex palustris</i>	10
Masked shrew	<i>Sorex cinereus</i>	25
Deer mouse	<i>Peromyscus maniculatus</i>	26
White-footed mouse	<i>Peromyscus leucopus</i>	14
Southern red-backed vole	<i>Clethrionomys gapperi</i>	32
Meadow vole	<i>Microtus pennsylvanicus</i>	31
Yellownose vole	<i>Microtus chrotorrhinus</i>	6
Woodland vole	<i>Microtus pinetorum</i>	1
Southern bog lemming	<i>Synaptomys cooperi</i>	12
Northern bog lemming	<i>Synaptomys borealis</i>	1
Meadow jumping mouse	<i>Zapus hudsonicus</i>	22
Woodland jumping mouse	<i>Napaeozapus insignis</i>	25

Birds

The avian community of the Boreas Ponds and MacIntyre tracts varies seasonally. Some species remain within the area year-round, but the majority of species utilize the area during the breeding season and for migration. The first Breeding Bird Atlas Project (BBA) conducted during 1980-1985 (Andrle and Carroll, 1988) and the Breeding Bird Atlas 2000 Project (2000-2005) documented 129 and 128 species, respectively, in atlas blocks within, or partially within these tracts. It is important to recognize that atlas blocks overlap and extend beyond the boundaries of the Boreas Ponds and MacIntyre tracts. Therefore, these data do not necessarily reflect what is found on the tracts, but on the atlas blocks. It is probable that some species were detected only on private lands adjacent to the State lands. However, the BBA data should provide a good indication of the species found throughout these tracts and adjacent region. Species that were detected were similar to those described for the Vanderwhacker Mountain Wild Forest.

Birds Associated with Boreal Forest

These tracts contain high elevation and lowland boreal forest habitats that are significant for a variety of birds. In total, boreal forest comprises approximately 3,964 acres of these tracts. This acreage includes approximately 1,200 acres of lowland boreal forest, which occurs primarily along the Hudson River south of Tahawus. The State endangered Spruce Grouse prefers lowland boreal forests, where it selects immature or uneven-aged spruce-fir habitats. Potential Spruce Grouse habitat closely aligns with lowland boreal forest within these tracts; however, contemporary data (1984) indicate that the single occurrence record for this species was from a BBA survey block along Blue Ridge Road and between the Elk Lake and Gulf Brook roads. This area contains limited lowland boreal forest.

The Boreas Ponds and MacIntyre tracts contain approximately 2,764 acres of high elevation boreal forest ($\geq 2,800$ feet elevation) which are mostly contiguous with higher elevations in the High Peaks and former Dix Mountain Wilderness Areas. Most of this area exists within the Boreas Range (1,466 acres) and Santanoni Mountains (972 acres). High elevation spruce-fir forest is especially important as breeding habitat for Bicknell's Thrush, a special concern species in New York that has been documented in BBA survey blocks within both tracts. Throughout the range of this species, montane forest between 2,900 ft. and 4,700 ft. that is dominated by stunted balsam fir and red spruce is the primary breeding habitat for this species (Atwood et al. 1996). Bicknell's Thrush also utilize fir waves and natural disturbances as well as areas of dense regeneration along the edges of ski slopes. The species is most common on the highest ridges of the Adirondacks, preferring young or stunted dense stands of balsam fir up to 9 ft. in height. Here they lay their eggs above the ground in the dense conifer thickets.

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In an effort designed to protect birds associated with high elevation boreal forest and their habitats, New York State designated the Adirondack mountain summits above 2,800 feet in Essex, Franklin, and Hamilton counties as the Adirondack Subalpine Forest Bird Conservation Area (BCA) in November 2001. The New York State Bird Conservation Area Program, established in September 1997, was designed to safeguard and enhance bird populations and their habitats on selected state lands and waters.

Of 27 bird species associated with boreal forest that occur in New, 25 have been documented in BBA survey blocks within, or partially within, these tracts. During the two BBA projects, 16 species of lowland boreal forest birds, 4 species of high elevation boreal forest birds, and 5 species commonly associated with boreal forest have been documented in survey blocks within, or partially within the unit (Table 2). Some notable differences in boreal bird species composition were recorded between the two atlas periods; Spruce Grouse were documented in the first atlas project but not the second, and Cape May Warbler, Palm Warbler, and Pine Sisken were documented in the second atlas project but not the first. American Three-toed Woodpecker and Connecticut Warbler were not detected during either BBA project.

Table 2. Bird species associated with boreal forest as documented by the New York State Breeding Bird Atlas projects (1980-1985 and 2000-2005) and occurring in atlas blocks within, or partially within, the Boreas and MacIntyre tracts.

Common Name	Scientific Name
Lowland Boreal Forest Species	
Spruce Grouse ^a	<i>Falcapennis canadensis</i>
Black-backed Woodpecker	<i>Picoides acticus</i>
Olive-sided Flycatcher	<i>Contopus cooperi</i>
Boreal Chickadee	<i>Poecile hudsonicus</i>
Ruby-crowned Kinglet	<i>Regulus calendula</i>
Cape May Warbler	<i>Dendroica tigrina</i>
Bay-breasted Warbler	<i>Dendroica castanea</i>
Rusty Blackbird	<i>Euphagus carolinus</i>

Common Name	Scientific Name
White-throated Sparrow	<i>Zonotrichia albicollis</i>
Yellow-bellied Flycatcher	<i>Empidonax flaviventris</i>
Gray Jay	<i>Persisoreus canadensis</i>
Palm Warbler	<i>Dendroica palmarum</i>
Lincoln's Sparrow	<i>Melospiza lincolni</i>
White-winged Crossbill	<i>Loxia leucoptera</i>
Red Crossbill	<i>Loxia curvirostra</i>
Pine Siskin	<i>Carduelis pinus</i>
High Elevation Boreal Forest Species	
Bicknell's Thrush ^b	<i>Catharus bicknelli</i>
Blackpoll Warbler	<i>Dendroica striata</i>
Winter Wren	<i>Troglodytes</i>
Swainson's Thrush	<i>Catharus ustulatus</i>
Species Commonly Associated with Boreal Forest	
Evening Grosbeak	<i>Coccothraustes vespertinus</i>
Blackburnian Warbler	<i>Dendroica fusca</i>
Magnolia Warbler	<i>Dendroica magnolia</i>
Northern Parula	<i>Parula americana</i>
Tennessee Warbler	<i>Vermivora peregrina</i>

^aEndangered species.

^bSpecial Concern species.

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Other Bird-Habitat Associations

In addition to boreal and mixed-boreal forests, other habitats types of importance include deciduous forests, lakes, ponds, streams, bogs, beaver meadows, and shrub swamps.

Birds associated with marshes, ponds, lakes, and streams include: common loon, pied-billed grebe, great blue heron, green-backed heron, American bittern, and a variety of waterfowl. The most common ducks include the mallard, American black duck, wood duck, hooded merganser, and common merganser. Other species of waterfowl migrate through the region following the Atlantic Flyway.

Bogs, beaver meadows, shrub swamps, and any areas of natural disturbance provide important habitat for species that require or prefer openings and early successional habitats. Species such as Alder and Olive-sided Flycatchers, American Woodcock, Lincoln Sparrow, Nashville Warbler, Chestnut-sided Warbler, Brown Thrasher, Blue-winged Warbler, Yellow Warbler, Common Yellowthroat, Indigo Bunting, Eastern Towhee, and Field Sparrow rely on these habitats and are rarely found in mature forests. These species, as a suite, are declining more rapidly throughout the Northeast than species that utilize more mature forest habitat. Habitat for these species is, and will be, very limited within these tracts.

Birds that prefer forest habitat are numerous, including many neotropical migrants. Some species prefer large blocks of contiguous forest (e.g., Northern Goshawk), others prefer blocks of forest with adjacent openings, and many prefer forest with a relatively thick shrub layer. The forest currently is maturing, and will eventually become old growth forest dominated by large trees.

Songbirds are a diverse group filling different niches in the Adirondacks. The most common species found throughout the deciduous or mixed forest include the Ovenbird, Red-eyed Vireo, Yellow-bellied Sapsucker, Black-capped Chickadee, Blue Jay, Downy Woodpecker, Brown Creeper, Wood Thrush, Black-throated Blue Warbler, Pileated Woodpecker, and Black and White Warbler. The Golden-crowned Kinglet, Purple Finch, Pine Siskin, Red and White-winged Crossbill and Black-throated Green Warbler are additional species found in the coniferous forest and exhibit preference for this habitat. Birds of prey common to the area include the Barred Owl, Great Horned Owl, Eastern Screech-owl, Northern Goshawk, Red-tailed Hawk, Sharp-shinned Hawk, and Broad-winged Hawk.

Game birds include upland species such as turkey, ruffed grouse and woodcock, as well as a variety of waterfowl. Ruffed grouse and woodcock prefer early successional habitats and their habitat within the area is limited due to the limited amount of timber

harvesting. Turkey are present in low numbers and provide some hunting opportunities. Waterfowl are common along the waterways and marshes and provide hunting opportunities.

Amphibians and Reptiles

The New York State Amphibian and Reptile Atlas Project (1990-1999) confirmed the presence of 23 species of reptiles and amphibians in USGS Quadrangles within, or partially within the Boreas and MacIntyre tracts. It is important to note that quadrangles (the survey sample unit) overlap and extend beyond the land boundaries of these tracts. Therefore, recorded species do not necessarily reflect what was found on the tracts, but on the quadrangles. Some species may have been found on private lands adjacent to the state lands. However, these data should provide a good indication of the species found throughout the area. These included three species of turtles, four species of snakes, nine species of frogs and toads, and seven species of salamanders (Table 3). These species are classified as protected wildlife and some may be harvested during open hunting seasons. Of the 23 confirmed species, one was classified as special concern (wood turtle) and none were classified as endangered or threatened. Three occurrences of wood turtle were documented in quadrangles within, or partially within, the tracts.

Table 3. Amphibian and reptile species recorded in USGS Quadrangles within, or partially within, the Boreas and MacIntyre tracts during the New York State Amphibian and Reptile Atlas Project, 1990-1999.

Common Name	Scientific Name
Spotted Salamander	<i>Ambystoma maculatum</i>
Red-spotted Newt	<i>Notophthalmus v. viridescens</i>
Northern Dusky Salamander	<i>Desmognathus fuscus</i>
Allegheny Dusky Salamander	<i>Desmognathus ochrophaeus</i>
Northern Redback Salamander	<i>Plethodon cinereus</i>
Northern Spring Salamander	<i>Gyrinophilus p. porphyriticus</i>
Northern Two-lined Salamander	<i>Eurycea bislineata</i>
Eastern American Toad	<i>Bufo a. americanus</i>

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Common Name	Scientific Name
Northern Spring Peeper	<i>Pseudacris c. crucifer</i>
Gray Treefrog	<i>Hyla versicolor</i>
Bullfrog	<i>Rana catesbeiana</i>
Green Frog	<i>Rana clamitans melanota</i>
Mink Frog	<i>Rana septentrionalis</i>
Wood Frog	<i>Rana sylvatica</i>
Northern Leopard Frog	<i>Rana pipiens</i>
Pickerel Frog	<i>Rana palustris</i>
Common Snapping Turtle	<i>Chelydra s. serpentina</i>
Wood Turtle ^a	<i>Glyptemys insculpta</i>
Painted Turtle	<i>Chrysemys picta</i>
Northern Redbelly Snake	<i>Storeria o. occiptomaculata</i>
Common Garter Snake	<i>Thamnophis sirtalis</i>
Northern Ringneck Snake	<i>Diadophis punctatus edwardsi</i>
Smooth Green Snake	<i>Liochlorophis vernalis</i>

^aSpecial Concern species.

Endangered, Threatened, and Special Concern Species

New York has classified species at risk into three categories, endangered, threatened, and species of special concern (6 NYCRR § 182). The following section indicates the protective status of some vertebrates that may be in the unit:

Endangered: Any species that is either native and in imminent danger of extirpation or extinction in New York; or is listed as endangered by the US Department of Interior.

Threatened: Any species that is native and likely to become endangered within the foreseeable future in New York; or is listed as threatened by the US Department of the Interior.

Special Concern: Native species not yet recognized as endangered or threatened, but for which documented concern exists for their continued welfare in New York. Unlike the first two categories, they receive no additional legal protection under the Environmental Conservation Law; but, they could become endangered or threatened in the future and should be closely monitored.

The following table lists endangered, threatened, and special concern species that were detected in survey blocks within, or partially within, the Boreas Ponds and MacIntyre tracts.

Table 4. New York State-listed endangered, threatened, and special concern species documented in survey blocks within, or partially within, the Boreas Ponds and MacIntyre tracts. Bird data were collected during the 1980-1985 and 2000-2005 Breeding Bird Atlas projects. Amphibian and reptile data were collected during the New York State Amphibian and Reptile Atlas Project (1990-1999). Species detected through other surveys are noted.

		Breeding Bird Atlas Project	
Common Name	Scientific Name	1980-1985	2000-2005
<i>Endangered</i>			
Peregrine Falcon	<i>Falco peregrinus</i>	x	
Spruce Grouse	<i>Falcipennis canadensis</i>	x	
<i>Threatened</i>			
Northern Harrier	<i>Circus cyaneus</i>	x	x
Bald Eagle	<i>Haliaeetus leucocephalus</i>		x
<i>Special Concern</i>			

II. Natural Resources

American Bittern	<i>Botaurus lentiginosus</i>	x	x
Common Loon ^a	<i>Gavia immer</i>	x	x
Cooper's Hawk	<i>Accipiter cooperii</i>	x	x
Osprey	<i>Pandion haliaetus</i>	x	x
Sharp-shinned Hawk	<i>Accipiter striatus</i>	x	x
Northern Goshawk	<i>Accipiter gentilis</i>	x	x
Common Nighthawk	<i>Chordeiles minor</i>	x	
Red-shouldered Hawk	<i>Buteo lineatus</i>	x	x
Horned Lark	<i>Eremophila alpestris</i>	x	
Golden-winged Warbler	<i>Vermivora chrysoptera</i>		x
Bicknell's Thrush ^a	<i>Catharus bicknelli</i>	x	x
Wood Turtle ^b	<i>Clemmys insculpta</i>	x	

^aAlso documented by New York Natural Heritage Program (NYNHP) staff. Bicknell's Thrush were detected just to the east of the Boreas Ponds tract on private lands.

^bSpecial Concern species.

Extirpated and Formerly Extirpated Species

Moose, elk, wolf, cougar, Canada lynx, bald eagle, golden eagle, and peregrine falcon all inhabited the Adirondacks prior to European settlement. All of these species were extirpated from the Adirondacks, mostly as a result of large-scale landscape changes during the nineteenth century. Unregulated harvest also led to the decline of some species, such as moose, wolf, elk, beaver, American marten, and fisher. More recently some birds fell victim to the widespread use of DDT.

Projects to re-establish the Peregrine Falcon, Bald Eagle, and Canada lynx have been implemented. Efforts to reintroduce the Peregrine Falcon and the Bald Eagle through "hacking" programs began in 1981 and 1983, respectively. These projects have been remarkably successful within New York. Bald Eagles are becoming more common, and

Peregrines are recovering. Both species are now found in portions of the Adirondacks. Golden Eagles are generally considered to have always been rare breeders within the state. A total of 83 Canada lynx were released into Adirondack Park from 1989 to 1991 by the SUNY College of Environmental Science and Forestry as part of their Adirondack Wildlife Program. Lynx dispersed widely from the release area and mortality was high, especially mortality caused by vehicle-animal collisions. The Wildlife Conservation Society conducted lynx surveys in the High Peaks region in 1998-99; however, these surveys failed to detect this species. It is generally accepted that the lynx restoration effort was not successful and that no lynx from the initial releases or through natural reproduction of released animals remain in the Adirondacks. Lynx are legally protected as a game species with no open season as well as being listed as threatened on both the Federal and State levels.

The wolf and eastern cougar are still considered to be extirpated from New York State. Reports of wolves are generally considered to be misidentified coyotes; however, recent genetic evidence indicates that coyotes in New York are hybrids comprised of western coyote, gray wolf, Eastern wolf, and domestic dog. This hybridization likely occurred as western coyotes dispersed north of the Great Lakes and past the Algonquin Park region of Canada at some point prior to entering New York State in the 1920s and 1930s. Periodic sightings of cougars are reported from the Adirondacks, but the source of these individuals is believed to be from released captive individuals. An exception to this general consensus occurred in 2010, when a wild male subadult cougar dispersed from South Dakota through New York (Lake George) and was killed by a collision with a vehicle in Connecticut (see Kerwin 2012; http://www.dec.ny.gov/docs/administration_pdf/1012consmagweb.pdf and Hawley et al. 2016; https://www.fs.fed.us/rm/pubs_journals/2016/rmrs_2016_hawley_i001.pdf).

Critical Habitat

Deer Wintering Areas

The maintenance and protection of deer wintering areas (or deer yards) are important in maintaining northern deer populations. These areas provide deer with relief from the energetic demands of deep snow and cold temperatures at a time when limited fat reserves are being used to offset reduced energy intake (i.e., nutritionally, winter browse is poor). Previous researchers have demonstrated that deer consistently choose wintering areas which provide relief from environmental extremes over areas that may provide more abundant forage (Severinghaus 1953; Verme 1965). These observations are consistent with the fact that the nutritional value of winter browse is poor due to low digestibility and that deer can expend more energy obtaining browse than the energy gained by its consumption (Mautz 1978).

II. Natural Resources

Severinghaus (1953) outlined several habitat components of deer yards, including topography and forest cover type (i.e., presence of conifers). The most important characteristic of an Adirondack deer yard is the habitat configuration making up a “core” and travel corridors to and from the core. The core is typically an area, or areas, of dense conifer cover used by deer during severe winter weather conditions. Travel corridors are dense but narrow components which allow access to food resources (hardwood browse) in milder conditions. Use of wintering areas by deer can vary over time depending on winter severity and deer population density. Although Severinghaus (1953) reported that some Adirondack deer yards have been used since the early 1800's, recent research suggests that the location of some current deer yards may overlap very little (or not at all) with their historical counterparts mapped in the 1950's and 1960's by DEC (Hurst 2004). Therefore, planning for the protection of deer wintering areas relative to recreational activities in the unit should consider the dynamic nature of these areas (not the static representation of historical boundaries) and seek to update our understanding of wintering areas currently used by deer.

Historical Deer Wintering Habitat

Potential deer wintering areas have been identified within the tracts from historical aerial surveys conducted by NYSDEC in the 1950's and 1960's; one area was verified via field surveys in the 1970's and 1980's (indicated below). These general areas were located within extensive wetland complexes and riparian forest and include:

1. To the east of Boreas Ponds and LaBier Flow and along Casey Brook and extending north to Upper Ausable Lake,
2. Adjacent to the Hudson River south of Tahawus (verified via field surveys), and
3. Adjacent to The Branch, in the Andrew Brook/Fly Pond region, and in the Brant Brook and Dudley Brook areas.

Guidelines for Protection of Deer Wintering Areas

Research on wildlife responses to winter recreation (e.g., cross-country skiing, foot travel, and snowmobiling) is limited. Studies conducted on mule deer (Freddy et al. 1986) and elk (Cassirer et al. 1992) suggest that these species can be disturbed by these activities. However, when planning the location of recreational trails, general guidelines for protecting deer wintering areas can be followed which should reduce the potential for disturbance.

Activities which substantially diminish the quality or characteristics of the site should be avoided, but this does not mean human use is always detrimental. Pass through trails, and other recreational uses can be compatible with deer wintering areas if they are carefully considered. Recreational planning which affords protection of core sections

and avoids fragmenting travel corridors are acceptable in many situations. Certain types of recreation such as cross-country skiing are not presently considered to significantly impact deer yards, particularly if the traffic along trails is not prone to stopping or off-trail excursions. These types of trails in or adjacent to deer wintering areas can provide a firm, packed surface readily used by deer for travel during periods of deep snow. They can also create access for free-roaming dogs if the location is close to human habitation; thus, trails should avoid deer yards in these situations. High levels of cross-country ski use can increase the energy demands of deer within the yard due to increased movement.

Proposed Management

Wildlife Management Guidelines

The legal foundation for wildlife and fisheries management in New York State is embodied in Article 11 of the Environmental Conservation Law (ECL). Article 11 authorizes Department to insure the perpetuation of fish and wildlife species and their habitats and to regulate hunting and trapping through the issuance of licenses, the establishment of hunting and trapping seasons and manner of taking, and the setting of harvest limits. Game species will continue to be managed by appropriate regional or statewide hunting or trapping seasons.

Objectives

While all the objectives and management actions outlined below are important, a priority should be placed on increasing our understanding of the occurrence and distribution of several wildlife species and critical habitats within these tracts. This priority is reflected under the management action projects outlined below.

- Perpetuate, support, and expand a variety of wildlife recreational opportunities, including sustainable hunting and trapping and wildlife observation and photography as desirable uses of wildlife resources.
- Meet the public's desire for information about wildlife and its conservation, use, and enjoyment.
- Assure that wildlife populations are of appropriate size and adequately protected to meet the demands placed on them, including consumptive and non-consumptive uses.
- Increase our understanding of the occurrence, distribution, and ecology of game and nongame wildlife species and their habitats.

II. Natural Resources

Action Steps

- Manage and protect wildlife through enforcement of the Environmental Conservation Law and applicable Rules and Regulations.
- Support traditional use of the tract's wildlife resources, particularly activities designed to perpetuate hunting and trapping programs and education efforts.
- Active management of wildlife populations will be accomplished primarily through hunting and trapping regulations developed by the DEC Bureau of Wildlife for individual or aggregate Wildlife Management Units.
- Regulations will be based on data collected from hunters/trappers, wildlife surveys, and research, as well as input from our constituents.
- Monitor critical habitats for potential human disturbance. Human disturbance impacts to critical habitats will be mitigated through appropriate measures (e.g., temporary closing of climbing routes, posting and/or gating entrances to caves that serve as bat hibernacula, and implementing standard guidelines for protecting deer wintering yards).
- Continue to monitor and inventory wildlife populations and their habitats, particularly species classified as endangered, threatened, special concern, rare, or game. Examples of important wildlife monitoring programs that we should continue include those for Peregrine Falcons, American martens, and boreal birds.
- Continue aerial surveys for moose, monitor existing radio-collared moose, and continue collaring new individuals on an opportunistic basis.
- Provide information to user groups on avoiding problems associated with black bears.
- Adopt and enforce the current bear canister regulation across all the High Peaks Wilderness aside from the Adirondack Canoe Route. Encourage the voluntary use of bear-resistant food canisters in other areas.
- Assess problems associated with beaver-flooded trails and roads. Work with area trappers and encourage trapping at nuisance sites during the open beaver trapping season.

F. Fisheries

Existing Conditions

The 1999 High Peaks Wilderness Complex and 2004 Dix Mountain Wilderness Area UMPs provided an inventory of the fisheries resource in these areas and recommendations for their management. This UMP Amendment describes what the

Department knows about these new aquatic resources and outlines our plans to study and manage their fish populations.

This UMP Amendment focuses on 11 new bodies of water, all of which have been in private ownership with differing amounts of fisheries management by the previous owners. DEC Fisheries Staff have had some opportunity to survey some of these waters in the past, and former owners like The Nature Conservancy have done some studies.

There has been ongoing research into the taxonomy of suckers of the genus *Catostomus* in the Adirondacks. Much of this work has been done by Doug Carlson of the NYSDEC Rare Fish Unit, Richard Morse of the New York State Museum, and Evon Hekkala of Fordham University. Their work was recently published in *American Currents*, The Publication of the North American Native Fishes Association. These researchers have found that sucker "...samples from Elk Lake were genetically distinct from both *C. commersonii* and *C. utawana* populations to the west." Additionally, in a recent DEC Boreas Ponds fisheries survey, it is stated that "sucker tissue samples were analyzed with MtDNA techniques by a geneticist from Fordham University to show that there were similarities (haplotype G of cytochrome B) to Elk Lake and Lower Ausable suckers that are known for late spawning." The Elk Lake sucker variant is currently thought to exist in eight waters of eastern Adirondack watersheds, including the Upper Hudson, Champlain, Raquette and St. Regis of St. Lawrence Canada. The Boreas Ponds is one of those eight waters. The summer sucker and the "unknown sucker variant", or "Elk Lake" suckers, are currently listed as Species of Greatest Conservation Need by NYSDEC in the high priority category. Additional genetic work is needed to resolve the taxonomy and biogeography of "Elk Lake suckers".

Of additional interest is the status of round whitefish within the area's waters. Round whitefish (*Prosopium cylindraceum*), also called frost fish, were once found in over 80 lakes in New York. However, most round whitefish populations have been extirpated, and by 2006 there were only six known endemic populations. Consequently, the species is listed as Endangered in New York State. To increase the number of waters containing this species, the Department has introduced round whitefish into new waters that contain the requisite habitat. Upper Preston Pond was selected as a candidate water, and round whitefish were stocked there in 2016 and 2017. It is hoped the stockings will lead to establishment of a self-sustaining round whitefish population. The success of the stockings will be evaluated within eight years of the last planting.

Appendix C has the list of pond narratives where specific information for the ponds can be obtained.

Proposed Management

Objectives

- Restore native fish communities with emphasis on native species that have declined due to man's influences. This goal is consistent with the primary wilderness management guidelines in the APSLMP. Implementation may include reclamations, liming, stocking and other activities as per the "Fishery Management Policy in Wilderness, Primitive and Canoe Areas"
- Protect native fish communities from the addition of undesirable non-native fishes. This goal is also consistent with the primary wilderness management guidelines in the APSLMP.
- Protect the fishless state of naturally barren waters that have not been stocked.
- Provide recreational angling as part of a larger wilderness experience emphasizing quality over quantity.

Action Steps

- Conduct fisheries surveys of the following waterbodies:
 - LaBier Flow (UH563)
 - Deer Pond (UH565)
 - Lake Andrew (UH698)
 - Bradley Pond (UH717)
 - Lake Jimmy (UH713)
- Conduct biological surveys of waters within the unit as required.
- Continue to stock Henderson Lake with brook trout and lake trout.
- Continue to stock Lower Preston Pond and Upper Preston Pond with brook trout.
- Conduct an assessment of round whitefish in Upper Preston Pond to determine if the experimental stockings have established a self-sustaining population
- Conduct additional genetic analyses to resolve the taxonomy of white sucker from Boreas Ponds
- Maintain and enforce regulations that prohibit the use of fish as bait within the unit. The use baitfish is a vector for potential introductions of disruptive nonnative fish species.

III. Recreational Resources and Human Uses

This Unit Management Plan Amendment proposes the development of wildland recreational facilities in the High Peaks Wilderness Complex, working in concert with the Vanderwhacker Mountain Wild Forest UMP Amendment. Each section below builds on the planning process as well as the recreational experience of the user. In addition to official documents, which inform the UMP process, the Planning Team applied principles and strategies that are currently considered norms in the field of wildland recreation management.

There are six best management practices that are identified as essential in successful wildland management. Essentials for Wildlands Management include:

1. Planning- Includes the UMP Process (with public participation), Work Planning, development of guidelines and other supportive materials and process and building partnerships with stakeholders.
2. Education and Outreach- Includes providing effective education and outreach for visitors, local government and communities and partners. Utilizing all mediums available and covering topics from preparedness to stewardship.
3. Front country infrastructure- Includes roadside access points, human waste facilities, visitor information and other support facilities.
4. Backcountry infrastructure- Includes trails, campsites and support facilities appropriate to educate and protect the natural resource
5. Limits on use when all else fails- When education and outreach along with appropriate infrastructure improvements cannot support the carrying capacity, different methods of permits, limits on use or fees should be utilized
6. Resources both personnel and funding- Includes staff to facilitate management, maintenance and safety concerns and appropriate funds to maintain and educate and expand opportunities for partnerships.

As part of the comprehensive process of managing the High Peaks Wilderness Complex and adjacent units, many of the proposals in this amendment will follow a process of conditional implementation, which is done through a data-based phasing process. Where these conditional management actions are listed, the Department will evaluate current conditions as part of considering the implementation of these proposals. While authorization for these conditional proposals is being sought at this

III. Recreational Resources and Human Uses

time, some may never move forward if the natural resource conditions or human use patterns don't support their implementation. The Department will adhere to the 6 Wildland Management BMPs and successfully build and manage recreation facilities that don't negatively impact the natural resources or wild experience of the user.

A. Carrying Capacity

The High Peaks Wilderness Complex, like any other natural area in our Forest Preserve, cannot withstand ever-increasing and unlimited visitor use without suffering the eventual loss of its essential natural and wild character. However, the underlying question of how much use and of what type the whole area - or any particular site or area within it - can withstand before the impacts of such use cause degradation of the very resource or experience, remains. Such understanding and determinations are a wildland manager's most important and challenging responsibility. Our primary goal throughout this amendment is to strike and maintain a proper balance of making sure a natural area's "carrying capacity" is not exceeded while concurrently providing for visitor use and enjoyment.

DEC is committed to providing a framework that allows an informed and evolving process to help guide the management of the lands in, and surrounding the newly classified Boreas Ponds and MacIntyre Tracts. Utilizing a phased approach for developing access points and recreational infrastructure that is tied to monitoring the Carrying Capacity through utilizing the Limits of Acceptable Change (LAC) framework will ensure that the wild character of the area and user experience is kept intact.

Proposed Management Action Steps outlined in this plan will follow a phased approach (Section Q Phases of Implementation) with decisions to implement successive phases informed by wilderness monitoring, planning and utilization of the LAC framework. Monitoring will inform land managers on the need to address any unacceptable changes in the current phase, or the benefits that can be seen by proceeding to the next phase.

Background

Defining the amount and type of use that an area can withstand before negative impacts to the resource or user experience occur is a significant challenge. Relative differences in ecosystem sensitivities to disturbances need to be considered in recreational planning. Avoiding sensitive sites or taking precautions in the layout and design of any facility can drastically reduce negative impacts associated with use. Individual locations

III. Recreational Resources and Human Uses

that can withstand more usage should be considered to help balance the overall carrying capacity of the unit.

The term "carrying capacity" in public lands management, where public recreation is the leading use, means the amount of use that any single facility or the entire complex can handle without degrading the resource or the perceived experience of the user. Given the many variables associated with measuring carrying capacity, it can be a challenging concept to both understand and measure. While it can be helpful to establish upper-level thresholds for use, there is not an exact science on how to consistently set these thresholds across all variables. Taking steps to address the micro-level of carrying capacity, such as addressing erosion and compaction of trails and campsites, may not always address the user-experience component of carrying capacity that occurs at the whole-unit level.

Essentially, this is because the relationship between the amount of use and the resultant amount of impact is not linear. For some types of activities, for instance, most of the impact occurs with only low levels of use. In the case of trail erosion, once soil starts to wash away, additional foot travel does not cause the impact upon the trail to increase proportionately. It has been discovered that visitor behavior, site resistance/resiliency, type of use, etc. may actually be more important in determining the amount of impact than the amount of use, although the total amount of use is certainly still a factor.

More recent carrying capacity studies have relied on the social aspect of recreation, in that users often have a pre-conceived idea of what type and level of use they want to experience on a given trip. This could be in the form of number of paddlers on a water body, hikers passed on the way to a destination, or how much solitude they want to experience at a primitive tent site, etc.

This makes the manager's job much more involved than simply counting, redirecting, and (perhaps) restricting the number of visitors in an area. Influencing visitor behavior can require a well-planned, multi-faceted educational program. Determining site resistance/resiliency always requires research (often including much time, legwork and experimentation). Shaping the types of use impacting an area can call not only for education, research and development of facilities, but also the formulation and enforcement of a set of regulations which some users are likely to regard as objectionable.

Nevertheless, the shortcomings of a simple carrying capacity approach have become so apparent that the basic question has changed from the old one, "How many is too many?" to the new, more realistic one, "How much change is acceptable?" The DEC

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embraces this change in approach while recognizing the tasks it calls for in developing the best foundation for management actions. Professionally-informed judgments must be made such that carrying capacity is given definition in terms of resource and social conditions that are deemed acceptable; these conditions must be compared with real, on-the-ground conditions; certain projections must be made, and management policies and actions must be drafted and enacted with an aim toward maintaining or restoring the conditions desired.

In the case of the Boreas Ponds and Macintyre Tract, public recreation is a new land use. Pre-existing data in the form of facility conditions and use numbers do not exist, so a baseline for which to work from has not been established, therefore we do not know what the actual carrying capacity of the newly acquired lands is. This introduces another layer of complexity in the carrying capacity question. A common way to directly manage the number of recreational users in an area, although varied in success, is through specifically sized parking areas. This often works well when the parking area services only one trail, or one hand carry launch etc. The complexity of the issue increases as multiple facilities are managed through one trailhead. A great example of this is the Four Corners Parking Area on the Boreas Tract in the Vanderwhacker Mountain Wild Forest. This parking area could service several user groups simultaneously, like paddlers for LaBier Flow and Boreas Ponds, hikers for White Lilly Pond or Allen Mountain, equestrian use along Boreas Road, and primitive camping throughout the area. This also introduces another consideration, in that management of the Vanderwhacker Mountain Wild Forest not only has to take into account the carrying capacity of the lands within the unit itself, but also the neighboring lands like the High Peaks Wilderness Area.

The motorized access and parking sections in both the Vanderwhacker Mountain Wild Forest and High Peaks Wilderness Complex UMP amendments, along with access points on easement lands, describe the size and locations of the proposed parking areas along with the associated proposals regarding maximum occupancy and roadside parking. These proposals set a baseline from which to allow access during phase 1 of implementation. As stated above, environmental sensitivity directly effects the carrying capacity of an area. Associated hand boat launches, trails and tent sites in phase 1 will be built from these motorized access and parking proposals. Building each facility in the most sustainable manner and location possible, along with balancing the design of each component to enhance the user's experience, will serve to simultaneously protect the natural environment and enhance the user's experience. Upon completion of construction the monitoring mechanisms described later will commence, which will guide management decisions related to the various phases.

III. Recreational Resources and Human Uses

The intent of this approach is to provide a variety of access to the property and to new purpose built recreational facilities in a way that allows the Department to keep track of use numbers and physical changes on the ground. After data is collected and ground conditions are observed the recreational carrying capacity can better be measured through several indicators discussed below. Sustainable purpose built facilities are a key factor in this process, not only to have a strong foundation for recreational use, but also so we can evaluate the known indicators. Once the condition of facilities is measured and evaluated through the LAC framework the next steps can be determined in accordance with the phases set forth below.

The use of this phased approach to develop facilities allows the Department to provide realistic timelines for the development of sustainable and enjoyable facilities. It also helps to minimize low-quality facilities that are underused in favor of creating locations that will help realize and balance all levels of carrying capacity. In order to further illustrate the succession of the phased approach the schedule of implementation at the end of this UMP Amendment was developed. The schedule is initially based on providing access to the tracts, followed by the construction of basic recreational facilities tailored to specific types of recreation. Once constructed, each facility will be photo documented to show its original condition, then periodically photo documented to illustrate changes over time. These photos coupled with use data collected from register sheets will be evaluated through the LAC process to illustrate the recreational carrying capacity of specific facilities. From there, the data collected on these individual facilities will be looked at on a larger scale that considers the entire network of facilities and access points regardless of land classification. An example of this is the recreational access that parking areas along Gulf Brook Road provide for facilities like the Boreas Ponds Trail and Boreas Mountain Trail which serve both the Wild Forest and Wilderness areas.

The phased approach and schedule of implementation integrates and takes into account the complex nature of the area, which will allow for a more balanced and systematic approach to address the carrying capacity of the area as a whole. Phase 1 in the schedule provides the strategy to construct the foundation of facilities. The evaluation of these facilities will guide the phases of this plan, and only after the condition of these facilities is evaluated, can a determination be made to proceed with, maintain current, or retract the phases of the schedule. There are various environmental criteria that can activate the next phases of the plan. These may be site specific or at larger scales and can include things such as campsite compaction and sprawl, vegetation damage, trail erosion, etc. Social criteria like frequent or high levels of tent site or trail use without environmental degradation can also prompt the next phases of the plan. Regardless of the criteria, the main objective is to appropriately

III. Recreational Resources and Human Uses

provide sustainable and desirable facilities without exceeding the carrying capacity of the land on which they are located.

Clearly, a delicate balancing act is called for, and yet just as clearly, the Department's management focus must remain on protecting the resource. A central objective of this amendment is to lay out a strategy for achieving such a balance within the newest additions to the High Peaks Wilderness Complex, the unit as a whole, and the surrounding lands like the Vanderwhacker Mountain Wild Forest. This strategy reflects important guidelines and principles, and it along with the guidelines and principles - has directed the development of the management proposals detailed below and in the following sections of this amendment.

Recreation Research Findings and Management Implications

Any recreational use in the High Peaks Wilderness Complex and Vanderwhacker Mountain Wild Forest will have some level of adverse environmental impact. Impacts from hiking and camping typically follow a natural progression. Initial and very light use may only damage particularly fragile soils and vegetation. However, even at low levels of use, the groundcover and surface organic litter are damaged. With moderate use, all but the most resistant plant species are lost on the developed area and mineral soils may be exposed. High use exposes mineral soils to compaction and erosion, which in turn expose the roots of trees.

Recreation impacts are related to visitor use levels in a curvilinear fashion. For example, a study of wilderness campsites in Minnesota found that only 12 nights of campsite use per year caused substantial impact. However, further increases in use caused little additional change for most forms of impact (Marion, 1998). Considering the popularity of camping in the HPWC and VMWF, most, if not all, campsites show evidence of substantial impact. However, it is also likely that continued use will have little additional adverse impact on those campsites.

One important implication of the curvilinear use/impact relationship is that nearly all use must be eliminated to achieve significant reductions in recreational impact. In other words, the only way to completely eliminate adverse impacts of hiking and camping throughout the tracts would be to close the area to all public use. However, a more realistic approach is to minimize impact by managing other factors to help mitigate adverse environmental impacts. <http://www.cnr.vt.edu/forestry/cpsu/Rececol1.gif>

Use-Related Factors. Many impacts are the result of uninformed or careless behavior. Managers can educate and regulate visitors to reduce high impact behavior (e.g., building fires, chopping on trees, cutting through switchbacks) and encourage low

impact behavior such as the “leave no trace” program. Large groups have a greater potential to damage resources than the same number of individuals spread across smaller groups. Limits on group sizes can be encouraged or required to minimize resource impacts. A defined camping season which only allows camping for a few months, rather than throughout the year, may also have some benefit.

Environmental Factors. Managers can encourage recreational use in impact resistant locations. For example, trails can be located or relocated to avoid wet areas and steep slopes and tent sites can be located on flat, well drained areas.

<http://www.cnr.vt.edu/forestry/cpsu/Rececol2.gif> Knowledge of the relative resiliency (ability to recover) of different vegetation and soil types can be used to select areas which will quickly recover following recreational trampling. Sites with high resiliency are also desirable because they usually support dense vegetation which helps confine the use of tent sites and trails to their desired locations.

Managerial Factors. Managers of some protected areas have sought to minimize impacts by encouraging visitor dispersal. However, due to the use/impact relationship and a number of behavioral factors, this impact-minimization strategy has only been successful in areas which receive low use. Therefore, this strategy would not likely to be effective in these new tracts because of the potential for high levels of use.

Other Considerations. Most visitors prefer hiking on established trails and camping at existing campsites. Many visitors enjoy camping close to trails and other groups for social reasons, while others fear getting lost when away from trails. Areas with rugged terrain and/or dense vegetation may limit the ability of visitors to hike off-trail or the number of suitable camping locations necessary to support a dispersed camping policy. Pre-existing trails and campsites are also more convenient, comfortable, and require less work to use and maintain. Finally, water and other scenic attractions in the backcountry will always attract larger numbers of visitors than less interesting areas. In general, management efforts to alter these natural tendencies will be unsuccessful without substantial and expensive educational and law enforcement programs (Marion, 1998).

Recreation research shows that visitor containment, or concentration, in the Forest Preserve offers a promising strategy for minimizing recreation impacts. Trails, which concentrate use on their treads represent one form of containment. Similarly, mandating use of designated campsites also contains visitors to sites that have already been impacted. Campsite rotation programs have also been considered in the past. However, recovery rates on campsites and trails are considerably lower than initial impact rates, which mean that a rest-rotation strategy will generally be ineffective (Marion, 1998).

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Examples of Cause

The most heavily-used areas will usually show the most effects from use. However, there are several factors which can mitigate heavy use or amplify the effects of lighter use. One factor is the condition of a facility at the time that the use occurs. For example, a few people walking a trail when the trail is wet and soft will cause more damage than a large number of people using the same trail when it is dry. Another factor to consider is the skill level and behavior of the users. A large group may not leave any evidence that they used an area, while a small group or even an individual can, through willful neglect or ignorance, leave an area permanently altered. A third factor to consider is the design and location of the improvement that is being used. A properly designed and located facility will allow for heavy use without having a negative impact on the resource. Poor facility design or location can lead to amplified deterioration of the resource.

Many land resource problems tend to expand with time, if they are not addressed. For example, muddy sections of trails result in an expansion of the muddy area and loss of vegetation as people, trying to stay dry, walk around the wet areas. Another example is people who visit a tent site which already has a litter problem are more likely to leave their own trash behind. For this reason, it is important to take action when a problem arises.

The most noticeable recreation impacts (such as trail erosion, trash, and tree injuries) receive most of the management focus. Recreation can also result in impacts to biological communities that are not as noticeable (Larson, et al, 2016), yet these impacts should still be considered. These impacts are not limited to the physical spot where the use occurs, but extend for a distance. While major portions of the planning area receive significant recreational use, there are other areas that see little to no use. Areas that receive significant use are generally near lakes, ponds and trails. Little used areas may have herd paths that pass through them, but generally lack developed facilities. The greater the distance from heavy recreational use, roads, and developed private property, the more-wild character the area will have and impacts to wildlife will be lesser.

Water Resources

Waterbodies in the High Peaks Wilderness Complex and Vanderwhacker Mountain Wild Forest are impacted by recreational use. These impacts come from the use that occurs on the water itself and on the adjacent lands. Primitive tent sites, trails, and parking areas are examples of facilities on land that could impact an adjacent waterbody. Different impacts are associate with different recreational uses.

The Department and the Adirondack Park Agency are currently working on developing carrying capacity guidance for waterbodies. Upon adoption of waterbody carrying capacity guidance, those standards will be adopted and applied in these units. In the interim this plan calls for monitoring all the recreational land based uses and actions will be taken to minimize impacts.

These management concepts form the basis of the proposed management actions presented in this UMP Amendment. This approach will require flexibility, determination and patience. It may not be possible to complete all inventories and assessments called for by this strategy - and by the APSLMP - in this plan's time frame. It will be important to show progress in achieving APSLMP goals and in gaining initial managerial experience and knowledge in applying this strategy to some carrying capacity questions and issues. Knowledge gained as a result of the implementation of these UMP amendments will be useful to: 1) revising and refining management actions if evaluation shows that desired conditions are not being attained or sustained; and 2) creating a foundation upon which this strategy can eventually be built into a fully-developed, science-based approach to protecting and managing the resources of the HPWA and VMWF.

Proposed Management

Management and Planning Concepts

The long-term approach for managing the tracts will use a phased approach for the implementation of facilities, guided by monitoring following the Limits of Acceptable Change (LAC). Given the numerous variables impacting the management of a large wildland complex, DEC acknowledges this process will evolve over time and utilize appropriate resources that are emerging across public land management agencies. The U.S. Forest Service White Mountain National Forest Wilderness Appendix is an impressive model that helped inform the Department's planning process. As the Wildland Monitoring Program is developed DEC will utilize aspects of the recently developed Visitor Use Management Framework (developed by the Interagency Visitor Use Management Council, which is made up of the federal public land agencies.)

Limits of Acceptable Change (LAC)

This method employs carrying capacity concepts, not as prescriptions of the total number of people who can visit an area, but as prescriptions of the desired resource and social conditions that should be maintained.

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Establishing and maintaining acceptable conditions depends on well-crafted management objectives which are explicit and draw on managerial experience, research, inventory data, assessments and projections, public input, and common sense. When devised in this manner, objectives founded in the LAC Framework models essentially dictate how much change will be allowed (or encouraged) to occur and where, as well as how to respond to changes. Indicators (measurable variables that reflect conditions) are chosen, and standards (representing the bounds of acceptable conditions) are set, all so that management efforts can be effective in addressing unacceptable changes. A particular standard may be chosen so as to act as a simple trigger for management action or it may be chosen to act as a kind of boundary which - given certain assessments - allows for management action before conditions deteriorate to the point of no longer meeting the standard.

Even well-conceived and executed efforts can prove ineffective, but the implementation of LAC will show the land manager if facilities are effectively working in the way that they were designed. If efforts do prove ineffective, management responses must be adjusted. Monitoring of resource and social conditions is absolutely critical. LAC models rely on monitoring to provide systematic and periodic feedback to managers concerning specific conditions.

In outline, The Department's approach applies four factors in identifying potential management actions for an area:

1. The identification of acceptable conditions as defined by measurable indicators;
2. An analysis of the relationship between existing conditions and those desired;
3. Determinations of the necessary management actions needed to achieve desired conditions;
4. A monitoring program to see if objectives are being met.

A proposed list of management and planning concepts, for which measurable indicators and monitoring tools can be developed, may be used by the Department for measuring and evaluating acceptable change within the units:

- Condition of vegetation in camping areas and riparian areas near lakes and streams;
- Extent of soil erosion on trails and at campsites;
- Noncompliant visitor behavior;
- Noise on trails, adjacent campsites and other areas where impacts occur;
- Conflicts between different user groups;
- Diversity and distribution of plant and animal species;
- Air and water quality.

The adoption of Indicators and Standards for measuring impacts helps create a consistent and reliable methodology in monitoring impacts. While LAC will be the main methodology to guide management decisions and actions, it is important to note the overall goal is to preserve Wilderness Conditions. [the White Mountain National Forest Land and Resource Management Plan provides a great example of what the Department is trying to achieve in establishing a well-rounded and useable method of informed decision making through monitoring]. Indicators are tools used to assess the resource or social conditions of a given area and are not always a direct measure of the actual conditions of a facility. The indicators set standards which act as thresholds to determine if and what management action will be taken. It is accepted and assumed that sustainable and purpose built facilities will experience minimal soil compaction and vegetation loss outside the developed tread or area, and will readily shed water without holding it or causing erosion. These assumptions need to be re-assessed over time. If the facilities are maintaining their intended condition then they can either be maintained as is, or the land manager can proceed to the next phase of the plan. If the condition of the facility is failing and our assumptions are not being met then corrective adjustments need to be made, which could involve anything from hardening and re-routes, to taking a step back to a previous phase of the plan.

Regular and consistent monitoring is critical for this framework to be successful. Without the regular measurements of the indicators and comparison to the established standards it is not possible to understand the degree to which we are able to achieve Wilderness Character integrity.

Based on the LAC framework outlined above, we chose four categories of indicators as significant identifiers of resource concerns. Those indicators fall into the categories of biophysical, social, aesthetic, and ecosystem process. Each is described below, along with a short excerpt from the Wilderness Definition from the SLMP that served as the primary (though not entire) focus in determining the scope of that individual indicator. See table 1 below for a summary of these indicators.

Biophysical Indicators

These are measures of the effects of human activity on the biological health and quality of the environment. They are typically large-scale and are often influenced most significantly by actions and events outside Wilderness. These indicators are distinct from others because the primary concern is for the health and quality of ecosystems and ecosystem components such as watersheds, air quality, wildlife and vegetative populations, rather than for the quality of the human experience.

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Social Indicators

These measures are immediate and local, involving direct contact among Wilderness users and between Wilderness users and agency personnel. These indicators are categorized as distinct from others because they are strictly a measure of how people affect other people, and the primary concern is for the human experience in terms of type, quality, and frequency of interaction with others. For example, do users change their route or destination as a result of other users on a trail, or do users not use a facility like a lean-to or tent site because its over use is resulting in degradation? These experiences may have a direct link to the quality of the ecosystem or the appearance of the surrounding landscape.

Aesthetic Indicators

These are measures of how direct human effects on the immediate landscape affect the human experience of the area as Wilderness. They typically are local in scope, are constrained to an immediate area, and result primarily from recreational use.

These indicators are distinct because the primary concern is for the human experience derived from the immediate, local landscape. These are measures of both human-caused impacts to a biophysical resource and the resulting effects of those impacts on the wilderness experience. However, these types of impacts are unlikely to have lasting, significant effects on the larger-scale health of ecosystem components. As such, the driving force to mitigate them stems from the human experience, which often results in these corrective measures being easily achievable through public will.

Ecosystem Process Indicators

These measures of process and change on the land occur separately from the direct influence of human action. They are usually broad scale and large in scope. These indicators are distinct from others because in many cases there is no direct human involvement in the process affecting change on the land. However, in recognizing the need for baseline data to inform management decisions, these processes should be monitored closely to understand natural change in the area.

Wilderness Management Process Application

Biophysical Indicators

Indicators may include air quality, water quality, threatened and endangered species, invasive species, and indicator species (see Table 1 below). * Though invasive species

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and indicator species concerns are often part of ecosystem processes (and are listed as such here), they will be treated in this plan as biophysical issues.

Standards will be common to all areas to preserve the wild character of the area.

Management Actions may not affect individual sites, depending on the scope and source of the exceeded standard.

Though in many cases the effects and actions available to manage and administer Wilderness in terms of these indicators are site-specific and within control of managers, they are sometimes beyond the manager's administrative scope (e.g., air quality issues). Standards are set, and methods to measure and ensure that these standards are met involve other federal or state laws, other federal and state agencies, and other disciplines.

Social Indicators

Indicators may include number of contacts per given segment of trail per survey period, number of contacts per given destination point per survey period, assessments of visitor experience, and perception of crowding at determined destination points (see Table 1 below).

Standards are based on use trends as monitored at the same locations and the same times from year to year. A range of survey locations will be determined across the unit.

Management Actions triggered by exceeding standards will include a focused examination of management actions, policies, and general recreation trends that may underlie the specific issue. The level of tolerance and restriction represented by management actions may differ by area. There are tools available to manage and administer Wilderness in terms of these indicators, however they are sometimes judged to be ineffective. Because of their often seemingly arbitrary nature, numerical standards in these cases are extremely difficult to set and even more challenging to justify; visitors in some areas have indicated a greater acceptance of higher use levels than increased managerial regulation. Nevertheless, management actions may involve implementation of use restrictions or limitations.

Aesthetic Indicators

Indicators include campsite density, campsite size, and frequency of litter and exposed human waste (see Table 1 below).

Standards are set for each indicator and often vary by area.

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Management Actions activated by an excess of standards will often involve direct manipulation of campsites, an increase in managerial presence in the affected area, and in extreme situations may involve the implementation of use restrictions or use limitations.

We have many tools to manage and administer Wilderness in terms of these indicators. Furthermore, clear standards may be set based on the values used to determine current and desired resource conditions. Management actions to mitigate impacts in these areas are usually justifiable and commonly acceptable to visitors.

Ecosystem Process Indicators

Indicators may include ecological indicator species, natural fire, natural disturbance, and invasive species (see Table 1 below).

The information presented above represents several of the concepts and theories for addressing Carrying Capacity and developing processes to monitor impacts. This represents the basis for our overall plan, Standards and Management Actions are largely dictated by a Wildland Monitoring Plan. Upon approval of the UMP Amendments, land managers for the High Peaks Wilderness and Vanderwhacker Mountain Wild Forest will take the concepts discussed to create a Wildland Monitoring Plan that will be used in conjunction with the Work Planning process to implement proposals. Tools to monitor Wilderness in terms of these indicators are largely based in the natural sciences. These processes must be carefully monitored to increase understanding of Wilderness conditions.

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	Wilderness Character	Indicators	Standards	Management Actions
Biophysical- Human effects on the land. Primarily broad scale.	"...an area...having a primeval character ...protected and managed so as to preserve its natural conditions.... generally appears to have been affected primarily be the forces of nature."	<ul style="list-style-type: none"> • Air Quality • Water Quality • Wildlife/TES • Invasive Species • Indicator Species 	Standards are often defined by other legislation and measured by specialists other than Wilderness Managers	Excess of standard may activate action, but most likely will no greatly restrict Wilderness recreation opportunities.
Social- Direct and immediate human effects on other humans.	"...outstanding opportunities for solitude or...unconfined type of recreation."	<ul style="list-style-type: none"> • Visitor Use, Trail • Visitor Use, Destination • Experience Quality • Perception of Crowding 	Standards are definable and measurable, but can be viewed as subjective and arbitrary.	Excess of standard activate focused examination of management actions and policies. Data informs our decisions- making and serves warning that use-related problems may increase
Aesthetic- Human effect on the land that primarily affects the experience by other humans of an area as Wilderness	"...without significant improvements or permanent human habitation...with the imprint of mans work substantially unnoticeable...outstanding opportunities for primitive...recreation."	<ul style="list-style-type: none"> • Campsite density • Campsite size • Litter and human waste 	Standards are definable and measurable.	Excess of these standards activate controlling actions on Wilderness Visitors
Ecosystem Process- Change and effects on the land not directly influenced by human action.	"A wilderness area, in contrast with those areas where man and his own works dominate the landscape, is as an area where the earth and its community of life ae untrammled by man."	<ul style="list-style-type: none"> • Presence of ecological indicator species • Absence of natural fire/disturbance • Invasive species 	Dictated by Wildland Monitoring Program	Dictated by Wildland Monitoring Program
		•		

Objectives

- Utilize a phased approach to facility implementation that is informed by the LAC Framework.
 - Proposals in this document that intended subsequent phases are referred to as conditional actions.
- Collect baseline data related to recreational use and the physical condition of the newly acquired lands.
- Establish and implement a regular and reoccurring Monitoring Program based on LAC and other available methods to help track changes to the unit over time.

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- Use the latest best management practices (BMPs) available in the siting and construction of all facilities
- Provide consistent messaging with partners to help educate users.
- The Department is committed to implementing a Carrying Capacity based phased approach through this UMP Amendment. To ensure the success of the proposed process, the Department will devote the necessary staffing resources to make sure all 6 of the BMPs for Wildland Management are given the resources needed. Quality data derived through this process will lead the Department in making the best decisions available to protect the resource and user experience.

Action Steps

- Develop the Wildland Monitoring Plan that will be utilized in the High Peaks Wilderness and Vanderwhacker Wild Forest to monitor the implementation process. DEC will convene a focus group following approval of the UMP Amendment to develop the Wildland Monitoring Plan within the first year of the approved UMP Amendment.
 - The Wildland Monitoring Plan will layout the methodologies for sampling and measuring, specify indicators and provide a framework for processing the data collected during monitoring efforts.
 - Following the adoption of the Wildland Monitoring Plan DEC will submit a work plan which will layout the timeline and resources needed for the Wildland Monitoring Plan.
 - After 5 years, the Wildland Monitoring Plan will be reviewed and the effectiveness of the monitored variables will be evaluated. If changes are needed, DEC will make appropriate adjustments to reflect the best methodologies available at the time.
- Develop an annual report including the status of the Wildland Monitoring Plan, implementation progress, usage trends and identify issues impacting the Wilderness Complex.
- Collect and tally trail register information on an annual basis
- Monitor facilities like parking areas, tent sites, and high-use trail areas on a periodic basis for comparison over time. These monitoring efforts will involve data collection through photo documentation, visual observations, use number data, etc. .Preference will be given to variables that will help guide management decisions.
 - Data that may be sampled (specifics in Wildland Monitoring Plan)
 - Erosion and Compaction;

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- Occurrences of litter and human waste;
 - Expansion of use beyond the designed area;
 - Visual and Audio sampling during peak and off peak times;
 - Need for enforcement actions, etc.
- Use a phased approach when constructing new facilities. This allows the Department to evaluate and ensure the social and environmental carrying capacities are not being exceeded, and ensure there is a public desire for additional facilities before they are constructed. If monitoring efforts show the limits of acceptable change are being exceeded then management adjustments will be made, and the next phases of the plan will not be considered until corrective measures are successfully completed. This could hold or bring the management back to a previous phase.
 - Develop a visitor survey that focuses on monitoring the intangibles of user experience. Using various methodologies develop a survey that discusses user satisfaction, acceptance of crowding, perceived management conditions and other factors to gauge user experience. This survey should be completed on a 3-5-year cycle across the complex.
 - Site facilities in locations that provide long-term sustainability, keep overall maintenance to a minimum, and enhance the user experience
 - Design, locate, and construct all new structures and improvements in ways that will minimize the potential for soil erosion.
 - Monitor the site conditions at all facilities. If unacceptable change occurs, provide restoration to secure the disturbed areas in a manner that prevents erosion.
 - Close, relocate, or restrict use of unit facilities, as appropriate, to reduce negative impacts to resources caused by recreational use.
 - Provide educational materials the public can find through signage on site and also on the Departments website before their visit.
 - Emphasize information and education as the primary means to reduce impacts and slow unacceptable levels of change.
 - Provide outreach through on the ground interactions with Department staff, Assistant Forest Rangers, SCA Back Country Stewards, and volunteers.

B. Signage and Education

History

Several of these tracts have a history of public use on hiking trail easements or existing Forest Preserve that were not formally part of the High Peaks Wilderness Complex. For the Boreas Ponds and MacIntyre Tracts the recent purchases provide the first public access to these lands.

DEC and its Partner Organizations have tried various methods of educational effort to help visitors understand a variety of topics including rules, preparedness and interpretation. These have included signs, maps, posters, DEC Assistant Forest Rangers, Student Conservation Association (SCA) Backcountry Stewards, Wildlife Conservation Society (WCS) Bear stewards, other volunteer education and outreach partners, and direct contact from DEC Forest Rangers.



Type I Register Kiosk

Existing Conditions

Signage on recently purchased lands is sparse. Basic permissive signage has been installed and some boundary signage erected to help inform the public of these new lands.

The Former NL lands and previously-named Dix Mountain Wilderness Area lands have a history of DEC signage, including directional and educational signage. The Adirondack Mountain Reserve maintains some signage at their boundaries and at access points off the Lake Road.

Currently Department and the Wildlife Conservation Society (WCS) partner to provide a part-time Bear Steward working the Upper Works area. WCS also has a bear steward that has worked the Northern end of the High Peaks area and in the Beer Walls area of the Dix Mountain Wilderness off Route 73.

Assistant Forest Rangers (3 items) focus on northern access routes to the High Peaks including the Marcy Dam-Flowed Lands corridor and the Johns Brook Valley.

There are currently 3 Forest Rangers that cover the lands in Newcomb, North Hudson and the Keene side of the Dix Mountain Wilderness lands.

Proposed Management

Objectives

- Provide users with appropriate information at the start of their hikes and at locations in the backcountry covering natural resource protection, personal preparedness, directional assistance as well as rules and regulations.
- Improve the opportunity for on the ground in person education and information.
- Provide consistent messaging on the ground and with education partners to help educate users.
- Utilize communication technologies to protect the natural resources, educate the public on Wilderness Values and empower individual preparedness to assure visitors have a Wilderness Experience.
- Provide appropriate staffing levels so the Department can provide education and outreach messages to users at popular trailheads and in the backcountry.

Action Steps

- Install a location map at each trail register to help orient users.
- Integrate Leave No Trace Principals and Wilderness Ethics into all messages.
- Provide consistent trailhead signage across all trailheads to help reinforce key educational and informational messages.
- Install Trailhead Registers or Kiosks at the following locations. (**Indicates locations where Dix Mountain Wilderness Signage will be replaced with High Peaks Wilderness Signage*)
 - Type 1 Kiosks
 - Bradley Pond
 - East River Trail
 - Upper Works Trail
 - Boreas Dam
 - Fly Brook
 - *Elk Lake to Slide Brook
 - Ampersand Mountain Trail

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- Mt. Van Hoevenberg Complex (If approved in the Mt VanHoevenberg Intensive Use Area UMP)
- Type 2 Kiosk
 - Moose Pond Horse Trail
 - *Elk Lake Marcy Trail
 - *Round Pond Trail to Dix
 - *Round Mountain Trail
- Type 3 Kiosk with signage
 - *Noonmark Trail
 - Newcomb Lake South Trail
- Install interior educational signboards at key points with the purpose of providing outreach about land ownership changes and land classification changes, including any rules that are applicable and additional educational messages. This consistent signage at trail/boundary interfaces will help educate visitors. Locations will include:
 - Classification or Land Ownership boundaries
 - *Indicates locations where Dix Mountain Wilderness Signage will be replaced with High Peaks Wilderness Signage
 - Wild Forest to Wilderness Transitions
 - North Shore of Newcomb Lake Trail after Sucker Brook
 - Leclair Hill Trail after Niagara Brook
 - Along Gulf Brook Road
 - Above 4 corners on old road going north
 - West of 4 corners there are 2 major woods roads that head north.
 - Intensive Use to Wilderness
 - Cascade Mountain Trail
 - Mt. Van Hoevenberg East Trail
 - 1932 Trail
 - Easement Lands to Wilderness Transitions
 - Lake Andrew Trail at Boundary

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- Bradley Pond Trail at Boundary
 - Henderson Lake South Trail at Boundary
 - Calamity Brook Trail beyond the Henderson Lake Outlet
 - East River Trail at Boundary by Lake Jimmy
 - Elk Lake Marcy Trail in 3 places where it crosses boundaries.
 - *Slide Brook Trail at Boundary
 - *Elevator Shaft Trail from Warden's Camp
 - *Fish Hawk Cliffs Trail
 - *Gil Brook Trail
 - *Bear Den Trail
 - Bartlett Ridge Trail
 - Haystack Brook Trail
 - Sawteeth from Warden's Camp
 - Sawteeth Scenic Trail
 - Above Rainbow Falls
 - Trail to Armstrong above Beaver Meadow Falls
 - Wedge Brook Trail
 - WA White Trail
 - Deer Brook Trail
 - Snow Mountain Trail
 - MacIntyre West where primitive road comes in and out
 - MacIntyre West where Newcomb Club Road ends
 - MacIntyre East at LeClaire Brook
- General Roadside or Informal Access Points
 - *Access to Beer Walls
 - *Chapel Pond Campsites
 - *Chapel Pond Parking Area
 - *Chapel Pond climbing Access Points
 - *North Fork of Boquet Access Point
 - *South Fork of Boquet Access Point
 - *Lindsay Brook Access
 - *Westmill Brook Access
 - *Walker Brook Access
 - *North Hudson Dome Access

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- Boundaries along the Eastern High Peaks Zone
 - Indian Pass Trail
 - Calamity Trail
 - East River Trail beyond Twin Brooks
- Install and maintain roadside Forest Preserve wilderness boundary signage along any public motor vehicle roads including:
 - Upper Works Road
 - NYS Routes 3, 9 and 73
 - The Adirondack Northway I-87
- Install and maintain boundary lines and signage along all new parcels of Forest Preserve abutting private lands and Conservation Easements lands.
- Past ownership signage or interior boundary signage will be removed as it is located.
- Install appropriate trail directional signage.
- Install campsite signage that provides educational and rule information.
- Install Wilderness Summit signage. In 2000, the Adirondack 46ers worked with DEC to remove the canisters off the trailless peaks. An agreement was made that established an official list of trailless peaks that would have signs on the summits. No peaks other than those listed below will have summit signs:
 - Maccomb Mountain
 - Couchsachraga Peak
 - Allen Mountain
 - Cliff Mountain
 - Mt. Redfield
 - Gray Peak
 - Mount Marshall
 - MacNaughton Mountain
 - Seymour Mountain
 - Seward Mountain
 - Donaldson Mountain
 - Mt. Emmons
 - Street Mountain
 - Nye Mountain

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- Tabletop Mountain
- DEC will take the lead and work with partners in local government, tourism and recreation industry, advocacy groups, schools and interested parties, to effectively spread Outreach and Educational Messages to focus improving and engaging public understanding of the following topics:
 - Wilderness and other Land Classifications of the Forest Preserve;
 - Leave No Trace principles and Wilderness Ethics;
 - Rules and Regulations pertaining to the High Peaks Wilderness Complex and other wilderness lands;
 - The transition of the lands formally part of the Dix Mountain Wilderness Area to the High Peaks Wilderness Complex;
 - User preparedness and backcountry safety.
- Lands and Forests seasonal staff conducting on the ground education and outreach, assist with the implementation of rule and regulation changes, work on implementation of proposals and monitoring of usages and follow-up projects.
 - Covering lands across the southern High Peaks Wilderness Complex and connecting or adjacent lands in both the Vanderwhacker Mountain Wild Forest and Giant Mountain Wilderness Area, covering:
 - 23 Major Trailheads and 40 additional access points
 - 300+ miles of trails
 - 180 campsites
 - 14 lean-tos
 - 13 major periphery rock climbing areas
 - 7 Easement Access Points
 - 7 waterbodies with hand carry launches
- Forest Rangers working in the High Peaks Wilderness Complex and other surrounding units (the Hoffman Notch Wilderness Area, Vanderwhacker Mountain Wild Forest and the Essex Chain of Lakes Complex), providing fulltime

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educational, natural resource protection and human health and safety efforts of these lands.

- With all the new land changes, rules and regulations along with assisting with the implementation over many years these positions will be important
- Assistant Forest Rangers working in the southern area of the High Peaks Wilderness Complex and surrounding lands for education, natural resource protection and human health and safety.
 - Assistant Forest Rangers patrolling Forest Preserve Lands in the Towns of Newcomb and North Hudson will provide assistant in education and outreach efforts on many changes to land use and help ensure the safe implementations of projects across the following units:
 - High Peaks and Hoffman Notch Wilderness Complexes'
 - Vanderhacker Mountain and Hammond Pond Wild Forests
 - Essex Chain of Lakes Complex
 - Including these easements:
 - Tahawus Conservation Easement
 - Adirondac Core Conservation Easement
 - Upper Hudson Woodlands ATP Conservation Easement
 - Elk Lake Conservation Easement
 - Adirondack Mountain Reserve Easement

C. Motorized Access, Trailheads and Parking

History

Past owners like the Bloomingdale's, Finch Pruyn, National Lead, The Nature Conservancy and associated recreational lease holders have accessed these tracts at several different locations in the past and for various reasons, including general property management, forest operations and timber sales, and recreation. Most of these entry points are situated in the Vanderhacker Mountain Wild Forest, are

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temporary or seasonal in nature and can be seen along the Blue Ridge, Elk Lake, Upper Works and Tahawus roads.

The majority of motorized access and parking for users of the High Peaks is located either in the Vanderwhacker Mountain Wild Forest or on various conservation easement lands adjacent to the wilderness.

Parking areas for Forest Preserve and conservation easement lands will be addressed below, with discussions of the access they provide the High Peaks Wilderness Complex. Detailed proposals for Parking in Wild Forest areas can be found in the Vanderwhacker Mountain Wild Forest Unit Management Plan. Details for any parking on conservation easement lands are addressed in actual easement or Recreation Management Plans (RMPs) or work plans approved by the landowner.



Lower Parking Lot on Gulf Brook Road

Existing Conditions

MacIntyre West and OSI Bradley Pond Tract

The Bradley Pond Trailhead on the Upper Works Road has been the formal access point for the Bradley Pond trail for years, with previous use occurring pursuant to a trail easement. Since 2015, it has served as an access point for the MacIntyre West Tract as well. A portion of the parking lot and the roadbed, for about 2.5 miles, is on the Tahawus Conservation Easement.

Former NL Lands and MacIntyre East

The Upper Works Trailhead and East River Trailheads are located on OSI lands (on which DEC and OSI are currently developing a conservation easement). Past use on Former NL lands and Finch lands was limited to trail corridor easements to access Forest Preserve. From the Upper Works trailhead, the Calamity and Indian Pass trails have historically been the major access points from the south. The East River Trailhead access to Mount Adams and the East River Trail (to Hanging Spear Falls and Allen Mountain herdpath) have been used for years. This provides the primary access to these tracts.

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North River Mountains Tract

This area was difficult to access until the State purchased the MacIntyre East Tract. Prior to that a small land connection to the east of Cheney Cobble was the only legal access via bushwhacking.

Boreas Ponds Tract:

All existing access points for the Boreas Ponds Tract are in the Vanderwhacker Mountain Wild Forest. In 2016, six parking lots were developed to help facilitate access to the Boreas Ponds Tract: two on Elk Lake Rd, one at the intersection of Branch and Blue Ridge Roads, one on Andrew Brook Rd, and two on Gulf Brook Rd. The majority of wilderness access is via The Gulf Brook Road parking areas or the Upper Elk Lake Road Parking Lot.

Casey Brook Tract

The Elk Lake Conservation Easement has historically provided access to the Casey Brook Tract via the Elk Lake-Marcy Trail.

Niagara Brook Tract:

Currently parking facilities for the Niagara Brook Tract do not exist, but access can be achieved by parking along the shoulder of Blue Ridge Rd and walking on Niagara Brook Rd, which is built to an industrial logging standard. Lands directly north of the Blue Ridge Rd are part of the Vanderwhacker Mountain Wild Forest.

Ampersand Mountain, Cascade Mountain and Dix Mountain Wilderness Lands:

The existing parking for the Ampersand Mountain Trailhead is situated in the Saranac Lake Wild Forest on the north side of Route 3. Parking issues along Route 3 have been a problem for years and the 2017 Draft Saranac Lake Wild Forest UMP suggests creating a parking area for Ampersand Mountain in the High Peaks Wilderness, to help deal with this issue.

Parking for the Cascade Mountain Trail is on the south side of Route 73, with a combination of four parking pull offs along the highway. In 2017 DEC worked with the Olympic Regional Development Authority (ORDA) and various stakeholders to implement a pilot trailhead relocation of the Cascade Mountain Trailhead and reroute of the trail.

The 2004 Dix Mountain Wilderness Area UMP discusses the major access points for that area. The trailhead on Elk Lake Conservation Easement Lands provides the major

southern access to this area. The Round Pond Trailhead and parking area serves as a major access point to the unit from Route 73. South of Chapel Pond the west side of Route 73 is used for access to the adjacent to the Chapel pond area and the Giant Mountain Wilderness Area's Ridge Trail. Rock Climbers access the Chapel Pond Slab and routes in the Giant Mountain Wilderness, hikers going up the Ridge Trail and people accessing Chapel Pond all park in this general area. In recent years the popularity of this location has led to concerns with safety along Route 73 and subsequent concerns with impacts to the resources in the area.

Desired Conditions for Trailhead Facilities Monitoring

There are numerous parking areas that serve as entry points to the front and backcountry. Properly designed and managed parking areas will maintain their firm and stable surface with minimal maintenance, and allow unencumbered parking for the designed number of vehicles. This not only maximizes environmental protection, but also user safety, function and enjoyment. Appurtenances to the parking areas like privies and gates should also be maintained in a clean and functional working condition. Like roads and other facilities described, parking areas can add to a user's positive experience if it blends well with the natural area and is kept free of trash and human waste. The variables to be monitored in parking areas will be the presence of a firm and stable surface that is smooth and easily accessible by the public, along with clean sanitary conditions including properly maintained privies and an absence of trash. Photo points will be a useful tool to help illustrate potential changes over time.

Proposed Management

Objectives

- Utilize adjacent Forest Preserve land units, conservation easements and public roadways to achieve safe locations where the public can gain access to the High Peaks Wilderness Complex.
- Provide and manage adequate trailhead facilities to protect natural resource values and enhance visitor Wilderness Experience through education and information messaging.
- Use parking areas to manage interior use by balancing parking lot capacities with resource and recreational carrying capacities.

Action Steps

- Monitoring for the desired conditions of parking areas will help measure and determine impacts to better inform carrying capacity development and long term

III. Recreational Resources and Human Uses

planning. Final specifics will be detailed in the Wildland Monitoring Plan but generally:

- Desired conditions for parking areas will be a firm and stable surface that has minimal expansion from the designed footprint, well maintained privies and gates, is free of occurrences of litter and human waste and adds to the overall user experience.
- Monitoring could include photo point locations, control measuring points, survey of invasive species, surveys of visual occurrences of trash, and user surveys.
- All parking areas will have improved signage and trailhead facilities that will include maps.
- All parking areas will have an appropriate method to deal with human waste.
 - Pit Privies will be installed where appropriate and possible.
 - Alternative options like United States Forest Service style Vault Toilets, Composting Toilets, Portable Toilets or other options will be used where appropriate and allowed.
- Work with OSI to develop terms in the pending Adirondac Core Conservation Easement to provide trailhead facilities at the Upper Works and East River trailheads.
- Work with OSI to develop terms in the pending Adirondac Core Conservation Easement to provide CP-3 motorized access from the Upper Works Trailhead to the outlet of Henderson Lake.
- Work within the terms of the Tahawus Conservation Easement to maintain the Bradley Pond Trailhead.
- Proposals in the Vanderhacker Mountain Wild Forest UMP amendment identify the following parking areas, which will serve as trailheads to the High Peaks Wilderness:
 - South of the Boreas Dam Primitive Area. Trailhead information and facilities will address access in to the High Peaks Wilderness Complex, including a bike rack at the gate so users can walk to Boreas Dam.
 - Fly Pond Parking Area
 - Branch Road Parking Area

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- Upper Elk Lake Parking Area
- LeClair Hill Parking Area (conditional action)
- Work within the terms of the Elk Lake Conservation Easement to maintain the trailhead, parking and seasonal limitations on access across the property.
 - Begin utilizing the existing parking area at the State land boundary, on Elk Lake Road, to serve as the overflow and winter parking area. Work with Elk Lake and the Town of North Hudson to close the smaller parking area at Clear Pond.
- Work within the terms of the AMR Conservation Easement to maintain the trailheads and parking opportunities.
- Proposal in the Mt. Van Hoevenberg Intensive Use Area UMP amendment calls for the placement of a trailhead to Cascade Mountain and Mt. Van Hoevenberg in the Intensive Use area. With the approval of that plan and the implementation of the trail reroutes proposed in both that plan and this amendment, the trailhead for Cascade Mountain would be relocated.
 - Once the Cascade Mountain Trailhead is relocated, the Department will work with the NYS Department of Transportation, policing agencies, local government, stakeholders and partners to complete the closure of the three parking lots on the south side of Route 73 adjacent to the trailhead (conditional action).
- Construct a 15-car parking lot on Route 3 approximately 0.6 miles west of the existing Ampersand Trailhead in the High Peaks Wilderness Complex. Design of the parking lot should accommodate snow removal.
- Construct 2 new 20 car parking lots on route 73 approximately 0.4 miles south of the existing Ridge Trail Parking area in the High Peaks Wilderness Complex. Design of the parking lot should accommodate snow removal. These parking lots and trailheads will serve users accessing Chapel Pond Slab and Chapel pond via a Class V trail (conditional action).
 - Through Work Planning in the Giant Mountain Wilderness Area the DEC will propose realigning the bottom of the Ridge Trail to come out in the vicinity of this new parking lot on the east side of Route 73. The trail realignment combined with the parking lot/ trailhead will allow the DEC to more safely manage the use at this location (conditional action).

III. Recreational Resources and Human Uses

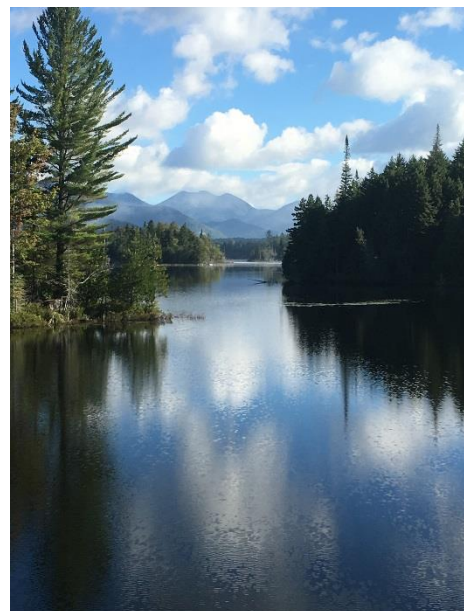
- Once the parking lot and trail are built, DEC will work with DOT, policing agencies, local government, stakeholders and partners to close roadside parking on Route 73 (conditional action).
- Expand the size of the Round Pond trailhead and parking area to 25 car capacity. This parking lot and trailhead will serve users accessing Round Pond, the Dix Range, Noonmark and Round Mountains as well as access to multiple rock climbing areas.

D. Dams

History

Given the rich history of logging and mining in this area, there is evidence of existing and past dams over much of this area. Three major dams still in existence owe their origins to past industries. These dams also provide the largest lure to this area with the views that can be attained while plying the waters, or in the case of Boreas Ponds Dam, standing on the structure.

Henderson Lake Dam was built around 1900. Prior to the dam being built the lake was smaller in size. Water from the dam was harnessed in the iron ore processes going on around the Upper Works and was probably utilized in the driving of logs down the Hudson River. One of the most notable structures on the Boreas Ponds Tract is the Boreas Ponds Dam. This was originally constructed by Finch, Pruyn & Co. in 1915-16 as a log flush dam to aid the LaBier Flow Dam downstream. Due to the inefficiency of horse and wagons for large logging operations and the lack of railroads in the area, the logging industry relied heavily on rivers to float logs to the mills where they were processed into various products like lumber and paper. The Boreas Ponds Dam was built to impound the Boreas River and flood Boreas Ponds, which had previously been 3 separate smaller ponds. The log dam was constructed in such a way that it would substantially block the flow of the river and also be able to be rapidly broken apart, releasing or “flushing” the ponded water behind it. Trees were



View North from Boreas Ponds Dam

cut throughout the area as high as the surrounding mountain summits. Logs were bucked, peeled, and transported down the mountains to Boreas Ponds, LaBier Flow, and the Boreas River by a combination of large log flumes that were constructed up the mountains and horse and sled. These logs would be stockpiled in the ponds and along the river all winter. Once spring arrived and thawed enough ice, typically mid to late April, the flush dams at Boreas Ponds and LaBier Flow were breeched creating a massive flood of water down the Boreas River. The flushing of the ponded areas released enough water to transport in excess of 5 million board feet of saw logs down the Boreas River. The initial flush of logs was relatively quick, but the entire log drive typically took two months to float all of the logs to the mills in Glens Falls.

Existing Conditions

Currently there are 3 functioning dams in the High Peaks Wilderness Complex. This UMP Amendment will address the Henderson Lake Dam and Boreas Ponds Dam; the third dam is impounding Lake Colden and is addressed in the 1999 High Peaks Wilderness Complex UMP. The Henderson Lake Dam is located in the Tahawus Primitive Area (OSI retained rights to produce hydro power on the Henderson Lake Dam) and the Boreas Ponds Dam is located in the Boreas Ponds Dam Primitive Area.

The APSLMP allows for the maintenance and rehabilitation of existing dams, where the structures are deemed essential to the administration and/or protection of State lands. As long as the dam is maintained and does not pose a public health and safety risk it can remain in place. Both the Henderson Lake and Boreas Ponds dams are Class A Hazard (Low Hazard) dams.

Proposed Management

Objective

- Ensure all dams are properly maintained and any bridges, trails or walkways associated with them are safe for travel.

Action Steps

- Manage vegetation on the dams.
- Conduct routine inspections by NYS DEC Dam Safety staff.
- Maintain and repair appurtenances to the dam required under the standards established by DEC's Dam Safety guidelines.:

E. Day Use Areas

Existing Conditions

The Wilderness lands impacted by this UMP provide a spectrum of opportunities for quick trips or endless backcountry adventures. Creating a day-use only area can help protect the natural resources and improve the overall wilderness experience in areas where visitors are concentrated along a road or near a parking area enjoying scenic views or other activities.

Proposed Management

Objectives

- Provide day use areas in appropriate locations in compliance with APSLMP guidelines.
- Provide parking and a no-camping zone in compliance with APSLMP guidelines for Wilderness Areas. It is useful to describe this zone as a “Day Use Area” because it conveys to the public the intent to restrict overnight usage, protect resources and improve the visitor experience. These sites should not be confused with areas classified as Intensive Use which also share the term Day Use Areas, but are more highly developed.

Action Steps

- The following locations will be built, designated, signed, and codified in regulation as day use areas.
 - Chapel Pond Day Use area (off Route 73 pond side) parking area and shoreline including beach on the south shore and below the Chapel Pond Slab climbing routes. (This doesn't impact the designated campsite to the north, near the outlet and the Chapel Pond Slab campsite would remain near). No picnic tables will be installed in this day use area.
 - Boreas Ponds Dam Day Use area, including the lands from Boreas Ponds Dam Parking Area along the Boreas Ponds Dam Trail and extending across the dam ¼ mile. (*Note – this action is only being mentioned here for reference. Authorization for this day use area is being sought in the Vanderwhacker Mountain UMP amendment.*)

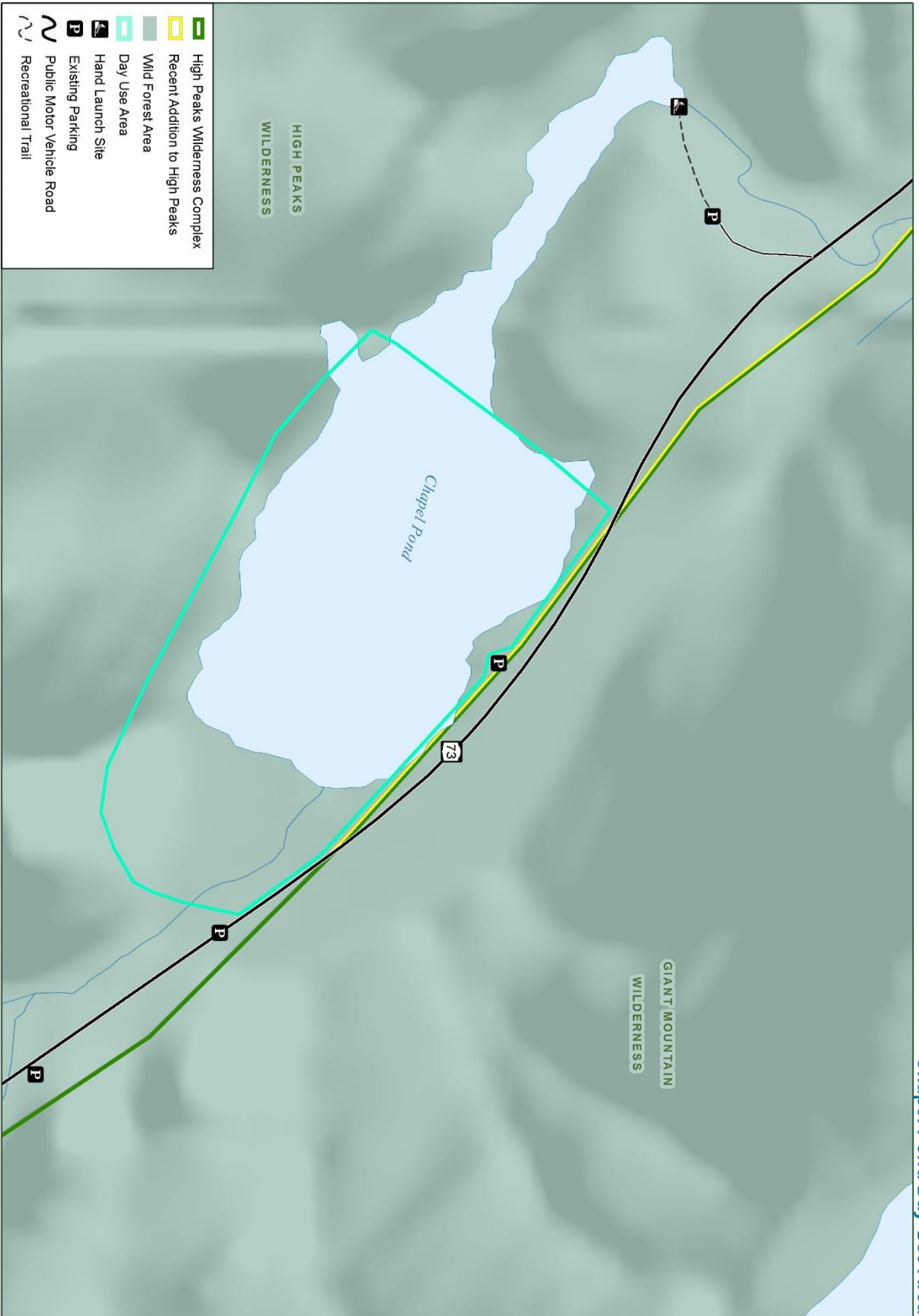
III. Recreational Resources and Human Uses

- Henderson Lake Dam Day Use Area, including the lands from the parking lot along the access trail. No picnic tables will be installed in this day use area.
- Each location will have an accessible privy or similar close by. At each location appropriate signage will be installed to help protect the natural resources.

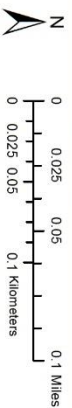
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High Peaks Wilderness

Chapel Pond Day Use Area



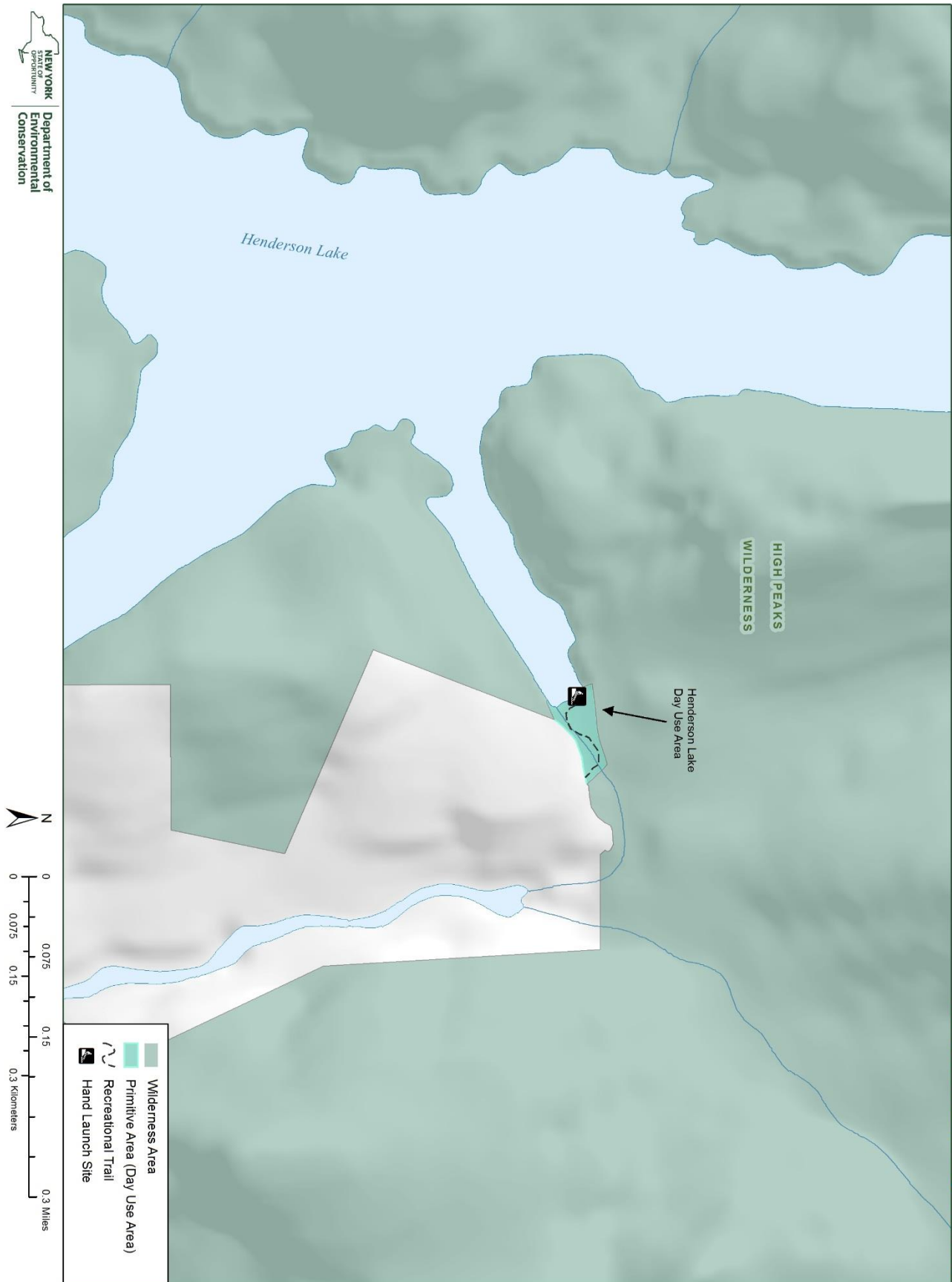
- High Peaks Wilderness Complex
- Recent Addition to High Peaks
- Wild Forest Area
- Day Use Area
- Hand Launch Site
- P Existing Parking
- P Public Motor Vehicle Road
- P Recreational Trail



III. Recreational Resources and Human Uses

High Peaks Wilderness

Henderson Lake Day Use Area



F. Access for Persons with Disabilities

Existing Conditions

The new parking lots constructed in 2016 are used by people of all abilities. Many people have accessed the property by a variety of means including horseback, especially to LaBier Flow and Boreas Ponds Dam. Several case-by-case permits for accommodations were also granted in 2016 and 2017 for individuals wanting to access a small pull-off near Boreas Ponds Dam via motor vehicle. The proximity to Boreas Ponds Dam made it possible for people to take in the scenery from the dam, and in some cases, even paddle the ponds.

Universal Trail Assessment Process

The Universal Trail Assessment Process (UTAP) is an objective method of measuring such site conditions as average and maximum grade, minimum trail width, cross slope, trail length and surface type. These variables can then be presented to the user at the trailhead and assist them making an informed decision about whether they would like to use the facility or not.

Accessible Camping in the Wilderness

Accessible camping opportunities will be provided at 3 locations. Camping at these sites will be managed according to general State land backcountry camping regulations. These locations will have stable surfaces and include parking or equestrian access, a hardened tent location, an accessible privy with a hardened access route to it and comply with the APSLMP. One of these sites will be located adjacent to a motor vehicle road and the other two will be located in the interior. The location of the of the accessible roadside tent site will be carefully chosen in order to provide attractive facilities in an area that can withstand use. Exact locations of these sites will be provided on maps, at trailheads, on the DEC website and through other appropriate informational pathways. Monitoring use and satisfaction of users will occur to assess and determine long term management of these sites.

Desired Conditions for Accessible Facilities Monitoring

Emphasis is given throughout the plan on well designed and constructed facilities that promote resource protection and will maximize long term sustainability. Accessible facilities are a great example of the importance to well-built sustainable facilities beyond the obvious environmental benefits. These facilities need to remain in proper working

order to be fully accessible by people with disabilities. The desired conditions for accessible facilities are also necessary conditions in order for the facility to remain compliant with accessible standards. Each type of facility has its own set of requirements, but for the intent of this Amendment, their requirement is to remain in a legally compliant condition. Further discussion specific facilities like accessible trails or tent sites can be seen in those respective sections. Like the rest of the facilities in this Amendment, it is important to construct these facilities in a manner that blends well with the natural surroundings and maximizes user enjoyment. Facilities built to accessible standards will be monitored for the variables described in their respective sections of this Amendment and will additionally be monitored for their compliance with their designed accessible standards.

Proposed Management

Objectives

- To provide outdoor recreational opportunities to people of all abilities.
- Increase access opportunities for people with disabilities where such development, does not alter the fundamental nature of existing programs, is compliant with Department regulation and policy, and conforming under the guidelines of the APSLMP.
- Comply with the Americans with Disabilities Act (ADA) of 1990 by improving access and creating recreational opportunities for people with disabilities.
- Inform users of the location and condition of facilities in the unit, focusing on such variables as length of trails, average grade, steepest grade, minimum width, etc.,

Action Steps

- Monitoring each location for the desired conditions for a sustainable accessible facility will help measure and determine impacts to better inform carrying capacity development and long term planning. Final specifics will be detailed in the Wildland Monitoring Plan but generally:
 1. Desired conditions for accessible facilities will vary between the type of facility and these details are outlined within each specific facility throughout the plan. Additionally, accessible facilities will remain accessible in accordance to their design standard. Like all facilities described thought this Amendment, it is important that accessible facilities remain functional and provide an enjoyable user experience.

III. Recreational Resources and Human Uses

2. Monitoring could include photo point locations, control measuring points, surveys of visual occurrences of trash, user surveys, and evaluation of their accessibility compliance.
- Maintain existing recreational access opportunities for people with disabilities, in compliance with the Americans with Disabilities Act (ADA) of 1990.
 - Publicize the locations and details of existing accessible facilities on DEC's public website and through other appropriate informational pathways.
 - Incorporate accessible signage at trailhead access points.
 - Perform a UTAP assessment of the hand carry boat launches specified in this plan.
 - Construct new facilities to the most accessible degree possible given site constraints, with the understanding that while many may not meet Americans with Disabilities Act (ADA) standards, the intent is to maximize the degree of accessibility for the widest range of abilities. These hand carry boat launches, trails, tent sites, etc. would provide opportunities for those seeking more primitive outdoor experiences than those found in traditional intensive use campground areas.
 - Take an existing tent site or find a new location on Henderson Lake and convert it to an accessible water access campsite.
 - Provide an accessible lean-to at the site of the former Boreas Lodge.
 - Develop an accessible roadside primitive campsite south of the South Fork of the Boquet River off Route 73 with an improved parking area off the highway and campsite.
 - Build 3 accessible hand carry boat launches at:
 - Henderson Lake;
 - Boreas Ponds;
 - Outlet of Chapel Pond.
 - Equestrian mounting platforms will be provided at the following locations:
 - Boreas Pond Dam area

G. Paddling/Hand Carry Boat Launches

History

On newly acquired lands lessees and previous property owners have accessed a variety of waterbodies throughout the tracts, and did so by a variety of means and locations. This was most notable near the dam on LaBier Flow, on Sanford Lake, and where East River Road meets the Hudson River.

On pre-existing Forest Preserve, the Boreas River at its intersection with Blue Ridge Road was often used to access the river for fishing, but water conditions rarely allow for canoe or kayak access.



MacNaughton Mtn and Walface via Henderson Lake

Existing Conditions

Currently, Boreas Ponds sees the most hand carry boat use for the tract. An official launch has not been built, but the public along with the lessees that still have access to the property often use the area around the dam to hand launch boats, kayaks and canoes for fishing and paddling.

On the Former NL lands tract, an informal hand launch exists near the dam on Henderson Lake. Visitors utilize this location for both day trips and to access the 1 water access campsites on Henderson Lake. The northern end of the lake offers spectacular views of Indian Pass.

It will be beneficial for the protection of the soil and water resources, and aid in recreational access, to site and construct water access points and associated parking areas in such a way that allows for use to be distributed across a broad area. This dispersal of use will also promote through-paddling opportunities where a car can be staged at one hand launch site and a vessel can be dropped and launched from another site.

The Opalescent River north of its confluence with the Hudson River is classified as a wild river.

Desired Conditions for Hand Carry Boat Launch Monitoring

There are several hand-carry boat launches described in the Amendment. These launches and their access trails serve as the connection between motorized access and paddling opportunities. These should be stable, erosion free areas that exhibit minimal wear over time and are free of invasive species, human waste and litter. The tread should remain well developed with minimal expansion. This should also blend well with the natural surroundings to enhance user experience. Like other facilities, the variables for hand carry launches will include monitoring efforts to look for the presence of eroded areas, trash and human waste. Photo points will be a useful tool to help illustrate potential changes over time.

Proposed Management

Objectives

- Provide hand carry boat launch facilities where possible, in areas known to have a demand for water access.
- In the construction of new launches, seek locations that would minimize environmental impacts and ongoing maintenance costs by avoiding wetlands, stream crossings, significant habitats, unstable soils and steep slopes.
- Manage the size and location of launch facilities to prevent user congestion on any one water body or portion of a large water body.
- Provide appropriate sanitary facilities near launch sites.
- Increase public awareness of invasive species threat to unit waters from access sites.

Action Steps

- Monitoring each location for the desired conditions for a sustainable hand carry boat launch will help measure and determine impacts to better inform carrying capacity development and long term planning. Final specifics will be detailed in the Wildland Monitoring Plan but generally:
 - Desired conditions for all hand carry boat launch sites will be one that is free of erosion, occurrences of invasive species, human waste and litter, has minimal expansion from the designed footprint of the built facility and provides an enjoyable user experience.

III. Recreational Resources and Human Uses

- Monitoring could include photo point locations, control measuring points, surveys of visual occurrences of erosion, trash, invasive species, and user surveys.
- Build an accessible hand carry boat launch, also suitable for carted boats, on the side of Boreas Ponds Dam. An accessible trail will be developed from the Parking Area in Wild Forest following the existing road to the intersection with the old lodge access road. At this location will be an intersection where the accessible trail to the Lean-to will go north and the accessible water access trail will go east north of the road and below the roads grade. This trail and water access will be laid out and constructed as an accessible trail to the water's edge. To help preserve the wilderness experience of Boreas Ponds and provide an appropriate transition area a natural ramp of stone or aggregate (up to ADA specs) will continue into the water upstream of the dam to allow for water transitions. The entry into the water will also be hardened with natural materials to allow accessibility at the site. Adjacent to the parking area an accessible privy. This action will be handled in the 2018 Vanderwhacker Mountain UMP Amendment. (*Note – this action is only being mentioned here for reference. Authorization for this hand-carry boat launch is being sought in the Vanderwhacker Mountain UMP amendment.*)
- Build an accessible hand carry boat launch, also suitable for carted boats, on the north side of Henderson Lake Dam. An accessible trail will be developed from a proposed parking area on OSI Easement Lands and go from the Bridge crossing the outlet to the Dam. This trail and water access will be laid out and constructed as an accessible trail to the water's edge. To help preserve the Wilderness Experience of and provide an appropriate transition area a natural ramp of stone or aggregate (up to ADA specs) will continue into the water upstream of the dam to allow for water transitions. The entry into the water will also be hardened with natural materials to maximize accessibility at the site. Adjacent to the parking area an accessible privy. This location of this proposed hand carry boat launch location is on the Henderson Lake Day Use Area map.
- Improve the hand carry boat launch site at the north shore of Chapel Pond and access from the highway to provide accessibility for people with disabilities. Close two designated camping sites at this location and convert into 6-car accessible parking area. Provide directional signage at the Chapel Pond parking area directing users to this launch site.
- A Class III Trail and a hand carry boat launch will be constructed near the northern end of LaBier Flow and will connect the flow to Boreas Road. This will

III. Recreational Resources and Human Uses

allow paddlers to launch on the southern end of the flow, paddle north across the flow and exit to Boreas Road, which will allow for a short carry to Boreas Ponds. The hand-carry launch will be located within the High Peaks Wilderness Area and the portion of the trail adjacent to the Boreas Road will be in the Vanderwhacker Mountain Wild Forest and is dependent on the approval of the trail in the VMWF UMP Amendment.

H. Trail Recreation

Note: This section contains a discussion and inventory of the proposed trail network and the uses (see icons) associated with each trail. The sections following this one discuss individual uses within the context of the recently-classified lands.

Existing Conditions

Past and existing trails and recreational use on all of these tracts was largely based on forest roads and skid trails. Portions of these lands have had public hiking for many years. Over time without continued road maintenance, old roads become difficult to maintain as foot trails, given that drainage is handled in different ways with trails. Due to this, many of the old logging and lessee hunting roads in the area are not viable as a long term and sustainable option for public recreational use. An entirely new trail system needs to be developed to maximize environmental protection, sustainability, and user enjoyment. The examples of the Indian Pass Trail, Calamity Brook Trail and Bradley Pond trails all show the result of using existing roadways. Though much work has been done on portions of these trails, they create an annual maintenance cost and effort that is far greater over time than establishing purpose built trails.



Proposed Management

Objectives

- Provide visitors with a wilderness trail system that offers a range of recreational opportunities in a manner that keeps physical and visual trail and resource impacts to a minimum and complies with APSLMP guidelines.
- Construct and maintain trails in a manner which preserves their classification (see trail classification chart in Appendix D for additional information), and prevents impacts such as sedimentation and erosion.
- Identify need for trail relocations and/or need for new trails.
- Provide a unified system of trail signage and markers on the High Peaks Wilderness Complex. Trail marker colors will describe general direction of trails; Red markers will be used on trails that primarily run east-west, Blue markers will be used on trails that primarily run north-south, and Yellow markers will be used on spur trails, connecting trails, and loop trails.
- Allow the previous owner and lessee trails that are not suitable for public recreational use to naturalize.
- Provide appropriate staffing levels so the Department can build and maintain a purpose built, world class Wilderness Trail System.

Proposed Trails and Uses

Use Icon Legend



Hiking



Cross-Country Skiing



Snowshoeing



Equestrian

1. Lake Andrew Trail (~6.5 miles of new trail)

Primary Uses:



Description:

This Class IV trail is intended to provide access to Lake Andrew and a connection from Newcomb Lake toward the Santanoni Mountains. The popularity of skiing the Newcomb Lake Road along with abundant snowfall in this area will contribute to this being a great extended ski tour. Generally, the trail will head north from the north shore of Newcomb Lake trail, west of Sucker Brook, taking advantage of the bridge crossing over Sucker Brook. The route will head northwesterly toward Santanoni Brook, staying in the upland forest to a large extent, avoiding the large lowland complex to the north as much as possible. After crossing Santanoni Brook, the trail will head to the north before crossing the brook again east of Black Pond. The trail will then traverse easterly, crossing drainages and side-hilling toward Lake Andrew. From Lake Andrew, the trail will head northerly, then head northeast on the lowest flanks of Mount Andrew toward the Forest Preserve boundary at the end of the easement road. From there the trail will connect with the Bradley Pond trail to the east.

2. Black Ermine Connector Trail (~3.5 miles of new trail)

Primary Uses:



Description:

A Class IV trail is conditionally proposed to provide access to Black Pond and the forest south of the Santanoni Mountains. This trail will provide loop opportunities associated with the Lake Andrew Trail, Newcomb Lake Trail, Moose Pond Trail and the possibility of combining with the Bradley Pond, and Northville Placid trail for a large loop backpacking opportunity. Leaving the Lake Andrew Trail east of Black Pond the trail will head west to the south of Black Pond. From there the trail will head northwesterly toward Ermine Brook and the Moose Pond trail.

3. Bradley Pond Trail (2.8 miles of upgrading existing, 3.5 miles of trail and 1.8 miles on road)

Primary Uses:



Description:

The existing Bradley Pond trail is a Class IV trail that goes approximately 7.5 miles from the Upper Works Road to Bradley Pond and north to Duck Hole. The first 1.8 miles of the trail is on an easement road and the vast majority of the old trail, from where it leaves the road to Bradley Pond, is on old skid or tote roads. North of Bradley pond the trail follows a brook and old woods road and is typical of a trail that was sited on an old woods road and isn't appropriate for use as a hiking trail. This proposal calls for several reroutes along the existing trail from the easement road to Bradley Pond, combined with a continuation of trail hardening and drainage. North of Bradley pond, the trail would stay around the 2500'-3000' elevations and head northerly, east of its current location, and contour around the unnamed peaks to the northeast, eventually curling around to the crossing between the Preston Ponds and then meeting with the Preston Ponds trail. In addition to creating a section of sustainable hiking trail, it provides connections and opportunities for loop hikes. It avoids hikers having to negotiate the ford of the Cold River below the Old Duck Hole Dam.

III. Recreational Resources and Human Uses

4. Henderson Lake Accessible Water Access Trail (~.15 miles of new trail)

Primary Uses:



Description:

A Class VI Accessible Front Country Trail which crosses the outlet of Henderson Lake from the OSI Adirondac Core Conservation Easement and heads toward Henderson Lake Dam. It parallels to the south the Henderson Lake Dam Trail while achieving the proper slopes to bring users to the dam and then down to the water's edge north of the dam.

5. Henderson Lake Dam Trail (0.2 miles on existing administrative road)

Primary Uses:



Description:

The Class VI Henderson Lake Dam Trail leaves the Calamity Brook Trail north of the outlet of Henderson Lake and follows the access road to Henderson Lake Dam. This allows users to gain access to Henderson Lake.

6. Calamity Brook Trail (2.2 miles of upgrading existing trails)

Primary Uses:



Description:

The Class V Calamity Trail leaves from the Upper Works Trailhead and follows the access road to Henderson Lake on Easement Lands. After crossing the outlet of Henderson Lake the trail continues easterly toward Flowed Lands. This is the main access trail for users going to the Flowed Lands/ Lake Colden and the Mt. Marcy area from the west. Most of the first 2 miles of trail follow old logging skid roads and reroutes from multiple hurricanes and salvage cuts. The existing trail has many tread and drainage issues. The vast majority of these trail issues can be address by improving drainage and installing rock based turnpiking. There will be a few minor reroutes but generally the existing route will be followed. This route is a popular cross country ski traverse that goes through

Avalanche Lake so the trail will also be maintained and managed as a Class VIII ski trail when it comes to installation of trail features and clearing width.

7. Calamity Cross Over Trail (2.1 miles of existing trails)

Primary Uses:



Secondary Uses:



Description:

The Class III Calamity Crossover Trail provides a connection for those coming from east to west and not wanting to head all the way down toward the Upper Works. For users from the north who are linking an Avalanche Pass- Indian Pass thru-hike it is part of the trail. If the crossing of Indian Brook is moved south (See Indian Pass Trail) in the future abandoning this trail will be considered.

8. Indian Pass Trail (1.6 miles of upgrading existing trails)

Primary Uses:



Description:

The Class IV Indian Pass Trail leaves the Calamity Trail north of the outlet of Henderson Lake and heads north into Indian Pass. The existing trail follows an old woods road with many drainage challenges. Currently the trail corridor exceeds 30 feet in width given its history as a skid trail. Tread work since 2015 has focused on building a raised, hardened trail tread and installing drainage to help create firm and durable hiking surfaces. This trail is a popular ski tour and will be managed to Class VIII Ski Trail criteria when it comes to tread features and clearing.

In 2012 (after Hurricane Irene), the Indian Pass Brook Bridge was replaced where the trail crosses Indian Pass Brook, at the junction with the Calamity Crossover Trail. This bridge is a little over .5 miles above another bridge over the same brook on the Preston Ponds trail. As part of a long-term vision of helping the High Peaks Wilderness become more wild and less dependent of on man's improvements, the Department will seek to eliminate the need for 2 bridges but cutting a reroute on the west side of Indian Pass Brook to connect the trails at the end of either of the current bridge's useful life. If the northern

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crossing is chosen to be the more sustainable crossing, a reroute for the Preston Ponds trail will be developed that goes west toward Preston Ponds.

9. Preston Ponds Trail (3.7 miles of upgrading existing trails)

Primary Uses:



Description:

The Class IV Preston Ponds Trail starts from the Indian Pass Trail where it crosses Indian Pass Brook on a large span bridge. The trail then goes southwest toward Henderson Lake before heading northerly toward Upper Preston Pond. The existing trail follows drainages and while more used than the Bradley Pond trail, has similar issues. Small reroutes, drainage and trail hardening will be needed.

10. Henderson Lake South Trail (1.25 miles of new trail)

Primary Uses:



Description:

A Class IV trail is conditionally proposed to be developed from the Bradley Pond Trail (on a portion of the Easement Road hike) along the south eastern corner of Henderson Lake and continuing to the Upper Works Road in the vicinity of the East River Trailhead. The eastern end of this trail will need to cross the OSI Conservation Easement, which will require approval and planning outside this UMP. This trail will go through mixed forests as it heads north along the inlet of the lake, turning east parallel to the southern bay of the lake and heading toward the Upper Works Road. This trail will provide a great connection to the Bradley Pond Trail and Upper Works Trailhead, reducing the distance hikers would need to walk along the road south of the East River Trailhead to Bradley Pond Trailhead, where the road is narrow with tight turns. It also provides an additional location for hikers to reach the shores of Henderson Lake and access one of the campsites. This will allow centralized parking for those wishing to hike or ski the loop that the new Bradley Pond and Preston Ponds trails make.

11. Mount Adams Trail (1.6 miles of upgrading existing trail)

Primary Uses:



Description:

The Mt. Adams Class IV trail is typical of old fire tower access trails that head straight up the mountain. It leaves the East River Trail at the Observer Cabin and goes directly to the summit. Mt. Adams provides an amazingly unique view of the High Peaks from below, while towering over the historic mining area and looking down at the Hudson River. The footprint of both the Observer Cabin and the Fire Tower are located on OSI Conservation Easement Lands and any plans associated with public access will be addressed in that Easement's Plan. The entire trail will be inventoried and trail improvements will focus on addressing the overall sustainability of the trail and user experience.

12. East River Trail (5 miles of upgrades to existing trails)

Primary Uses:



Description:

This Class IV trail has seen much impact from natural disasters and logging. It provides access to Mt. Adams, Allen Mountain and the longest approach to Flowed Lands, and Hanging Spear Falls. From the East River Trailhead first 0.4 miles are on an OSI Conservation Easement lands and there is a portion of the trail east of Lake Sally that is on private land, with a trail easement. Much of the trail follows old skid roads or stone haul roads. Where the trail is going to remain on old roadways the intent is to allow the vegetation grow from brush into a forest canopy, reducing the width to that of a Class VIII ski trail. North of Upper Twin Brooks, the trail along the Opalescent River was washed away after Hurricane Irene in 2011. A reroute has proved to not be sustainable. East of the crossing of the Opalescent River the trail will be rerouted in the vicinity of Lower Twin Brooks and connect to the old trail upstream of the washed-out sections.

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13. White Lily Connector Trail (~8.2 miles of new trail)

Primary Uses:



Description:

A Class IV Trail will be developed that leaves the East River Trail east of the Opalescent River and proceeds south of Dudley Brook on the lower slopes of the North River Mountains and Cheney Cobble, heading north of White Lily Pond and heading southerly to connect with the Casey Brook Connector Trail. The existing roadway to White Lily Pond poses several long-term sustainability issues, however, portions of it can be utilized where it crosses the wetland complex east of the Boreas Ponds. North of Boreas Ponds, a new trail will traverse up the southern slopes of Moose Mountain and then head east of White Lily Pond, avoiding the wetland complex along the outlet. This trail will provide for east west connections from the Boreas Ponds area to the Western High Peaks and allow for large multiday loops in the High Peaks without the need to go over Mt. Marcy.

14. Casey Brook Connector Trail (5 miles of new trail)

Primary Uses:



Description:

A Class V trail will be developed from the Boreas Ponds Dam, east of the Boreas Ponds and to the Elk Lake-Marcy Trail. This trail will serve as the main route into the High Peaks Wilderness from the Boreas Ponds Dam area. Users can head west via White Lily Brook, east to the Dix Range or north to Panther Gorge. The existing roadway east of the Boreas Ponds poses several long-term sustainability issues as a whole, but portions of the corridor could be converted into a trail. Once on the Casey Brook tract the route will swing to the east away from Marcy Swamp and cross Casey Brook further to the east before meeting up with the Elk Lake-Marcy Trail.

15. Boreas Ponds Trail ([~4 miles of new trail proposed in VMWF UMP] and ~3.5 miles of new trail)

Primary Uses:



Description:

A Class V trail will be developed from the Andrew Brook Parking Area on the Blue Ridge road, crossing through Vanderwhacker Mountain Wild Forest to the the Fly Pond Parking Area and then going north entering the High Peaks Wilderness, going over the low shoulder of Boreas Mountain and to the north of LeClair Brook, and then head northerly toward Boreas Ponds converging with the Casey Brook Connector Trail. This trail will also be designated as a Class VIII Ski trail for clearing widths. Combined with the Andrew Brook Trail, this route will serve as access from the Blue Ridge Road to Boreas Ponds allowing hikers and skiers to avoid the motor vehicles on the Gulf Brook Road.

16. Boreas Mountain Trail (2.5 miles of new trail)

Primary Uses:



Secondary Uses:



Description:

A Class IV trail is conditionally proposed to be developed from the Boreas Ponds Trail to the Summit of Boreas Mountain. This trail will be built to sustainable standards.

17. RNT Loop Trail (4.2 miles of new trail)

Primary Uses:



Secondary Uses:



Description:

A Class IV trail is conditionally proposed to be developed, starting at the Boreas Mountain Summit, that generally follows the Boreas Ridge north and then descends a shoulder to a prominent point before continuing its descent west and

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meeting up with the Casey Brook Connector Trail. This trail will allow for a loop hike or access to Boreas Mountain from the upper Boreas Ponds area.

18. Boreas Ponds Dam Trail (0.1 miles of trail)

Primary Uses:



Secondary Uses:



Description:

This Class VI Front Country trail will be sited on the Administrative road between the parking lot in the Vanderwhacker Mountain Wild Forest and the Boreas Ponds Dam. The first half of this trail will be surfaced as an accessible trail to the junction with the Boreas Ponds Water Access Trail. (*Note – this action is only being mentioned here for reference. Authorization for this trail is being sought in the Vanderwhacker Mountain UMP amendment.*)

19. Boreas Ponds Accessible Water Access Trail (0.15 miles of new trail)

Primary Uses:



Description:

Construct a Class VI Accessible Front Country Trail to Boreas Ponds, along with an accessible hand carry boat launch to the west of the Boreas Ponds Dam. The accessible route from the Boreas Ponds Dam Access Trail will be constructed to connect the hand carry boat launch to the Boreas Ponds Dam Trail and Parking Area. (*Note – this action is only being mentioned here for reference. Authorization for this trail is being sought in the Vanderwhacker Mountain UMP amendment.*)

20. MC Lean-to Accessible Trail (0.3 miles of new trail)

Primary Uses:



Description:

A Class VI Accessible Front Country Trail will leave the Boreas Ponds Water Access Trail and traverse up an old access road and across the contours to bring users up to the MC Lean-to.

21. Elk Lake-Marcy Trail (1.7 miles of upgrading existing trail)

Primary Uses:



Description:

A Class V trail that crosses the Elk Lake and AMR Easements as well as Forest Preserve. This serves as the major access point to Panther Gorge.

22. Pinnacle South Trail (1.75 miles of new trail)

Primary Uses:



Secondary Uses:



Description:

The existing Class IV trail up Pinnacle from the Elk Lake-Marcy Trail will be relocated to leave the Elk-Lake Marcy Trail further to the south, near the intersection with the Casey Brook Connector Trail. A new Class IV trail will be built going up the southern and eastern slopes of the mountain, around Elk Lake Conservation Easement lands. This route will have a more sustainable trail tread to handle increased traffic from thru-hikers or hikers accessing Blake and Colvin Mountains.

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23. LeClaire Hill Trail (1.5 miles of new trail)

Primary Uses:



Secondary Uses:



Description:

A Class IV trail is conditionally proposed to be developed across the Vanderhacker Mountain Wild Forest and High Peaks Wilderness to the lookout on LeClaire Hill. This short hike will provide views to the south of the Hoffman Notch Wilderness Area and over the drainage of The Branch River. The trail will start at the Niagara Brook Parking Area in the Vanderhacker Mountain Wild Forest, head north and then traverse east, crossing Niagara Brook before climbing the northern portion of the LeClaire Hill.

24. South Fork of Boquet River Accessible Trail (0.1 miles of new trail)

Primary Uses:



Description:

The Class VI South Fork of Boquet River Accessible Trail will be built to allow users to travel from the proposed parking spots to an accessible campsite near the South Fork of the Boquet River.

25. Chapel Pond Connector Trail (1.2 miles of new trail)

Primary Uses:



Description:

The class V Chapel Pond Connector Trail will connect the Round Pond Trailhead and southern shoreline of Chapel Pond. This trail will meander between the foot of the mountains and Route 73 as it connects the Round Pond Trailhead to the new parking areas proposed for access to the Chapel Pond Slabs and Chapel Pond and future access to the Ridge Trail in the Giant Mountain Wilderness. Thru hikers coming from the Giant Mountain will have a safe trail to travel south toward the access to Round Pond and provide Rock Climbers to safely park and gain access to lesser known rock climbing sites in the valley.

26. Trailless Peaks Access Routes

The 1999 High Peak Wilderness Complex UMP and 2004 Dix Mountain Wilderness Area UMP both discussed the popular 46er trailless peaks. DEC and the Adirondack 46ers reached an agreement on managing a single access path to each of the peaks.

Usage across all the peaks has increased and there are portions of routes up the trailless mountains that are becoming heavily impacted. Each of the peaks has several sections where trail expansion or reroutes has caused natural resource damage. Many times the reroutes are done in the same manner as the original section of trail, mostly up the fall-line.

Historically these routes involved route finding and pushing through a forest that didn't have a defined path which is quite a contrast to the present when most of these paths are well worn, easy to follow in the summer and see major impacts with exposed bedrock and mud holes.

DEC will work to identify sustainable routes and start to develop and construct official Class III and Class IV trails up the 21 traditional trailless peaks. Each reroute will focus on resource protection and user experience, trying to address use patterns, but not following historical routes at the detriment of resource protection.

A written Trail Work Plan will be developed for each of the routes to ensure that work completed to address immediate issues is consistent for the overall plan and routing vision. Over the short-term, DEC will work with the Adirondack 46ers to provide marking and signage that will address resource protection and human safety. As routes are changed and trail work is conducted, DEC will provide that information to the public.

27. Cascade Mountain Trail Reroute (~5 miles of new trail)

Primary Uses:



Description:

The Class V Cascade Mountain Trail is proposed to be relocated. The trailhead for this trail will be in the Mt. Van Hoevenberg Intensive Use Complex and is proposed in the 2018 draft UMP for that unit.

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As usage in the greater High Peaks area has surged in the last decade, it has caused a number of negative impacts to the area's natural resources, primarily created via trail and user-related issues (i.e. trail expansion and erosion, human waste and litter and increases in Search and Rescue efforts). Along with negative impacts in the wilderness, there are impacts along interfaces with public roads and private properties. Human safety along Route 73 has become a concern, as parking lot controls are not stopping users from parking on the side of the highways. With the additional parking comes congestion along the roadways and trailhead facilities are not able to address human waste and trash disposal.

Rerouting the trail up Cascade Mountain will help to address natural resource impacts, improve the wilderness experience and public safety and increase opportunities for education and outreach to users of this route.

The proposed Class V Cascade Mountain Trail will be longer than the current route, but will be built in a manner that ascends the mountain on lower grades. Using modern contour trail layout and reduced maintenance features, we can provide a trail that will resist natural resource impacts.

The Intensive Use Area will provide DEC and partners a chance to provide more education and outreach of users, facilities to address waste and opportunities to match up users with a Wilderness Opportunity that better matches their interests. The new Mt. VanHoevenberg East Trail will help provide a shorter wilderness experience with world class views of the High Peaks. This will be managed as part of the trail system of the High Peaks Wilderness Complex.

28. Mt. Van Hoevenberg East Trail (2.3 miles of new trail)

Primary Uses:



Description:

The Class V Mt VanHoevenberg Trail is proposed to be built, bringing hikers to the summit of Mt VanHoevenberg from the northern side. The trailhead for this trail will be in the Mt. VanHoevenberg Intensive Use Area and is proposed in the 2018 draft UMP for that unit and will be managed as part of the trail system of the High Peaks Wilderness Complex.

Rerouting the trail up Mt. VanHoevenberg is part of a combined effort with the Cascade Mountain Trail reroute to help address natural resource impacts and improve Wilderness Experience and public safety. This trail will start at the same location as the Cascade Mountain Trail and provide a shorter trip to the top of a mountain with world class views of the High Peaks. When combined with education and outreach efforts, the opportunities on the Mt. Van Hoevenberg East Trail will allow new wilderness users to have an enjoyable experience. This will be managed as part of the trail system of the High Peaks Wilderness Complex.

The summit of Mt. VanHoevenberg will need work to address natural resource impacts to the summit vegetation while avoiding impacts to the wilderness experience of users. This work will be done prior to the trail development.

29. 1932 Trail (~.75 miles of upgraded trail)

Primary Uses:



Description:

The Class IV 1932 Trail starts by the 1980 Start for the Bobsled and follows an old road up to the start of the 1932 Bobsled run on the Mt. VanHoevenberg Intensive Use Area and then crosses into the High Peaks Wilderness Area up to the summit. This route will be upgraded to provide a looping opportunity for users that want to use the Mt. VanHoevenberg East Trail or wish to hike from the bobsled tracks. This will be managed as part of the trail system of the High Peaks Wilderness Complex.

30. Ampersand Mountain Trail Reroute (3.2 miles of upgrades and new trail)

Primary Uses:



Secondary Uses:



Description:

The Class V Ampersand Mountain Trail has moved several times over its history and past trail building efforts have worked to address impacts on the current route. Combined with the parking lot proposal in this UMP Amendment, the lower section of the trail will be relocated to connect the new parking area with

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the summit ridge portions of the trail.

31. Wright Peak Ski Trail (Trail reroute and new trail)

Primary Use:



Description:

A Class VIII Ski Trail is conditionally proposed that utilizes portions of the existing and reroutes to the Wright Peak Ski Trail, that would reroute the lower section of the trail to connect with the Whale's Tale Ski Trail.

32. Klondike Notch Trail (5.2 miles of trail upgrades and reroute)

Primary Uses:



Description:

The Class IV Klondike Notch Trail will be upgraded along most of its route with a reroute on the southern end, within the Johns Brook Valley where it meets the Phelps Trail. This trail will be dual-designated to be a Class IV and Class VIII Ski Trail. Given the grade of the trail, its northeasterly aspect and snow pack it will serve as a ski trail access into the Johns Brook Valley. The reroute on the southerly end will focus on removing the trail from the bottom of the drainage and siting it on the north and eastern aspects of the slopes. This will improve the trails winter and summer sustainability.

33. Trailless Sections in the High Peaks Wilderness Complex

Description:

This UMP Amendment lays out a conceptual opportunity for a purpose built, sustainable trail system that facilitates access and recreational opportunities across these lands. To preserve the opportunity for unconfined wilderness experiences, there are 3 large trailless sections proposed. Each of these areas will share an absence of marked trails or developed facilities. Existing Class 2

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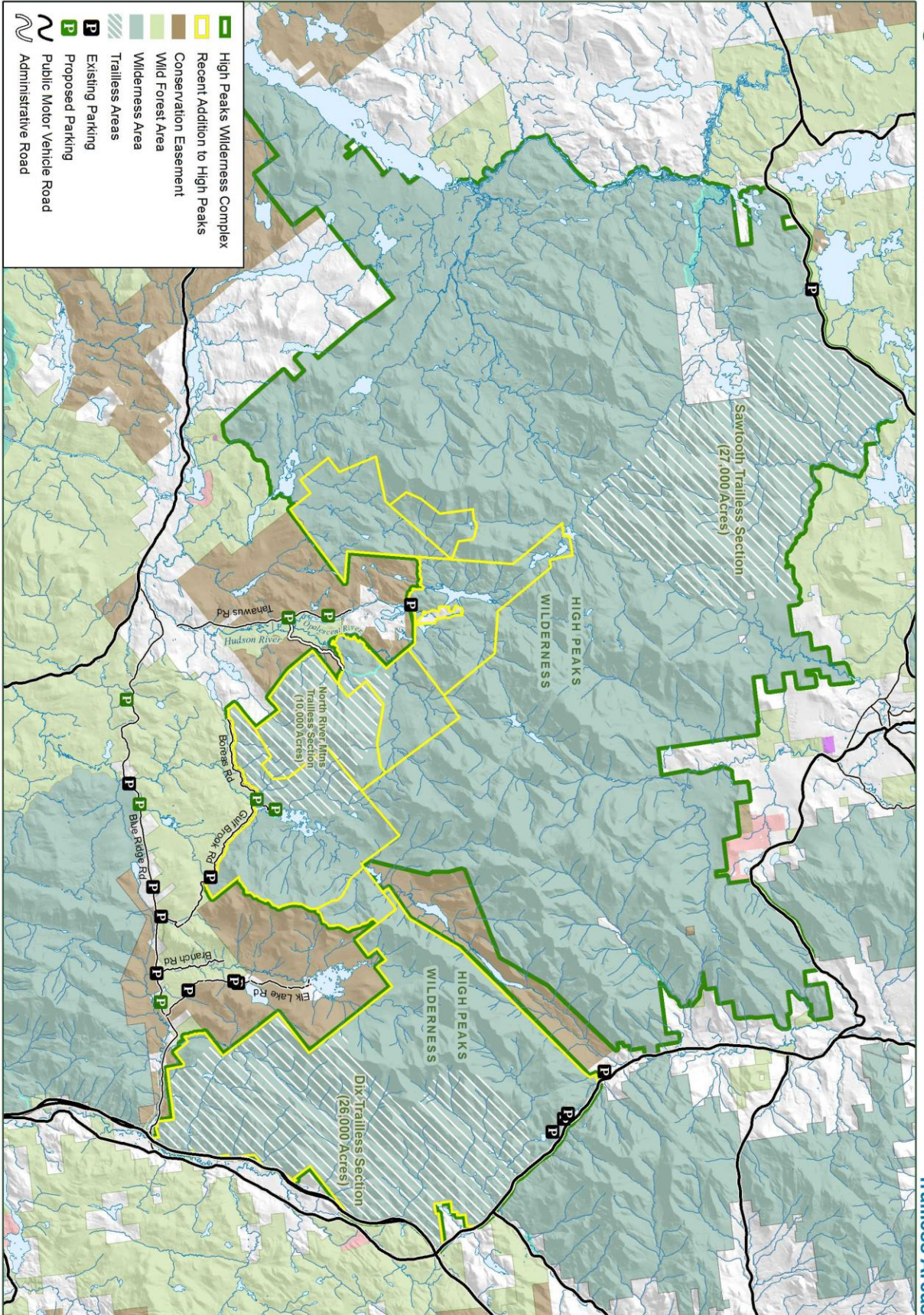
access paths will remain unmarked and monitored occasionally for natural resource impacts. Part of the Wildland Monitoring Plan will focus on the Trailless Sections to measure any usage impacts. The three areas include:

- Dix Trailless Section (~26,000 acres), including lands east of the Dix Mountain Range to the State land boundary, adjacent to the Adirondack Northway and lands south, almost to the Blue Ridge Road.
- North River Mountains Trailless Section (~10,000 acres), including lands west of Boreas Ponds to the Wilderness Boundary and south of Cheney Cobble.
- Sawtooth Mountains Trailless Section (~27,000 acres), including lands between and north of the Northville-Placid Trail and Ward Brook Trails extending north to the wilderness boundary.

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High Peaks Wilderness

Trailless Areas



I. Horse Trails

Existing Conditions

Under the 2016 Boreas Ponds Interim Access Plan, horses are allowed on the Boreas Ponds Tract unless otherwise signed against it. The Blue Ridge, Fly Pond, Andrew Brook, Notch, and Upper Elk Lake parking areas currently offer parking for horse trailers, and the Boreas and Gulf Brook roads offer enjoyable equestrian riding, but there are not purpose built trails in place.

The Vanderhacker Mountain Wild Forest UMP Amendment provides for equestrian opportunities that connect to the Boreas Ponds Primitive area.

Desired Conditions for Equestrian Facilities Monitoring

Properly designed and constructed equestrian trails will maintain their firm and stable surface for their intended use, with minimal maintenance. A sustainable trail ensures environmental protection, user safety, function and enjoyment. Building a well-designed, sustainable trail that blends well with its natural surroundings enhances the user's experience and decreases user conflict. Like other facilities, the variables for equestrian trails will include monitoring efforts to collect data on the presence of eroded areas, the expansion of the tread through vegetation loss, and the occurrence of trash and human waste. It will also be important to monitor for the presence of invasive species on equestrian facilities. Photo points will be a useful tool to help illustrate potential changes over time.

Proposed Management

Objectives

- Provide recreational opportunities for equestrian trail riders in suitable locations.
- Maintain trails to appropriate usable standards, while minimizing environmental impacts.
- Provide information about uses allowed on, and appropriate etiquette for, multiple-use trails.

Actions

- Monitoring for the desired conditions of equestrian Trails will help measure and determine impacts to better inform carrying capacity development and long term

III. Recreational Resources and Human Uses

planning. Final specifics will be detailed in the Wildland Monitoring Plan but generally:

- Desired conditions for equestrian trails will be ones that are free of invasive species, has minimal expansion from the designed footprint of the built facility, doesn't negatively impact trailside vegetation, is free of occurrences of human waste or litter and provides an enjoyable user experience.
- Monitoring could include photo point locations, control measuring points, survey of invasive species, surveys of visual occurrences of trash and user surveys.
- Allow equestrian use on Boreas Ponds Dam Trail to the Boreas Ponds Dam. (*Note – this action is only being mentioned here for reference. Authorization for this use in this location is being sought in the Vanderwhacker Mountain UMP amendment.*)
- Provide equestrian mounting platform in the vicinity of the Boreas Ponds Dam. (*Note – this action is only being mentioned here for reference. Authorization for this use in this location is being sought in the Vanderwhacker Mountain UMP amendment.*)
- Install signage where equestrian trail riding is not allowed.
- Identify locations for equestrians where water is available for horses and install signage at these locations. Hitching posts or high lines may also be provided adjacent to these locations, with proper separation distance from the water.
- Promulgate a regulation to prevent horses from entering wetlands and waterbodies, except through fords on designated trails.

J. Hiking and Snowshoeing Trails

Existing Conditions

Hiking and snowshoeing are allowed throughout all the tracts. Although hiking and snowshoeing will continue to be allowed at-large, this amendment proposes 28 trail opportunities for hiking and snowshoeing to be constructed or upgraded. These will be purpose-built trails focusing on sustainability and user enjoyment.

Desired Conditions for Hiking and Snowshoe Trail Monitoring

Properly designed and constructed hiking trails will maintain their firm and stable surface for their intended use, and with minimal maintenance. A sustainable trail ensures environmental protection, user safety, function and enjoyment. Building a well-designed, sustainable trail that blends well with its natural surroundings enhances the user's experience and decreases user conflict. Like other facilities, the variables for hiking trails will include monitoring efforts to collect data on the presence of eroded areas, the expansion of the tread through vegetation loss, and the occurrence of trash and human waste. Photo points will be a useful tool to help illustrate potential changes over time.

Proposed Management

Objectives

- Design and locate all trails in accordance with DEC guidance and best management practices that minimize environmental impacts.
- Add and enhance hiking and snowshoe trail opportunities as appropriate throughout the area.
- Establish photo point monitoring locations and systematic measuring methodologies to help monitor trail impacts on all newly constructed, rerouted and rehabilitated trails. This data will help inform the decision-making process on future trail decisions.
- Improve the overall wilderness experience and user enjoyment of the trail system within the High Peak Wilderness Complex. This includes a trail system which is not dominated by visual trail structures that stand out in contrast to the surrounding landscape.

Actions

- DEC Trail Crews to build and maintain the trail system, working with professional contract trail crews, volunteer trail crews and other assets to have a world class Wilderness Trail System.
- Monitoring for the desired conditions of Hiking Trails will help measure and determine impacts to better inform carrying capacity development and long term

III. Recreational Resources and Human Uses

planning. Final specifics will be detailed in the Wildland Monitoring Plan but generally:

- Desired conditions for Hiking Trails will be ones that have minimal erosion and expansion from the designed footprint of the built facility, doesn't negatively impact trailside vegetation, is free of occurrences of human waste or litter and provides an enjoyable user experience.
- Monitoring could include photo point locations, control measuring points, occurrences of erosion and tread expansion, trash, and user surveys.
- Evaluate, improve and/or reroute portions of the existing Class V Trails:
 - Calamity Brook Trail;
 - Elk Lake Marcy Trail;
 - Henderson Lake Dam Trail;
 - Ampersand Mountain Trail (conditional action).
- Evaluate, improve and/or re-route portions of the existing Class IV Trails:
 - Preston Ponds Trail;
 - Indian Pass Trail;
 - Mt Adams Trail;
 - East River Trail;
 - 1932 Trail [up Mt. VanHoevenberg from the north] (from the 1980 Start Track past the 1932 Start)
 - This will include the portions of the trail that will existing on the Mt.VanHoevenberg Intensive Use Area.
 - Klondike Notch Trail.
- Evaluate, improve and/or re-route portions of the Class IV Bradley Pond Trail from the Easement Road to the lean-to. Abandon the trail north of the lean-to.
- Evaluate, maintain, improve, reroute and/or abandon trails identified in the 1999 High Peaks Wilderness Complex UMP and the 2004 Dix Mountain Wilderness Area UMP, as needed, to help shift the trail system to one that is purpose built and sustainable. All work should focus on reducing maintenance efforts, maximizing the lifespan of trail facilities and enhancing the wilderness experience.
- Construct and maintain a Class IV trail from Bradley Pond north toward the narrows between Preston Ponds.
- Evaluate, improve and/or reroute portions of the existing Class III Calamity Crossover Trail.
- Construct and maintain the following ADA-compliant Class VI Accessible Front County Trails:
 - Henderson Lake Accessible Water Access Trail;
 - MC Lean-to Access Trail;

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- South Fork of Boquet River Trail.
- Construct and maintain the following Class V Trails:
 - Boreas Ponds Trail;
 - Casey Brook Connector Trail;
 - Chapel Pond Connector Trail;
 - Mt. VanHoevenberg East Trail
 - This will include the portions of the trail that will exist on the Mt. VanHoevenberg Intensive Use Area;
 - Cascade Mountain Trail
 - This will include the portions of the trail that will existing on the Mt. VanHoevenberg Intensive Use Area;
- Construct and maintain the following Class IV Trails:
 - Lake Andrew Trail;
 - White Lily Connector Trail;
 - Boreas Mountain trail (conditional action);
 - Black Ermine Connector Trail (conditional action);
 - LeClair Hill Trail (conditional action);
 - RNT Loop Trail (conditional action);
 - Henderson Lake South (conditional action).
- Evaluate and compare rehabilitation of the Class IV Pinnacle trail from Elk Lake Marcy trail vs the construction of a new trail from the Elk Lake Marcy Trail near the height of land boundary with Elk Lake Conservation Easement.
- Evaluate and develop Trail Work Plans for routes up the trail-less peaks. Each of these routes is envisioned to be a Class III Primitive Trail unless the evaluation and work planning process indicated the trail is better served with Class IV designation. The following mountains are part of the list:
 - Gray Peak;
 - Iroquois Peak;
 - Santanoni Peak;
 - Mt. Redfield;
 - Panther Peak;
 - Table Top Mt.;
 - Macomb Mt.;
 - Hough Peak;
 - Seward Mt.;
 - Mt. Marshall;
 - Allen Mt.;
 - Street Mt.;
 - Mt. Donaldson;

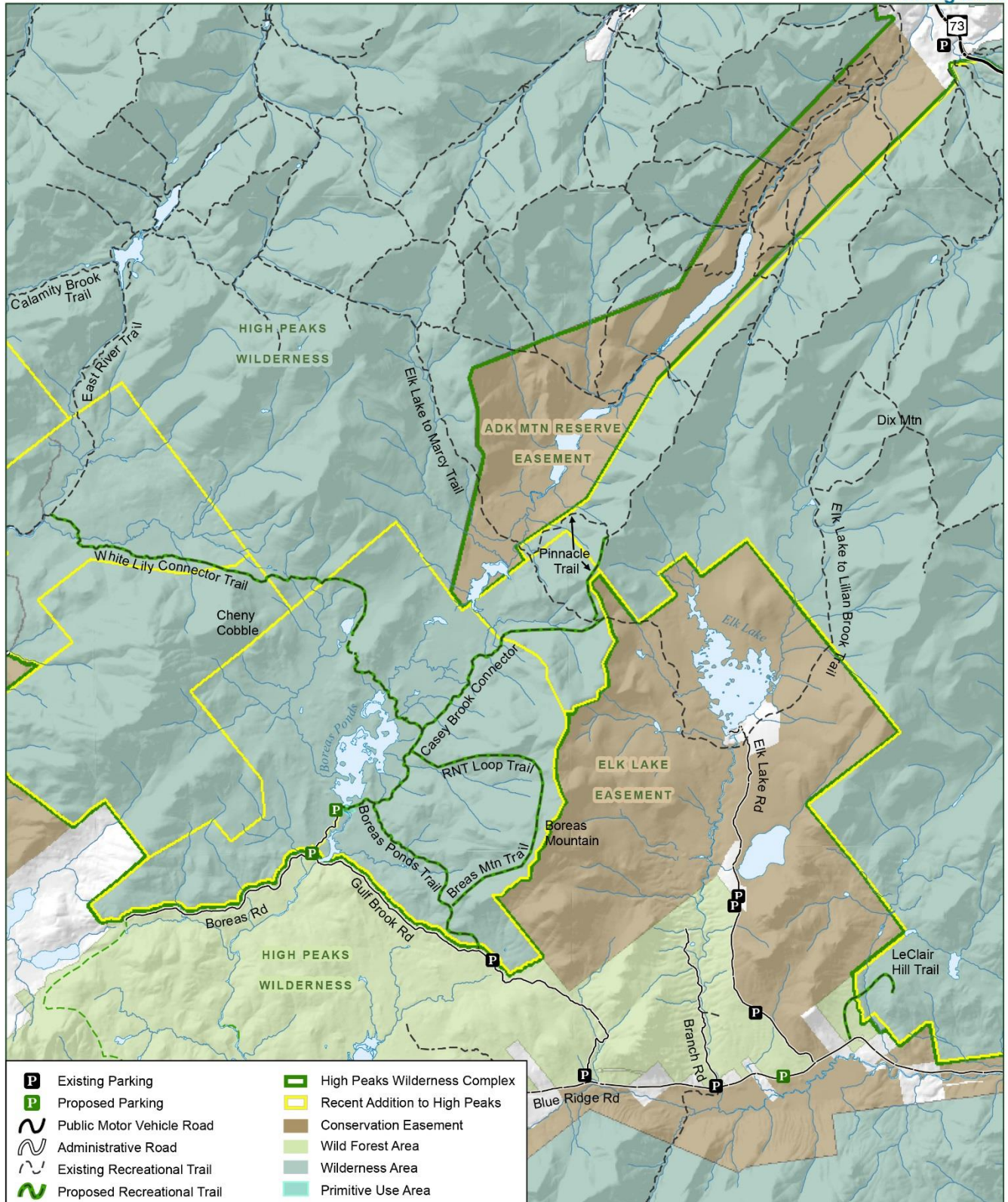
III. Recreational Resources and Human Uses

- Seymour Mt.;
- South Dix;
- Mt. Emmons;
- Grace Peak;
- MacNaughton Mt.;
- Cliff Mt.;
- Nye Mt.;
- Couchsachraga Peak

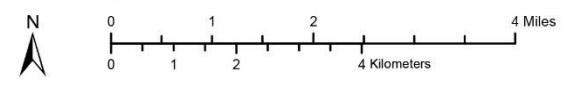
III. Recreational Resources and Human Uses

High Peaks Wilderness

Hiking East



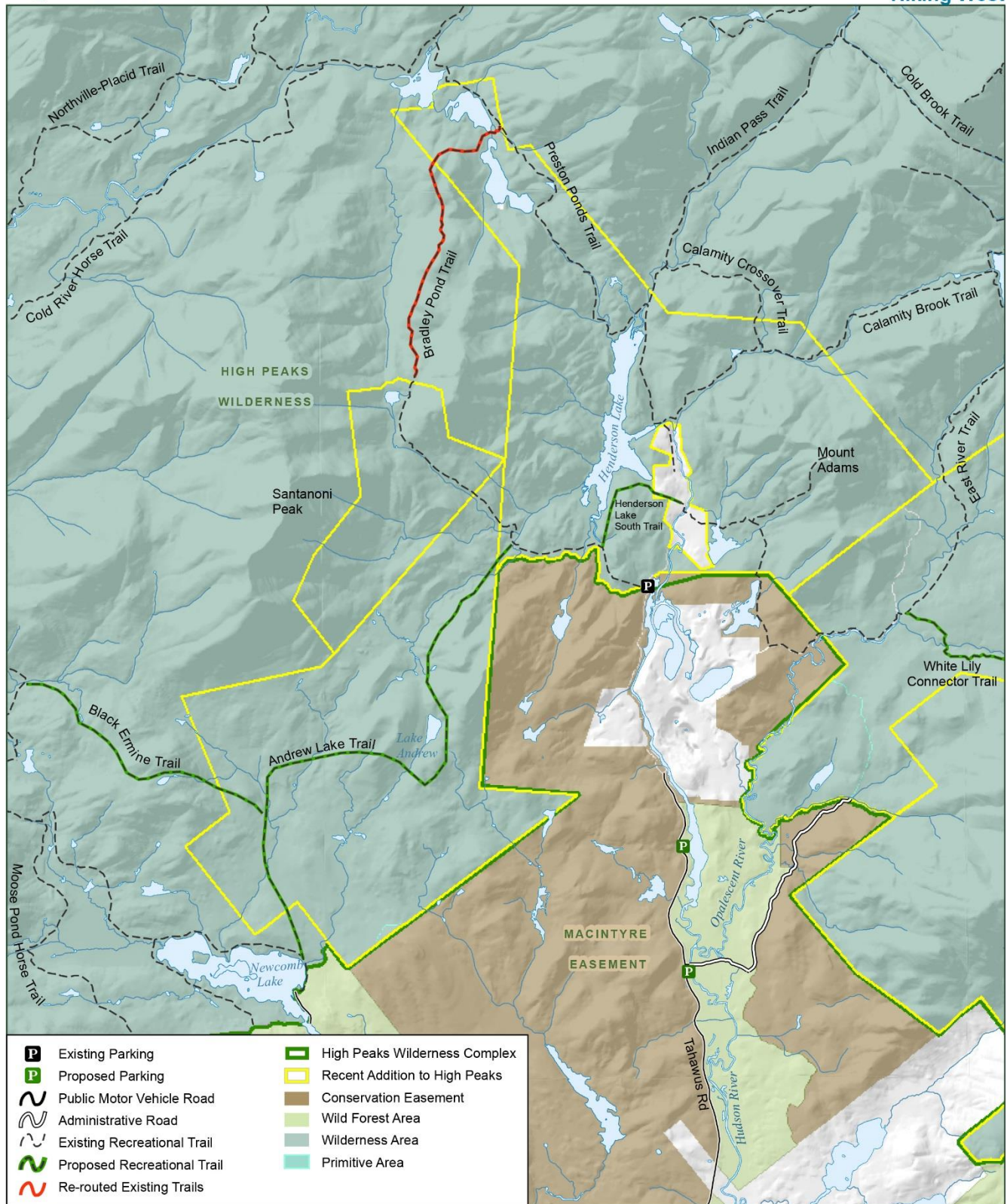
Existing Parking	High Peaks Wilderness Complex
Proposed Parking	Recent Addition to High Peaks
Public Motor Vehicle Road	Conservation Easement
Administrative Road	Wild Forest Area
Existing Recreational Trail	Wilderness Area
Proposed Recreational Trail	Primitive Use Area



III. Recreational Resources and Human Uses

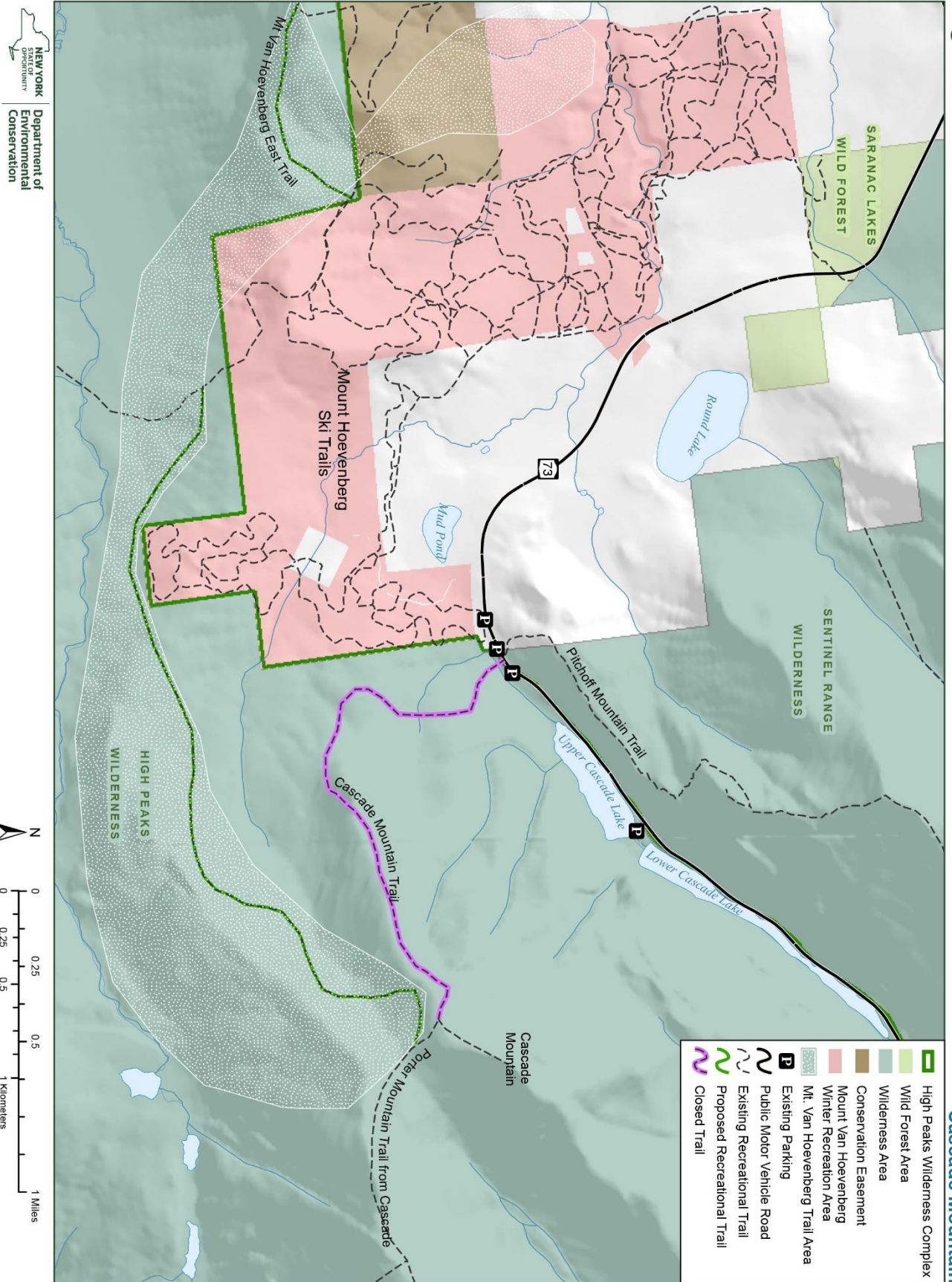
High Peaks Wilderness

Hiking West



III. Recreational Resources and Human Uses

High Peaks Wilderness

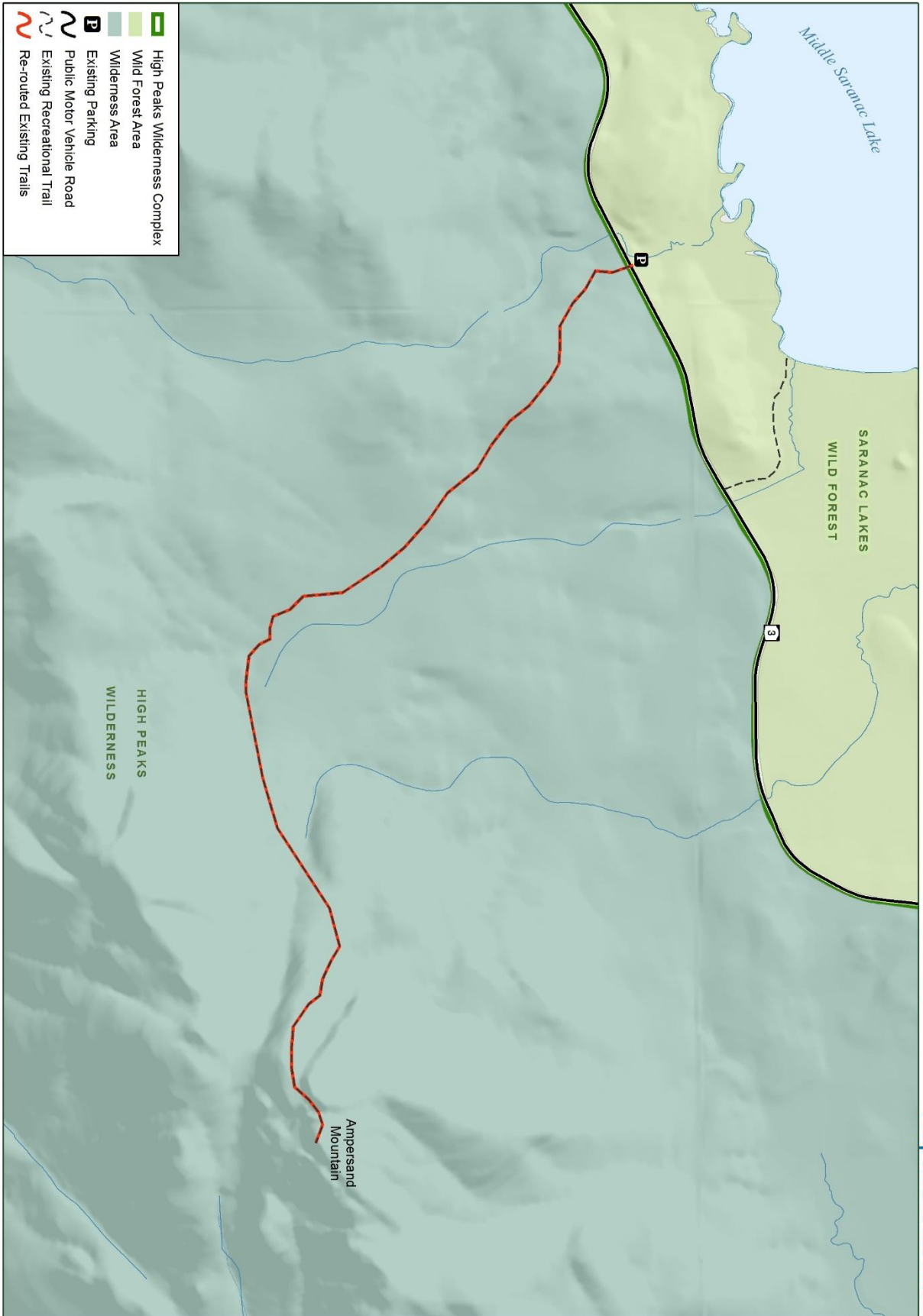


Cascade Mountain

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High Peaks Wilderness

Ampersand Mountain



K. Skiing Trails

Existing Conditions

Skiing and Snowshoeing are allowed at-large throughout the newly acquired tracts as well as on preexisting trails that the public has used since before the tracts became part of the High Peaks Wilderness Complex. Visitors choose to follow old roads, trails and bushwhack on the tracts. Although skiing and snowshoeing will continue to be allowed at-large this UMP Amendment proposes dual-designation of 16 trails to be included as ski trails. In addition to dual-designation, this UMP Amendment identifies trails that will be managed with skiing in mind, though the cleared width will remain consistent with the trail classification. See Appendix C for the Trail Classification Chart.

Desired Conditions for Ski Trail Monitoring

Desirable conditions are typically easily achievable for cross country ski trails, as long as the weather cooperates. With adequate snow pack, conditions rarely become deteriorated, which shifts the typical tread concerns like erosion to other concerns like corridor expanding through a loss of vegetation. Desirable cross country ski trails maintain safe lines of sight and corridors that are free from vegetative obstructions, along several other features. Cross Country skiing is often a secondary use on hiking trails, so when this is the case, the monitoring variables for the trails in which they use will be the primary guide for monitoring variables. When the trails are for skiing only, the monitoring program will assess, in the non-winter months, corridor expansion through vegetation loss, and erosion. Photo points will be developed along routes to continually monitor impacts and to ensure corridor expansion through vegetation loss is not occurring.

Proposed Management

Objectives

- Design and locate all trails in accordance with DEC guidance and best management practices that minimize environmental impacts.
- On trails with dual-designation, design trail features with skier safety and enjoyment in mind.
- Establish photo point monitoring locations and systematic measuring methodologies to help monitor trail impacts on all newly constructed, rerouted

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and rehabilitated trails. This data will help inform the decision making process on future trail decisions.

Actions

- Monitoring for the desired conditions of cross country ski trails will help measure and determine impacts to better inform carrying capacity development and long term planning. Final specifics will be detailed in the Wildland Monitoring Plan but generally:
 - Desired conditions for ski trails will be ones that have minimal expansion from the designed footprint of the built facility, doesn't negatively impact trailside vegetation and provides an enjoyable user experience.
 - Monitoring could include photo point locations, control measuring points, occurrences corridor expansion, and visible erosion in non-winter months.
- The following trails will have dual-designation and be constructed and/or maintained with tread and drainage development standards of their first classification (Class III, IV or V) and the clearing width and height of a Class VIII ski trail. Except when impractical any bridges will be built as ski trail bridges:
 - Lake Andrew Trail;
 - Black Ermine Connector (conditional action);
 - Bradley Pond Trail;
 - Calamity Brook Trail;
 - Preston Pond Trail;
 - Indian Pass Trail;
 - Henderson Lake South Trail (conditional action);
 - Henderson Lake Dam Trail;
 - East River Trail;
 - Dudley Brook Connector Trail;
 - White Lily Trail;
 - Casey Brook Connector Trail;
 - Boreas Ponds Trail;
 - Elk Lake-Marcy Trail;
 - Chapel Pond Connector Trail;
 - Klondike Notch Trail.
- Conditionally propose changes and reroutes to the Wright Peak Ski Trail, that would reroute the lower section of the trail to connect with the Whale's Tale Ski Trail. The vision of this proposal is to provide a unique and improved skiing opportunity in the High Peaks Wilderness. The Department will work with the Agency in developing guidelines for backcountry ski trails that define the nature

of backcountry skiing opportunities. Once SLMP compliant Ski Trail Guidance has been developed the DEC will develop this trail.

- The following trails will be constructed and/or maintained to their class with consideration in layout given for skiing on slopes and curves:
 - Calamity Crossover Trail,
 - Elk Lake to Lillian Brook Trail
 - Round Pond to the base of the Dix Slides.

L. Rock, Ice and Mixed Climbing

Background

Climbing, like hiking and skiing, has been long recognized as a legitimate recreational use of public lands. Like hiking and skiing, climbing in the Adirondacks traces its roots to the 1800's, with early technical ascents on Colden in 1850, and on Gothics in 1896. Increased interest and information on rock climbing can provide new and positive recreational opportunities but could potentially have some negative effects if not handled properly. Currently, informal trails lead to the climbing locations and as popularity increases and climbing routes are published through different media outlets, informal trails may increase in number and impact.

The Adirondack region remains one of few areas in the country where the placement of fixed climbing anchors (bolts) is not overly common, but is an increasing practice and a growing concern. The reputation of the region is one of traditional climbing, where bolts and pitons are the exception rather than the rule. The use of fixed anchors, particularly fixed expansion bolts, placed in holes drilled into the rock has been an issue of controversy in public land management (Access Fund, 2001). Fixed anchors have long been used by climbers as a method of protection where use of traditional removable protection (camming devices, chocks and nuts) is not possible. Fixed anchors, including bolts and slings placed around trees have



South face of Gothics. Photo by Will Roth

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also been used for rappel anchors. This practice can provide some level of protection to the natural resource by reducing damage to trees from girdling, caused when rappel ropes wrapped around trees are pulled down at the end of a climbing session. When placed indiscriminately, bolts and related fixed anchors can mar cliff faces and result in visibility impacts from the ground. The use of fixed anchors, when properly managed, can be an important management tool to protect the natural resource. Use of fixed anchors for protection on a climb that might not be possible without the placement of fixed or artificial anchors has engendered much more controversy both within and outside of the climbing community. The use of fixed anchors for this purpose in some areas has fundamentally altered the sport of climbing, resulting in a "climbing gym" atmosphere where numerous bolts are used to create a route where none previously existed. Like other areas of the Forest Preserve, fixed anchors have been documented in the Boreas Ponds Tract on Ragged Mountain. At least five routes are advertised on various climbing websites and publications. Popular climbing locations within the Boreas Ponds Tract and the Vanderwhacker Mountain Wild Forest in general must be further inventoried and monitored.

At this point in time the placement of bolts or other fixed anchors which involve drilling or defacement of the rock is a violation of Department regulations (6 NYCRR §190.8(g) -- "No person shall deface, remove, destroy, or otherwise injure in any manner whatsoever any . . . rock, fossil or mineral . . . excepting under permit from the Commissioner of Environmental Conservation and the Assistant Commissioner for State Museum and State Science Service . . ."). The APSLMP does not discuss the appropriateness of fixed anchors in the Adirondack Forest Preserve.

Existing Conditions

Rock, Ice and Mixed climbing are allowed throughout all the tracts, and with the purchase of the Boreas Ponds Tract in 2016 Ragged Mountain saw an almost immediate use by climbers and has since seen steady use by the rock climbing community.

Because the Boreas Ponds Tract is relatively new to public use it is difficult to say how popular the climbing routes here will be. Without sufficient data on use and the environmental effects of that use, proposing specific management actions that manage climbing in the area is difficult. The climbing around Chapel Pond and other places within the High Peaks Wilderness has been popular for decades, though DEC has minimal specific data to help guide management. Data regarding the number of users and the environmental impacts of their use needs to be collected and evaluated over time in order to make sound management decisions. This UMP Amendment proposes

actions to help mitigate natural resource impacts, improve the wilderness experience of climbers and other users and increase the education and outreach in areas where climbing is popular.

Desired Conditions for Climbing Monitoring

Climbing offers a slightly different set of variables for desirable conditions. The access routes are similar to hiking trails in that they will maintain their firm and stable surface for their intended use, and with minimal maintenance. A sustainable trail ensures environmental protection, user safety, function and enjoyment. The top and bottom of climbing routes are often located on steep slopes of various types that can be prone to erosion. Desirable conditions for routes are a firm and stable area to prepare for an ascent, a face that accepts removable anchors, and a top that is either firm and stable or that cannot easily be topped out or access for the use of slings. Somewhat similar to other facilities, the variables for climbing will include monitoring efforts to collect data on access trails for the presence of eroded areas, the expansion of the tread through vegetation loss, and the occurrence of trash and human waste. Variables to consider for the routes are firm and stable soils at the bottom and top of climbing routes, vegetation loss through both erosion and the use of slings to trees and the occurrence of fixed anchors. Photo points will be a useful tool to help illustrate potential changes over time.

Proposed Management

Objectives

- Manage visitor use to keep impacts on the resource and experiences of all visitors at an acceptable level consistent with the concept of wilderness as described by the APSLMP.
- Monitor changes in use and level of use over time.
- Provide fair and equitable access to rock and ice climbing resources.
- Manage rock climbing sites to minimize environmental impacts.
- Keep the effects of visitor use on resources to a minimum.

Action Steps

- As prescribed in the carrying capacity discussion, collect use data through visitor number information, visual observations and photo documentation. DEC will also establish photo point monitoring locations to help monitor impacts at the base and top of climbing routes and on herd paths and approach trails. This data will help inform the decision-making process on future management decisions on these facilities.

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- Monitoring for the desired conditions of Climbing Routes will help measure and determine impacts to better inform carrying capacity development and long term planning. Final specifics will be detailed in the Wildland Monitoring Plan but generally:
 - Desired conditions for Climbing Routes will be ones that have minimal impacts to the top and bottom of cliffs and access routes to popular locations, is free of occurrences of human waste or litter, doesn't have any expansion of fixed anchors and provides an enjoyable user experience.
 - Monitoring could include photo point locations, control measuring points, occurrences of erosion, vegetation loss and trash, and user surveys.
- Stabilize soil at the top and bottom of climbing routes where erosion is identified as a problem. Terracing and other forms of stabilization will be used if erosion begins to occur.
- Monitor popular climbing routes for resource degradation. Design, designate and construct sustainable trails to popular climbing destinations where herd paths are having a negative effect on the resource. These will be sustainably designed, constructed, maintained, re-routed, and improved to a Class III Trail standard.
- A temporary moratorium will be established relative to the establishment of new, or replacement of existing, bolts or fixed pitons. This moratorium will allow the Department to gather use data and monitor the environmental impacts of the area and will aid in making sound decisions for the management of climbing routes and their access facilities in the future.
- The Department will work with the climbing community to undertake an inventory of all existing fixed anchors in the unit.
- The Department will convene a focus group, including Department and Agency staff, members of the climbing community, environmental organizations and other interested parties to develop a park-wide policy on the management of fixed anchors on Forest Preserve lands.
- At parking areas near climbing areas, kiosks providing climbing-specific educational materials and LEAVE-NO-TRACE™ information shall be installed.
- Work with climbing interest groups to promote protection of wildlife and wildlife habitats that are found along climbing routes; this may involve temporary closures of specific climbing routes.
- Monitor popularity of climbing routes and numbers of climbers using those routes. Should large groups be causing resource degradation, this UMP supports the establishment of a regulation to limit group size to a maximum size of 10 persons and limited to utilizing a maximum of three roped climbing routes at any given time.

M. Fishing

Existing Conditions

DEC angling regulations are designed to conserve fish populations in individual waters by preventing overexploitation. Angling regulations effectively control impacts of angler use. DEC monitors the effectiveness of angling regulations, stocking policies and other management activities by conducting periodic biological and chemical surveys.

Statewide angling and special angling regulations provide the protection necessary to sustain or enhance natural reproduction where it occurs. In addition to angling regulations, factors at work in the unit which serve to limit use include the relative remoteness of some waterbodies/waterways from roads, the seasonal nature of angling in coldwater ponds, and seasonal road closures.

The use of motorized watercraft is prohibited.

Proposed Management

Objectives

- To maintain the diversity of coldwater and warmwater fish populations in the unit.
- To encourage and promote angler use of the waters in the unit through routine fish management practices including hotlines, correspondence and contact with the public by Department staff.

Action Step

- Enforce current applicable Statewide and special fishing regulations in the management areas waters.

N. Hunting and Seasonal Access

Existing Conditions

The tracts provide an opportunity for a variety of wildlife related recreational pursuits. These include hunting, trapping, bird watching and wildlife photography. A number of mammals and birds may be hunted or trapped during seasons set annually by the Department. These species are identified in the Environmental Conservation Law (ECL), Sections 11-0903 and 11-0908. The DEC has the authority to set hunting and trapping season dates and bag limits by regulation for all game species. The Boreas

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Ponds and MacIntyre tracts are located within Wildlife Management Units (WMU) 5H and 5F.

Wildlife related usage has historically centered around big game hunting, primarily for deer, although bear hunting, small game hunting and furbearer trapping are also prominent. Since the State took ownership of the area, white-tailed deer hunting during the regular big game season has been fairly popular.

Proposed Management

Objective

- Maintain up-to-date public information regarding hunting and trapping opportunities and any associated regulation changes.

Action Step

- Support educational opportunities related to hunting and trapping, and enforce hunting and trapping regulations.

O. Camping

Existing Conditions

Although designated primitive tent sites do not currently exist, primitive camping and campfires are allowed on these tracts pursuant to existing DEC camping regulations (6 NYCRR Section 190.3(b)). Since the acquisition of the tracts several suitable primitive tent site locations have been identified and are discussed below.



Camping on MacIntyre West Tract

Desired Conditions for Tent Site Monitoring

Emphasis is given throughout the plan on well designed and constructed facilities that promote resource protection and will

maximize long term sustainability. Tent Sites are a great example of the importance of constructing a well-built, sustainable facility up front. Choosing a suitable location and constructing a tent site with a hardened tent pad ensures initial and long term environmental protection. These facilities will exhibit a comfortable, well drained tent pad, usable fire pit, and a sanitary privy. Beyond the obvious environmental benefits, these facilities add to the user's experience as much as a desirable location does. The monitoring variables for tent sites will include efforts to collect data on the expansion of the designated area through vegetation loss, soil compaction, and the occurrence of trash and human waste. Photo points will be a useful tool to help illustrate potential changes over time.

Proposed Management

Objectives

- To build and maintain high quality, sustainable primitive tent sites and lean-tos with associated infrastructure (access trails, privies, fire rings and cleared sustainable areas for tents). Focusing use on a desirable and durable tent site will help lessen the overall impacts on the natural resources.
- To provide scenic camping opportunities throughout the trail system for multi-day camping opportunities and for a variety of recreational methods
- To provide primitive camping opportunities for people with disabilities
- Keep designated campsites properly spaced to maintain the opportunity for solitude in wilderness.
- Provide designated primitive tent sites in a manner which minimizes impact to the site while providing an enjoyable wilderness experience for the user.

Action Steps

- Each primitive campsite will be purpose built including proper siting, vegetation clearing, hardening of a formal tent pad and other campsite accessories as needed (access trails, privies and fire rings).
- Monitoring for the desired conditions of Campsites will help measure and determine impacts to better inform carrying capacity development and long term planning. Final specifics will be detailed in the Wildland Monitoring Plan but generally:

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- Desired conditions for Campsites will be ones that have minimal expansion from the designed footprint of the built facility, doesn't negatively impact adjacent vegetation, shows minimal signs of compaction, is free of occurrences of human waste or litter and provides an enjoyable user experience.
- Monitoring could include photo point locations, control measuring points, occurrences of trash, vegetation loss, and user surveys.
- ADA campsites will include accessible fire pits, privies and tent pads.
- All of the sites proposed below will follow APSLMP separation distance guidelines, no campsites will be sited to have less than 500' separation distance.
- A designated primitive campsite is one identified by a DEC permissive sign or disk and campers may not camp in excess of 15 feet from such signs or disks. To define proper camp locations, disperse use and limit adverse impacts to resources and other campers, a regulation will be adopted to prohibit camping further than 15 feet from a camping disk throughout the HPWC.
- Inventory and evaluate existing campsites in High Peaks Wilderness Complex. Develop work plans to take action to improve, close or move any site that isn't sustainable or in conformance. Once the site is completed establish a baseline photo monitoring program and periodic monitoring program.
 - As campsites are built, relocated or improved DEC will post signage at front country and backcountry locations to inform users of changes and maintain a map that is updated annually.
- MacIntyre West Tract Campsite Proposals
 - Build a primitive campsite along the proposed Lake Andrew Trail near Santanoni Brook north of Newcomb Lake (conditional action).
 - Build a primitive campsite near Black Pond adjacent to the proposed Black Ermine Trail (conditional action).
 - Build a primitive campsite near Lake Andrew adjacent to the proposed Lake Andrew Trail.
 - Over time monitor the usage of this campsite and consider it as a location for a Lean-to (conditional action).
 - Build a primitive campsite adjacent to the Bradley Pond Trail just after the crossing of Santanoni Brook.

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- Build a primitive campsite near Bradley Pond adjacent to the existing herd path.
- Former NL Lands Tract Campsite Proposals
 - Henderson Lake Campsites
 - Evaluate existing primitive campsites around Henderson Lake for sustainability. Each site will be reconstructed to create a sustainable camping pad and relocated to conform the setback requirements.
 - There are currently 3 primitive tent sites.
 - There is currently 1 lean-to.
 - Build or upgrade an existing site to an accessible water access site on Henderson Lake.
 - Evaluate existing primitive campsite at Preston Pond for sustainability. The site will be reconstructed to create a sustainable camping pad and or relocated to conform with the setback requirements.
 - Build a primitive tent site near the western shore of Preston Pond along the proposed reroute of the Bradley Pond Trail.
 - Build a primitive campsite near the eastern shore of Lower Preston Pond adjacent the Preston Pond Trail.
 - Build a primitive campsite along the Calamity Brook Trail east of where it meets with the Crossover trail (near the old Trail Jct.).
 - Build a primitive campsite along the East River Trail near the east side of Lake Jimmy.
 - Build 2 primitive roadside campsites along Upper Works Road between the Bradley Pond Trailhead and The Blast Furnace.
- MacIntyre East Tract Campsite Proposals
 - Build a primitive campsite near the Opalescent River, on the north side of the river north of the bridge on the East River Trail.

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- Build a primitive campsite at an existing clearing (and old lease camp site), just south of the Dudley Brook confluence with the Opalescent. The access trail would come south from the East River Trail on the east side of the bridge (conditional action).
- Build a primitive campsite in the vicinity of where Twin Brook comes to the Hanging Spear Falls Trail (conditional action).
- Build a primitive campsite along the proposed Dudley Brook Trail north of Cheney Cobble (conditional action).
- Boreas Tract Campsite Proposals
 - Boreas Ponds tent sites
 - Build up to 5 primitive tent sites along Boreas Ponds (conditional action).
 - Build a Universally Accessible lean-to to be located at the site of the former lodge above Boreas Ponds.
 - An accessible access trail will leave the Boreas Ponds Access trail and traverse the grades, utilizing some of the existing roadbed and surrounding forest, to bring visitors to the lean-to site. Once the trail and lean-to are built the existing roadbed will be naturalized.
 - Build a primitive campsite near Snyder Brook along the proposed Casey Brook Connector Trail.
 - Build 2 primitive campsites near White Lily Pond along the proposed White Lily Pond Trail (conditional action).
 - Build 2 primitive campsites along the Boreas Ponds Trail in the vicinity of LeClair Brook (conditional action).
- Casey Brook Tract Campsite Proposals
 - Build 2 primitive campsites along the Elk Lake Marcy Trail just north of the boundary line near the first major drainage (conditional action).
 - Build a lean-to on the Elk Lake Marcy Trail.
- Former Dix Mountain Wilderness Lands Campsite Proposals

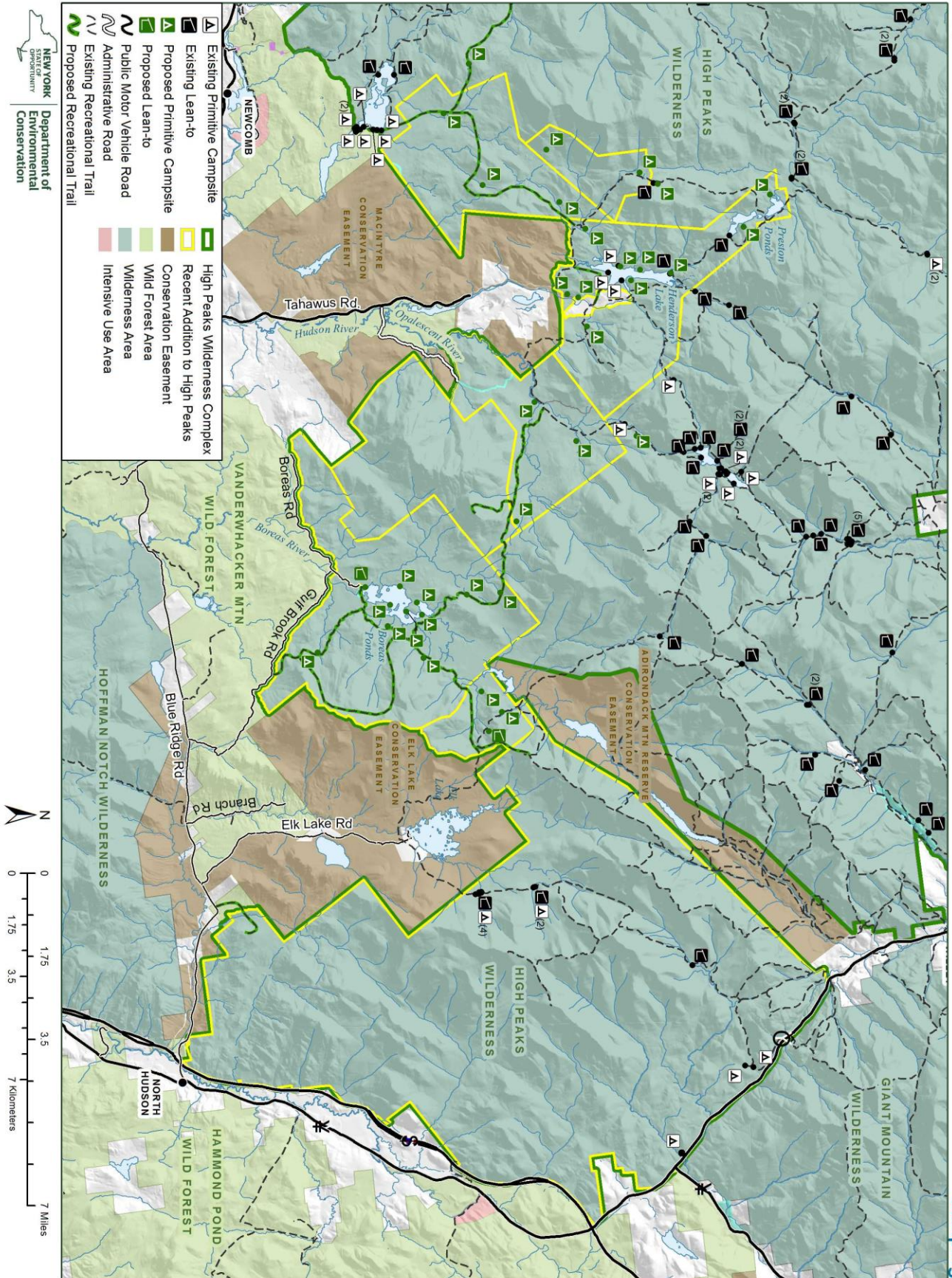
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- Evaluate the existing primitive campsite near the junction of Elk Lake Marcy Trail and Pinnacle Trail. If necessary, the site will be reconstructed to create a sustainable camping pad and relocated to conform the setback requirements.
- Build a primitive tent site near Niagara Brook along the Le Clair Hill Trail (conditional action).
- Build an accessible primitive campsite north of the South Fork of the Boquet River off of Route 73. This will include an improved drive in parking location and accessible trail to the campsite.

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High Peaks Wilderness

Camping



P. Visitor Use, Natural Resource Protection Regulations and Use Reservations

Existing Conditions

The 1999 High Peaks Wilderness Complex UMP called for a series of regulations to help implement changes that would help stop some negative environmental impacts in the Eastern High Peaks Zone, while addressing concerns of user experience and safety. Three Zones were created dividing up the High Peaks Wilderness Area. With The Adirondack Canoe Route, Zone B the Western High Peaks Zone and Zone C the Eastern High Peaks Zone.

A number of benefits to wilderness lands, wildlife, user safety and the wilderness experience have been observed since the regulations were promulgated. The camping areas around Marcy Dam and Lake Colden provide some of the most powerful visuals of the success of these efforts, as trees have recovered and the area is no longer a wide open campsite.

There are seven sporting clubs leases on the Boreas Ponds and MacIntyre tracts. The clubs have access and use rights under the leases that are different from the general public's access and use provisions. Their leases expire on September 30, 2018, and all lessee camp buildings and property must be removed no later than October 1, 2019.

Proposed Management

Objectives

- Protect the natural resources across the unit while allowing for unconfined recreation that doesn't impact the wilderness experience of users.
- Protect users and wildlife, specifically bears, from negative interactions. Prevent bears from acquiring human food and encouraging additional human-bear conflicts.
- Ensure compliance with Leaseholder Management Agreement.
- Reduce the potential for conflict between lessees and the general public.

Actions

- Changing the Zone Names:
 - Eastern High Peaks Zone to the Central High Peaks Zone.

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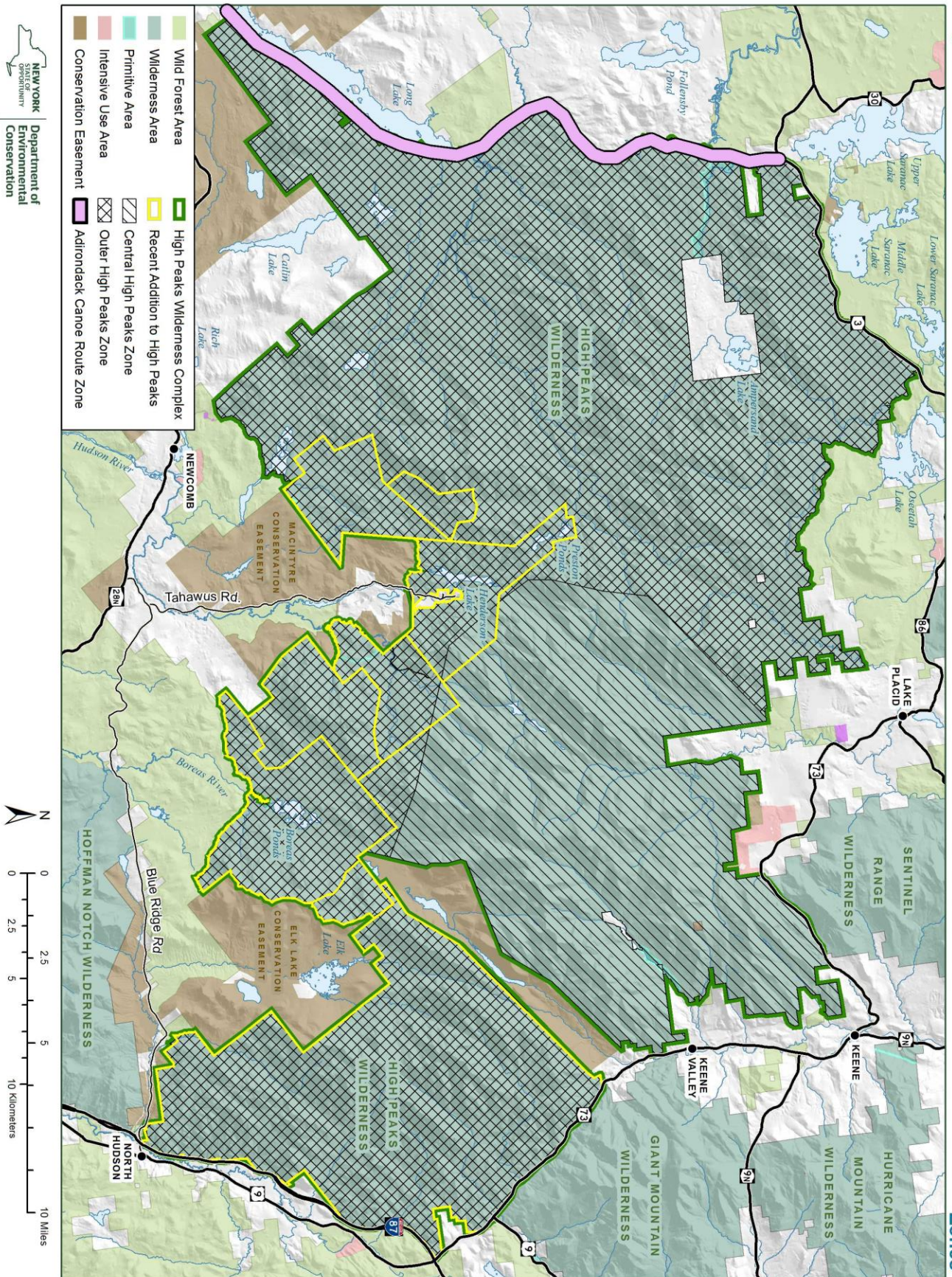
- Western High Peaks Zone to the Outer High Peaks Zone.
 - Includes most of new lands and Dix Mountain Wilderness Area lands.
 - The Adirondack Canoe Route would stay the same.
- Adjustment to the boundary between the former East zone and former West zone (Central High Peaks Zone and Outer High Peaks Zone) in the High Peaks Wilderness Complex
 - Prior to the purchase of the former NL Lands the southern end of the boundary between the zones in the High Peaks was south of MacNaughton Mountain, northwest of Henderson Lean-to. From this location the line would head southeast to the summit of Mt. Adams and then easterly to the summit of Allen Mountain and then to where the Elk Lake-Marcy Trail crosses the Adirondack Mountain Reserve (AMR) boundary. (See High Peaks Wilderness Zones Map)
- Include the Ampersand Primitive Area, Johns Brook Primitive Area and Tahawus Primitive Area to the lands covered under the regulations pertaining to the High Peaks Wilderness.
- Group Size Regulations for Central High Peaks Zone and Outer High Peaks Zone Lands
 - Group size of 8 people for overnight
 - Group size of 15 people for day use.
- Dog Regulation
 - Outer High Peaks Zone dogs need to be under owner control and leashed above 4000', at campsites and trailheads.
- Camping at designated sites only
 - The Adirondack Canoe Route and Central High Peaks Zone
- No Glass Containers
 - Entire High Peaks Wilderness
- Mandatory Registration
 - Entire High Peaks Wilderness
- Bear Canister Regulation
 - Adjust dates of requiring a bear canister to the beginning of May till the end of October
 - Add that bear canisters used by public must be from a Department approved list, which will be updated annually on our website.

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- Change Bear Canisters required in Central High Peaks Zone and Outer High Peaks Zone
- Ski and Snowshoe Regulation
 - Change depth of snow to 12” off trail surface.
- Monitor lessees and the general public for compliance with access and use provisions and restrictions on Forest Preserve lands in the unit.
- Maintain facilities in a manner that allows the leases to remove their camps by September 30, 2018. In the event that the clubs do not comply, continue to maintain the facilities in a manner that allows The Nature Conservancy to remove the camps.

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High Peaks Wilderness



Zones

Q. Phases of Implementation

Background

The overall guidance throughout this UMP Amendment is based on implementing the prescribed management actions in phases that allows land managers to continuously monitor and evaluate the desired conditions of the lands affected. The phases are outlined to provide initial access to facilities, which will then be monitored for use and impacts to the environment. Once ground use data is collected through monitoring it will be evaluated to determine if the specific thresholds of each facility have been met in order to activate the following phase of the plan. With this phased approach it is understood that the actions in phase 1 will be constructed, and once the carrying capacity of the area in relation to the phase 1 facilities is evaluated successive phases may be implemented. Successive phases are conceptual and will need to be activated in order to be constructed. This process will be repeated for each facility outlined below. Monitoring results, will determine if successive phases will be started, if the facility will be maintained at its current level of development, or if we need to step back a phase and re-evaluate our management strategy. Through this process we can methodically develop opportunities, monitor them and make decisions to realize the management goals for the area. The full phased schedule of implementation is found below in the action steps.

Proposed Management

Objectives

- Implement the management actions outlined throughout this amendment in accordance with the schedule of implementation below
- Collect baseline data related to recreational use and the physical condition of the newly acquired lands
- Monitor facilities on an ongoing basis and evaluate them through the LAC process
- Use the latest best management practices (BMPs) available in the siting and construction of all facilities

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Action Steps

PHASE 1
Planning
Develop the Wildland Monitoring Program that will be used in association with the Work Planning process to implement the phases of implementation.
Annually collect and tally trail register information.
Begin monitoring program for any new facility built.
In 5 years the Wildland Monitoring Plan will be evaluated to make sure variables are correct and adjustments will be made.
Wilderness Conformance
Work to remove nonconforming bridges, culverts and other manmade nonconforming items. Completed by 3/2021
Camp Removal Completed by 9/30/2019
Begin annual or periodic inspections and maintenance efforts on the Henderson Lake Dam and the Boreas Ponds Dam.
Education and Outreach
Seasonal Education and Outreach. WCS Bear Steward, 2 Assistant Forest Rangers in towns of Newcomb and North Hudson. 4 Assistant Forest Rangers in northern part of High Peaks
Initiate multimedia, broad scale education and outreach program on changes coming to the former Dix Wilderness lands. Messages regarding group size, bear canisters and other issues should be focused on through a minimum 2-year grace period prior to enforcement of regulations.
Install interior educational signage across the unit at ownership and classification boundaries.
Provide signage, seasonal education and outreach and internet information regarding the fisheries rules and regs, specifically the prohibition on baitfish in the unit.

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Special Management
Establish the 3 Day Use areas proposed in the UMP Amendment. Provide signage and education-outreach efforts.
Work to Promulgate Regulations proposed in this UMP Amendment
Work to educate users of the unique zones in the High Peaks including: The Adirondack Canoe Route, Central High Peaks Zone and Outer High Peaks Zone.
Access and Parking
Maintain all of the existing parking areas, install trailhead signs and install or replace a privies and kiosks.
Through the Vanderwhacker Mountain Wild Forest UMP planning process the development of trailhead locations will provide access to the High Peaks Wilderness.
Improve the Bradley Pond Parking Area and Trailhead and all its appurtenances.
Work with OSI through the Conservation Easement to develop an improved parking and trailhead facility at the Upper Works.
Work with OSI through the Conservation Easement to develop an improved parking and trailhead facility at the East River Trailhead and all its appurtenances..
Work through the Elk Lake Conservation Easement and establish the overflow and winter parking facility and Trailhead with all its appurtenances, on the Elk Lake Road at the State land boundary.
Work with ORDA through the Intensive Use Area UMP to establish a new trailhead for Cascade Mountain and VanHoevenberg complex.
Work with stakeholders and the Giant Mountain Wilderness Area UMP to study and develop the Ridge Trailhead relocation on Rt 73 south of Chapel Pond. With construction of new year round parking areas develop and build the Class V Chapel Pond Connector Trail.
Work with stakeholders to relocated the Ampersand Mountain Trailhead, building an appropriate parking area for year round use and Trailhead with all its appurtenances..
Work with the AMR to maintain trailheads and parking opportunities through the AMR Easement.
Work with partners to build 2 new year round parking lots on Route 73, south of Chapel Pond. Once constructed work with all interested parties to address parking issues on Rt 73 in this section.

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Expand the size of the Round Pond Trailhead Parking lot and add any appurtenances needed.
Water Access
Construct an accessible water hand carry boat launch at Henderson Lake Dam.
Construct an accessible trail and water hand carry boat launch at Boreas Ponds Dam.
Construct a Class III Trail and a hand carry boat launch will be constructed near the northern end of LaBier Flow and will connect the flow to Boreas Road.
Construct an accessible hand carry boat launch and parking area near the outlet to Chapel Pond.
Work with OSI through the Conservation Easement to establish a CP-3 access route from the Upper Works Trailhead to a parking area south of the outlet of Henderson Lake. Upon completion of this work, the Department will build an accessible trail between the parking and the accessible hand carry launch at Henderson Lake Dam.
Trails
Annually maintain and upgrade trails in the unit, including: Henderson Lake Dam Trail, Preston Ponds Trail, Indian Pass Trail, Calamity Crossover Trail, Calamity Pond Trail, Mt. Adams Trail, East River Trail, Elk Lake-Marcy Trail, 1932 Trail and trails in the former Dix Wilderness and High Peaks Wilderness and any new trails built in the first phase of this plan. Rerouted sections of existing trails should have photo monitoring points established and annual monitoring begin.
Layout and Construct the Casey Brook Connector Trail. Upon completion of the trail establish photo monitoring points and an annual monitoring program.
Layout and Construct the Lake Andrew Trail. Upon completion of the trail establish photo monitoring points and an annual monitoring program.
Layout and Construct the Bradley Pond Trail reroutes. Upon completion of the trail establish photo monitoring points and an annual monitoring program.
Layout and Construct the Klondike Notch Trail reroutes. Upon completion of the trail establish photo monitoring points and an annual monitoring program.
Layout and Construct the White Lily Connector Trail. Upon completion of the trail establish photo monitoring points and an annual monitoring program.

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Layout and Construct the Mt.VanHoevenberg East Trail. Upon completion of the trail establish photo monitoring points and an annual monitoring program.
Layout and Construct the Cascade Mountain Trail, once the Mt. VanHoevenberg Trail is completed. Upon completion of the trail establish photo monitoring points and an annual monitoring program.
Layout and Construct the Ampersand Mountain Trail, once the trailhead relocation is complete. Upon completion of the trail establish photo monitoring points and an annual monitoring program.
Layout and Construct the High Peaks portion of the Boreas Ponds Trail. Working with the VMWF UMP to build and develop the Wild Forest portion of the Boreas Ponds Trail, with both segments built prior to the opening of the Community Connector Trail along the Gulf Brook Road. This will preserve year round access to Boreas Ponds by a non-motorized corridor. Upon completion of the trail establish photo monitoring points and an annual monitoring program.
Inventory the Pinnacle Trail from the Elk Lake-Marcy Trail to the ridgeline. Compare the existing trail with the proposed reroute from the southwest portion of the ridge. If data shows a new trail will result in an improved user experience and a more sustainable route, then construct and new trail. Upon completion of the trail establish photo monitoring points and an annual monitoring program.
Develop Trail Work Plans for each of the Trailless Peaks listed in the UMP. Once the plans are developed start taking steps to manage the trails for their future layout as possible.
Camping
Inventory and evaluate existing campsites in the primary area covered by this UMP Amendment. Develop work plans to take action to improve, close or move any site that isn't sustainable or in conformance. Once the site is completed establish a baseline photo monitoring program and periodic monitoring program.
Update the Campsite Plan for the High Peaks Camping Corridor and expand it to the entire Central High Peaks Zone. Once inventory is complete, create a base map and numbered campsite system for utilization in mapping and outreach efforts. Developed work plans to take action to improve, close or move any site that isn't suitable or in conformance. As sites are addressed the information and mapping will be updated for the public. Once a site is completed, establish a baseline photo monitoring program and periodic monitoring program.
Develop a Campsite Plan for the Adirondack Canoe Route Zone. Once inventory is complete, create a base map and numbered campsite system for utilization in mapping and outreach efforts. Developed work plans to take action to improve, close or move any site that isn't suitable or in conformance. As sites are addressed the

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<p>information and mapping will be updated for the public. Once a site is completed, establish a baseline photo monitoring program and periodic monitoring program.</p>
<p>Build a designated primitive campsite in the vicinity of Lake Andrew. Once the site is completed establish a baseline photo monitoring program and annual monitoring program.</p>
<p>Build a designated primitive campsite in the vicinity of Santanoni Brook (on Bradley Pond Trail). Once the site is completed establish a baseline photo monitoring program and annual monitoring program.</p>
<p>Build a designated primitive campsite in the vicinity of Bradley Pond. Once the site is completed establish a baseline photo monitoring program and annual monitoring program.</p>
<p>Build 2 designated primitive campsites in the vicinity Preston Pond. Once a site is completed establish a baseline photo monitoring program and annual monitoring program.</p>
<p>Evaluate the existing campsites on Henderson Lake and Preston Pond. Develop work plans to take action to improve, close or move any site that isn't suitable or in conformance. Once a site is completed, establish a baseline photo monitoring program and periodic monitoring program.</p>
<p>Convert 1 existing site, or chose a suitable location for a new site that will be upgraded as an accessible water access site on Henderson Lake. Once the site is completed, establish a baseline photo monitoring program and periodic monitoring program.</p>
<p>Build a designated primitive campsite in the vicinity of Lake Jimmy on the East River Trail. Once the site is completed, establish a baseline photo monitoring program and periodic monitoring program.</p>
<p>Build a designated primitive campsite in the vicinity Opalescent River. Once the site is completed establish a baseline photo monitoring program and annual monitoring program.</p>
<p>Build 2 designated primitive campsites in the vicinity Boreas Ponds. Once the sites are completed establish a baseline photo monitoring program and annual monitoring program.</p>
<p>Build a designated primitive campsite in the vicinity White Lily Pond. Once the site is completed establish a baseline photo monitoring program and annual monitoring program.</p>
<p>Build the MC Lean-to on Boreas Ponds including a Class VI accessible front country access trail. Once the lean-to is completed establish a baseline photo monitoring program and annual monitoring program.</p>
<p>Build a Lean-to on the Elk Lake-Marcy Trail. Once the lean-to is completed establish a baseline photo monitoring program and annual monitoring program.</p>
<p>Build a designated primitive campsite on the Calamity Brook Trail east of the intersection with the Calamity Crossover Trail. Once the sites are completed establish a baseline photo monitoring program and annual monitoring program.</p>

III. Recreational Resources and Human Uses

Build 2 roadside designated primitive campsites along the Upper Works Road. Once the sites are completed establish a baseline photo monitoring program and annual monitoring program.

Evaluate the existing campsite south of Marcy Swamp near the Elk Lake-Marcy Trail. Develop a work plan to take action to improve, close or move any site that isn't suitable or in conformance. Once a site is completed, establish a baseline photo monitoring program and periodic monitoring program.

Build an accessible campsite, Class VI front country accessible trail and improved parking area in the vicinity of the South Fork of the Boquet River. Once the campsite is completed establish a baseline photo monitoring program and annual monitoring program.

Phase 2

Education and Outreach

Continue Seasonal Education and Outreach. WCS Bear Steward, 2 Assistant Forest Rangers in towns of Newcomb and North Hudson. 4 Assistant Forest Rangers in northern part of High Peaks.

Continue multimedia, broad scale education and outreach programs on special Wilderness Regulations for the High Peaks Wilderness Complex and Wilderness Ethics. Continue working with partners to ensure bear canister conformance is high. Should issues with bears raise consider alternative solutions.

Special Management

Monitor usage on Mt VanHoevenberg and Cascade Mountain. Compare data with previous years usage and existing usage data on comparable sized hikes. If usage is beyond thresholds consider developing a pilot permit system for these trails out of the VanHoevenberg Complex.

If camping capacity is being exceeded on Boreas Ponds consider implementation of a reservation permit system for overnight camping, working in concert with the possibility of adding additional opportunities.

Through the Vanderwhacker Mountain Wild Forest UMP planning process the development of trailhead location on the Niagara Brook Tract.

III. Recreational Resources and Human Uses

Trails
<p>After monitoring utilization of the Lake Andrew Trail, Moose Pond Trail and Bradley Pond Trail, study register data and survey for on the ground occurrences of informal access to Black Pond, that indicate interest in the Black Ermine Connector Trail as both a day use or backpacking trail. If results of monitoring and surveys are positive, then consider triggering the layout and construction of the Black Ermine Trail. Upon completion of the trail establish photo monitoring points and an annual monitoring program.</p>
<p>After monitoring utilization of the Gulf Brook Road, hiking usage on Boreas Ponds Trail, study register data and survey for on the ground occurrences of informal access to Boreas Mountain, that indicate interest in the Boreas Mountain Trail as both a day use or backpacking trail. If results of monitoring and surveys are positive, then consider triggering the layout and construction of the Boreas Mountain Trail. Upon completion of the trail establish photo monitoring points and an annual monitoring program.</p>
<p>After monitoring utilization and use patterns on the Ragged Mountain Trail and other local short view hikes in the North Hudson area, study register data and survey for on the ground occurrences of informal access to LeClair Hill, that indicate interest in the LeClair Hill Trail as both a day use or backpacking trail. If results of monitoring and surveys are positive, then consider triggering the layout and construction of the LeClair Hill Trail. Upon completion of the trail establish photo monitoring points and an annual monitoring program.</p>
<p>After monitoring use patterns on the Gulf Brook Road and hiking usage on the trail system north of Boreas Ponds as well as access to Allen Mountain from the east and south, develop and conduct a survey that indicates the interest in the Allen Mountain Trail as both a day use or backpacking trail. If results of monitoring and surveys are positive, then consider triggering the layout and construct of the Allen Mountain Trail. Upon completion of the trail establish photo monitoring points and an annual monitoring program.</p>
<p>Once Ski Trail Guidance is developed for the Forest Preserve, develop a work plan and reroute and improve the Wright Peak Ski Trail. Upon completion of the trail start a leaf on and leaf off photo monitoring points and annual monitoring program.</p>

III. Recreational Resources and Human Uses

Camping
After monitoring the impacts to the 2 campsites and 1 lean-to on Boreas Ponds, along with usage, develop and conduct a survey that indicates the interest in adding up to 2 additional campsites on Boreas Ponds. If results of monitoring and surveys are positive, then consider triggering the layout and construction of up to 2 additional primitive campsites on Boreas Ponds.
After monitoring use patterns on along the Elk Lake-Marcy and Casey Brook Connector Trail and the Lean-to, develop and conduct a survey that indicates the interest in adding additional primitive tent sites along the trail corridors. If results of monitoring and surveys are positive, then consider triggering the layout and construction of up to 2 additional primitive tent sites along these trails.
If the Black Ermine Connector Trail is constructed, build a designated primitive campsite in the vicinity of Black Pond. Once the site is completed establish a baseline photo monitoring program and annual monitoring program.
Once the East River Trail to Hanging Spear Falls has been relocated and rebuilt, monitor usage patterns on the trail and consider building a campsite in the vicinity of Upper Twin Brooks.
After monitoring utilization and use patterns on the Lake Andrew Trail, campsites on Newcomb Lake and the Lake Andrew Campsite, study register data and survey for on the ground occurrences of informal camping along the trail north of Newcomb Lake. If results of monitoring and surveys are positive, then consider triggering the construction of a designated campsite in the vicinity of Santanoni Brook along the Lake Andrew Trail. Upon completion of the campsite establish photo monitoring points and an annual monitoring program.
After monitoring utilization and use patterns of the campsite adjacent to the Opalescent River along the East River Trail, study register data and survey for on the ground occurrences of informal camping at the old clearing south of Dudley Brook. If results of monitoring and surveys are positive then consider triggering the construction of a designated campsite south of Dudley Brook, where it joins the Opalescent River. Upon completion of the campsite establish photo monitoring points and an annual monitoring program.
After monitoring utilization and use patterns on the White Lily Connector Trail, campsites at White Lily and near the Opalescent River, study register data and survey for on the ground occurrences of informal camping along the White Lily Connector Trail. If results of monitoring and surveys are positive, then consider triggering the construction of a designated campsite along the White Lily Connector Trail and north of Cheney Cobble. Upon completion of the campsite establish photo monitoring points and an annual monitoring program.
Once the Boreas Ponds Trail is built monitor utilization and use patterns along the trail, study register data and survey for on the ground occurrences of informal camping along the trail. If results of monitoring and surveys are positive, then consider triggering the construction of up to 2 primitive campsites along the trail in the vicinity of LeClair Brook. Upon completion of a campsite establish photo monitoring points and an annual monitoring program.

III. Recreational Resources and Human Uses

After monitoring utilization and use patterns on the White Lily Connector Trail and of the campsite at White Lily Pond, study register data and survey for on the ground occurrences of informal camping in the vicinity of White Lily Pond. If results of monitoring and surveys are positive, then consider triggering the construction of a designated campsite in the vicinity of White Lily Pond. Upon completion of the campsite establish photo monitoring points and an annual monitoring program.

Phase 3

Trails

After monitoring use patterns on the Gulf Brook Road, hiking usage on the Boreas Ponds Trail, Boreas Mountain Trail and usage east of Boreas Mountain, develop and conduct a survey that indicates the interest in the RNT Loop Trail as both a day use or backpacking trail. If results of monitoring and surveys are positive, then consider triggering the layout and construct of the RNT Loop Trail. Upon completion of the trail establish photo monitoring points and an annual monitoring program.

After monitoring use patterns on the Bradley Pond Trail and backpacking and skiing loop usage, develop and conduct a survey that indicates the interest in the Henderson Lake South Trail as both a day use or backpacking trail. If results of monitoring and surveys are positive, then consider triggering the layout and construct of the Henderson Lake South Trail. Upon completion of the trail establish photo monitoring points and an annual monitoring program.

Camping

Once the leClair Hill Trail has been built, monitor usage patterns to indicate if a campsite in the Wilderness in the vicinity of Niagara Brook would be

After monitoring the impacts to the 4 campsites and 1 lean-to on Boreas Ponds, along with usage, study register data and survey for on the ground occurrences of informal camping along Boreas Ponds. If results of monitoring and surveys are positive, then consider triggering the layout and construction of 1 additional primitive campsite on Boreas Ponds.

Appendix A – Management and Policy Considerations

Article XIV of the New York State Constitution

State lands which are the subject of this Unit Management Plan Amendment are Forest Preserve land protected by Article XIV, Section 1 of the New York State Constitution. This Constitutional provision, which became effective on January 1, 1895 provides in relevant part:

“The lands of the state, now owned or hereafter acquired, constituting the Forest Preserve as now fixed by law, shall be forever kept as wild forest lands. They shall not be leased, sold or exchanged, or be taken by any corporation, public or private, or shall the timber thereon be sold, removed or destroyed.”

Environmental Conservation Law

The body of law that established DEC and authorizes its programs is called the Environmental Conservation Law (ECL). DEC is responsible for administration and enforcement of the ECL, and Article 9 of the ECL authorizes, among other things, the management of the Adirondack and Catskill forest preserves and the recreational facilities contained thereon.

Adirondack Park State Land Master Plan

The Adirondack Park State Land Master Plan (APSLMP) was initially adopted in 1972 by the Adirondack Park Agency, with advice from and in consultation with the Department, pursuant to Executive Law §807, now re-codified as Executive Law §816. The APSLMP provides the overall general framework for the development and management of State lands in the Adirondack Park, including those State lands which are the subject of this UMP Amendment.

The APSLMP places State land within the Adirondack Park into the following classifications: Wilderness, Primitive, Canoe, Wild Forest, Intensive Use, Historic, State Administrative, Wild, Scenic and Recreational Rivers, and Travel Corridors, and sets

Appendix A – Policy and Management Considerations

forth management guidelines for the lands falling within each major classification. The APSLMP classifies the lands which are the subject of this UMP Amendment as part of the High Peaks Wilderness Complex.

The APSLMP sets forth guidelines for such matters as: structures and improvements; ranger stations; the use of motor vehicles, motorized equipment and aircraft; roads, jeep trails and State truck trails; flora and fauna; recreational use and overuse; boundary structures and improvements and boundary markings.

Executive Law §816 requires the Department to develop, in consultation with the APA, individual UMPs for each unit of land under the Department's jurisdiction which is classified in one of the nine classifications set forth in the APSLMP. The UMPs must conform to the guidelines and criteria set forth in the APSLMP. Thus, UMPs implement and apply the APSLMP's general guidelines for particular areas of land within the Adirondack Park.

Executive Law §816(1) provides in part that "(u)ntil amended, the master plan for management of state lands and the individual management plans shall guide the development and management of state lands in the Adirondack Park."

APA/DEC Memorandum of Understanding

As agencies of the same New York State Executive Department, the Department and the Agency recognize it is imperative that the specific authorities and program responsibilities of each are administered as cooperative elements of a coordinated State government program for the Adirondack Park. The Department and the Agency each agree that their specific program responsibilities and activities are enhanced by the involvement and participation of the other, including coordinated policy development and implementation, as well as sharing of information, technical and other resources. Revised in 2010, the Memorandum of Understanding between the Adirondack Park Agency and the Department of Environmental Conservation Concerning the Implementation of the State Land Master Plan for the Adirondack Park (MOU) outlines the specific roles and procedures to be followed by each Agency in fulfilling this commitment. Specific topics covered by the MOU include General Coordination and Communication, Adirondack Park State Land Master Plan, State Land Classifications, Unit Management Plans, State Land Project Management, State Land Activity Compliance, and Interpretation of the Adirondack Park State Land Master Plan.

State Environmental Quality Review Act

The State Environmental Quality Review Act requires that all agencies determine whether the actions they undertake may have a significant impact on the environment. The intent of the legislation is to avoid or minimize adverse impact on the resource. The guidelines established in the APSLMP for developing unit management plans express these same concerns. Any development within the High Peaks Wilderness Complex presented in the plan must take into consideration environmental factors to ensure that such development does not degrade that environment. The overall intent of this UMP Amendment is to identify mitigation measures to avoid or minimize significant adverse environmental impacts to the natural resources of the State within the unit. Any reconstruction or development within the confines of this unit will take environmental factors into account to ensure that such development does not degrade the resource.

SEQRA requires the consideration of environmental factors early in the planning stages of any proposed actions(s) that are undertaken, funded or approved by a local, regional or state agency. A Long Environmental Assessment Form (LEAF) is used to identify and analyze relevant areas of environmental concern based upon the management actions in the draft UMP.

As required by SEQRA, during the planning process a range of alternatives were formulated to evaluate possible management approaches for dealing with certain issues or problem locations. Department staff considered the no-action and other reasonable alternatives, whenever possible. Potential environmental impacts, resource protection, visitor safety, visitor use and enjoyment of natural resources, user conflicts, interests of local communities and groups, as well as short and long-term cost-effectiveness were important considerations in the selection of proposed actions. Efforts were made to justify reasons for the proposals throughout the body of the UMP Amendment so the public can clearly understand the issues and the rationale of the decision making.

Wild, Scenic, and Recreational Rivers Act and Regulations

In 1972, the State Legislature passed the Wild, Scenic and Recreational Rivers System Act (Rivers Act) in order to protect and maintain certain designated rivers in their free-flowing condition and natural setting. Pursuant to part 666.6[f] of title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR), upon the designation of a river in this system and until final boundaries are established,

the provisions of 6 NYCRR Part 666 are applicable within one-half mile of each bank of the river. None of the river segments in the High Peaks Wilderness Complex are known to have a current use which is in conflict with either the Rivers Act or its implementing regulations. Section 666.7 provides that “*management plans will be developed by Department of Environmental Conservation for designated river areas to recommend specific actions to protect and enhance all river corridor resources.*” This UMP will also serve as the River Management Plan for those segments of designated rivers located within the High Peaks Wilderness Complex planning area.

A wild river is “*a river or section of river that is free of diversions and impoundments, inaccessible to the general public except by water, foot or horse trail, and with a river area primitive in nature and free of any man-made development except foot bridges.*” (APSLMP, page 49). The Opalescent River is classified as a wild river.

Invasive Species Management Guidance

In 2007, the Department and the Adirondack Park Agency developed Inter-Agency Guidelines for Implementing Best Management Practices to Control Invasive Species on DEC Administered Lands of the Adirondack Park (Guidelines). The Guidelines describe the process through which any active invasive species management will take place on DEC administered lands in the Adirondack Park. The Guidelines provide Best Management Practices (BMPs) that describe what management practices are allowed and when they can be implemented, who is authorized to implement them, and which species can be targeted. Species or techniques that are not included in the guidance may be addressed by the Department on a case-by-case basis in consultation with the Agency. The Guidelines are a living document and are updated periodically.

Reference to the Guidelines are included in UMPs as they are drafted or revised. UMPs also include available inventory information on the distribution of invasive species on or in close proximity to the Unit.

The Guidelines also describe a process by which the Department may enter into partnership agreements with and facilitate individuals or groups to manage invasive species on DEC administered lands using the listed BMPs. Partnership agreements will be accompanied with a site-specific or Rapid Response Work Plan (Work Plan) for the invasive species management activity and include provisions for monitoring control efficacy and native plant recovery. As noted above, the site-specific or Rapid Response Work Plan will provide detail regarding the selected management options on a site-specific basis.

Americans with Disabilities Act

The Americans with Disabilities Act of 1990 (ADA), along with the Architectural Barriers Act of 1968 (ABA) and the Rehabilitation Act of 1973, Title V, Section 504, have had a profound effect on the manner by which people with disabilities are afforded equality in their recreational pursuits. The ADA is a comprehensive law prohibiting discrimination against people with disabilities in employment practices, use of public transportation, use of telecommunication facilities and use of public accommodations. Title II of the ADA requires, in part, that reasonable modifications must be made to the services and programs of public entities, so that when those services and programs are viewed in their entirety, they are readily accessible to and usable by people with disabilities. This must be done unless such modification would result in a fundamental alteration in the nature of the service, program or activity or an undue financial or administrative burden.

Title II also requires that new facilities, and parts of facilities that are newly constructed for public use, are to be accessible to people with disabilities. In rare circumstances where accessibility is determined to be structurally impracticable due to terrain, the facility, or part of facility is to be accessible to the greatest extent possible and to people with various types of disabilities.

Consistent with ADA requirements, the DEC incorporates accessibility for people with disabilities into the planning, construction and alteration of recreational facilities and assets supporting them. This UMP Amendment incorporates an inventory of all the recreational facilities or assets supporting the programs and services available on the unit, and an assessment of the programs, services and facilities on the unit to determine the level of accessibility provided. In conducting this assessment, DEC employs guidelines which ensure that programs are accessible, including buildings, facilities, and vehicles, in terms of architecture and design, transportation and communication to individuals with disabilities.

Any new facilities, assets and accessibility improvements to existing facilities or assets proposed in this UMP Amendment are identified in the section containing proposed action steps.

The DEC is not required to make each of its existing facilities and assets accessible as long as the DEC programs, taken as a whole, are accessible.

For copies of any of the above mentioned laws or guidelines relating to accessibility, contact the DEC Universal Access Program Coordinator at 518-402-9428 or UniversalAccessProgram@dec.ny.gov.

Partnerships and Volunteers

Temporary Revocable Permits

The DEC issues Temporary Revocable Permits (TRPs) in its sole discretion for the temporary use of State lands and conservation easement lands for activities that have negligible or no permanent impact on the environment. Historically, TRPs have been issued for lean-to construction, cross country races, forest insect research, wildlife research, town road maintenance and utility line right-of-way work, among many other purposes. Through the TRP review process, DEC avoids conflicting uses of State land and situations that could threaten health, public safety, or integrity of natural resources. TRP authorization does not provide exemption to any existing State laws and regulations. To hold any event, a sponsoring organization must request permission in writing at least 30 days in advance of the date of the proposed activity. The TRP applicant or sponsoring organization must provide proof of liability insurance. TRPs often have specific stipulations pertinent to the activity in question and TRPs are authorized by DEC policy.

Volunteer Stewardship Agreements

Many great things are accomplished on State lands through the volunteering of individuals and groups. There are instances where coordinating work through the DEC proves challenging due to logistics, staffing, or funding levels. In some of these instances, great work is able to be accomplished through the generosity of these volunteers.

The current DEC procedure that facilitates the use of volunteers to carry out work on State land is called a Volunteer Stewardship Agreement (VSA). When a work project seems to be a good fit for volunteers and there is an individual or group willing to take on this project, the relevant Department land manager will help the potential volunteers through the VSA process, which consists of an application and a final agreement. This process is necessary, as it lays out the details of the project to make sure that the final project is true to the intent of management of the area. The VSA also provides volunteers with liability and workers compensation insurance coverage while they are working on State land.

Student Conservation Association

DEC has an ongoing partnership with the Student Conservation Association (SCA) for trail crews and backcountry stewards. SCA trail crews provide labor to complete implementation of projects on State lands, including: trail construction, primitive tent site

construction, bridge work, rehabilitation and maintenance of facilities, and much more. These crews allow DEC to accomplish a large amount of work. The backcountry stewards spend their time traversing the backcountry, protecting resources, monitoring usage, and providing public outreach. Both of these programs are indispensable in helping the DEC to accomplish its management objectives.

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Appendix B – Pond Narratives

Boreas Ponds Tract et al - Pond Narratives

- for amendment to High Peaks UMP

Upper Hudson watershed:

Boreas Ponds (UH564)

Originally three distinct ponds, the Boreas Ponds is currently a single waterbody whose water level is preserved by a concrete dam on its outlet at the southern end of the pond. This point also marks the origin of the Boreas River. Total acreage of the three-pond complex is approximately 350 acres and includes several islands and floating bog mats. The “First Pond” section contains the bulk of the deep water with a maximum depth of nearly 40 feet. The vast majority of the remaining pond is less than 10 feet deep and features large swaths of emergent vegetation.

The most recent fisheries survey was completed in July of 2017 and documented the presence of the following species: brook trout, golden shiner, common shiner, northern redbelly dace, creek chub, pearl dace, white sucker, brown bullhead and pumpkinseed. Though identified to species as white sucker, these fish are a late-spawning variant more closely related to the Elk Lake type of sucker. Genetic analysis is ongoing and the taxonomy of these fish has yet to be fully resolved.

Although much of the pond is shallow and likely becomes too warm for brook trout in the summer, “First Pond” provides about 20 acres of cold, deep water. Catch rates and sizes for brook trout from the 2017 netting were very respectable compared to other Adirondack ponds. The Boreas Ponds were last stocked by the private landowners in 2011 and have not been stocked by the DEC, therefore the trout caught in the 2017 survey were very likely the result of natural reproduction. Water chemistry was outstanding with a pH of 7.3 and an acid neutralizing capacity (ANC) of 116 µeq/l.

In 2015, a genetic study of brook trout from two of the primary tributaries to the Boreas Ponds was completed by Spencer Bruce on the behalf of the Nature Conservancy. His results suggest that the Boreas Ponds and associated tributaries are inhabited by a single, genetically robust, freely dispersing brook trout population. In addition, while this population shares genetic characteristics with nearby brook trout populations in the Upper Hudson watershed, it shows no evidence of genetic influence from brook trout strains previously stocked. From this information, it is reasonable to infer that the brook trout population currently inhabiting the Boreas Ponds complex is better adapted to its environment than the strains that were stocked. We will periodically sample the pond to monitor the brook trout population and gauge recreational fishing pressure. However, based on the genetic information and netting results, stocking does not appear to offer any advantage at the present time.

Management Class: Adirondack Brook Trout

Deer Pond (UH565)

Deer Pond is a small (less than two acres) waterbody located west of the Boreas Ponds. We have no fish or water chemistry data for this pond.

A fisheries survey should be completed in the future to determine species assemblage and water chemistry conditions.

Management Class: Unknown

LaBier Flow (UH563)

LaBier Flow is a 15-acre waterbody located just downstream of the Boreas Ponds. It is a shallow impoundment of the Boreas River whose water level is maintained by a steel and wooden dam. It was last surveyed by the Adirondack Lakes Survey Corporation (ALSC) in 1987 when the following fish species were captured: brook trout, common shiner, northern redbelly dace, creek chub, white sucker, brown bullhead, redbreast sunfish and pumpkinseed. Water chemistry values from that survey were excellent with a pH of 7.2 and an ANC of 177 µeq/l. LaBier Flow reportedly received two stockings of rainbow trout in the late 1990's by the previous landowners.

A fisheries survey should be conducted to update our files and determine the current status of the brook trout population.

Management Class: Adirondack Brook Trout

White Lily Pond (UH566)

White Lily Pond is a 15 acre, shallow (approximately 5 feet deep) waterbody located at the north end of the Boreas Ponds tract. No previous data existed for this pond, other than water chemistry data from 1990, so a cursory survey was done in 2017. Although sampling gear was only deployed for a couple of hours, two brook trout were captured. No other fish species were collected, but many small fish were observed in the shallows along the shoreline. Analysis of water samples from the 2017 survey revealed very good chemistry with a pH of 7.4 and an ANC of 186 µeq/l along with high dissolved oxygen (D.O.) levels.

The pond was stocked with brook trout by the previous owners, but we believe that had ceased by 2011, meaning that the trout caught in the 2017 survey were very likely the result of natural reproduction. We have no plans to stock fish at this time, but will periodically sample the pond to monitor the brook trout population and gauge the fishing pressure to determine if stocking is warranted in the future. Collecting water

temperature data will be important since the pond's shallow depth may contribute to warming to a degree that would preclude a brook trout fishery.

Management Class: Adirondack Brook Trout

Lake Andrew (UH698)

No fisheries or water chemistry data exist for this 16-acre waterbody, but the lake has a history of brook trout based on a 1924 report commissioned for the Tahawus Club. The lake was also stocked with brook trout for decades by the private landowners.

A fisheries survey should be conducted to update our files and determine the current status of the brook trout population.

Management Class: Adirondack Brook Trout

Bradley Pond (UH717)

Bradley Pond is a 9-acre waterbody located about two miles west of Henderson Lake. We have no fish or water chemistry data for this pond.

A fisheries survey should be completed in the future to document species assemblage and water chemistry conditions.

Management Class: Unknown

Henderson Lake (UH715)

Henderson is a relatively large (235 acres) and deep (70 feet) lake with a dam on its eastern arm. It is located just west of the Hudson River at the end of the Tahawus Road and is accessed by a short carry from the parking area. The lake was most recently surveyed in 2003 and 2004 when the following species were caught: brook trout, common shiner, creek chub, white sucker, brown bullhead, pumpkinseed and yellow perch. Based on the 2004 survey, water chemistry is very good with a pH of 6.5, an ANC of 27 $\mu\text{eq/l}$ and D.O. levels that are suitable for trout throughout the water column. The lake currently has a stocking policy for brook trout and lake trout.

Henderson Lake will continue to be stocked with brook trout and lake trout and their populations will be assessed through periodic biological surveys.

Management Class: Adirondack Brook Trout

Lake Jimmy (UH713)

Thirty-acre Lake Jimmy is located just east of the Hudson River in the Tahawus area. We have no fish or water chemistry data for this pond, but the lake has a history of brook trout according to a 1924 report commissioned for the Tahawus Club.

A fisheries survey should be conducted to update our files and determine the current status of the brook trout population.

Management Class: Adirondack Brook Trout

Unnamed Water (UH710A)

Pond #710A in the Upper Hudson drainage is located just east of the Opalescent River. It is a seven-acre waterbody that appears to be shallow and heavily vegetated based on aerial photos. We have no fish or water chemistry data for this pond.

This water will be managed to preserve its aquatic community for its intrinsic value.

Management Class: Unknown

Raquette watershed:

Lower Preston Pond (R238)

Lower Preston Pond is the downstream-most of a pair of ponds located about 1.5 miles north of Henderson Lake. The lower pond has a surface area of 55 acres and is 50 feet deep. The most recent survey in 2004 captured only brook trout, the same result as the ALSC netting in 1986. The 2004 water chemistry values were: pH of 6.0, ANC of 13 µeq/l and excellent D.O. readings. This represents a tremendous improvement in the acidity level, as the pH was only 4.9 in 1986. The pond is currently stocked with brook trout.

Lower Preston Pond will continue to be stocked with brook trout and be managed for its brook trout fishery. Trout condition and species composition, along with water chemistry, will be monitored through periodic biological surveys.

Management Class: Adirondack Brook Trout

Upper Preston Pond (R239)

Upper Preston Pond, located just south of Lower Preston, is a 72-acre waterbody with very clear water attaining a maximum depth of 70 feet. The pond is accessed via a foot trail from the south near Henderson Lake. Brook trout were the only fish species caught when the pond was last surveyed in 2004. The previous survey, by ALSC in 1986, found brook trout and creek chubs. Upper Preston received plantings of round whitefish, a species that is endangered in New York State, as part of its restoration plan. More than a thousand round whitefish were stocked in each of the springs of 2016 and 2017 with a goal of establishing a self-sustaining population. Like the lower pond, the

upper pond experienced a significant increase in the pH since the ALSC sampling. Results from the 2004 water samples were: pH of 6.3 (5.6 in 1986), ANC of 21 $\mu\text{eq/l}$ and D.O. levels suitable for trout survival. The pond is currently stocked with brook trout.

Upper Preston Pond will continue to be stocked with brook trout and be managed for its brook trout fishery. The status of round whitefish, trout numbers and condition, species composition, and water chemistry will be monitored through periodic biological surveys.

Management Class: Adirondack Brook Trout

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Appendix C – Trail Classifications

Trail classifications are listed by trail. The table below describes trail corridor and tread dimensions for reference.

<u>Trail Type</u>	<u>Marking</u>	<u>Tread and Tread Width</u>	<u>Trail Corridor</u>	<u>Bridges/Ladders</u>	<u>Design and Maintenance</u>
Class I Unmarked Route	None	Intermittently apparent, relatively undisturbed, organic soil horizon	Intermittently apparent No side cutting	None	Natural obstructions will be present, large logs left and water courses crossed without aid.
Class II Path	Intermittent	Intermittently apparent, compaction of duff, mineral soils occasionally exposed	Visible w/ some obstructions Minimal side cutting, blowdown removal only to define route	None	Same as Class I trails, if social trails develop provide routing and marking to minimize impacts.
Class III Primitive Trail	Trail markers, signs at junctions with other trails	Apparent, soil compaction, minor natural material hardening, 14" – 18" wide	3' wide, 10' high Blowdown removal 2-3 years, side cutting to define trail	Bridges to protect resource, 2'-3' wide. Ladders only to protect exceptionally steep sections if reroute not possible	Purpose built trails routed and built to shed water. Existing trails drainage installed to halt erosion. Heavily eroded sections of trails considered for reroute vs hardening in place. Minimize bog bridging through reroutes or turnpiking.
Class IV Secondary Trail	Trail Markers, signs at junctions with other trails, basic	Likely worn and possibly eroded. Rocks exposed and little to no duff. Natural material trail hardening. 18" – 24" wide	4' wide, 12' high Annual blowdown removal, side cutting to define trail	Greater allowance for bridges to protect resources, 2'-4' wide. Ladders on exceptionally steep rock faces if reroute not possible.	Purpose built trails routed and built to shed water and hardened to be sustainable. Existing trails drainage installed to halt erosion. Heavily eroded sections of trails considered for reroute vs hardening in place. Minimize bog bridging through reroutes or turnpiking.

Appendix D – Trail Classifications

<u>Trail Type</u>	<u>Marking</u>	<u>Tread and Tread Width</u>	<u>Trail Corridor</u>	<u>Bridges/Ladders</u>	<u>Design and Maintenance</u>
Class V Trunk Trail	Trail Markers, signs at junctions, more information and warnings	Wider tread, worn and very evident. Rock exposed, possibly eroded. Extensive natural material trail hardening allowed, non-native materials as a last resort. 18" – 26" wide	6' wide, 12' high Annual blowdown removal and side cutting allowed	Bridges for difficult high water crossings 2'-6' wide, priority given to streams below concentrations of designated camping. Ladders only if reroute not possible.	Purpose built trails routed and built to shed water and hardened to be sustainable. Existing trails, drainage installed to halt erosion. Heavily eroded sections of trails considered for reroute vs hardening in place. Minimize bog bridging through reroutes or turnpiking.
Class VI Front Country	Heavily Marked, Detailed Interpretive Signage	Groomed, some paving, bark chips or other accessible materials. 24" – 48" wide	6' wide, 12' high Blowdown removal and side cutting allowed	Bridges 3'-8', made to ADA Standards.	Purpose built trails using appropriate techniques. To be implemented within 500' of wilderness boundary.
Class VII Horse Trail	Marked as Trunk trail or Secondary Trail	Wide tread development, must be rather smooth. Use of natural and non-native materials 24" – 48" wide	8' wide, 12' high Same as Trunk trail	Bridges 6'-10' wide with kick rails, nonnative dimensional materials preferred.	Same as Trunk Trail on larger scale and use equestrian techniques. Use of horse drawn implements allowed.
Class VIII Ski Tail	Marked High for Snow Pack, Special Markers, Signs at Junctions, Usage Signs at Junctions of Hiking Trails	Duff remains, discourage summer use.	6' wide, slight wider, depending on grade and curves, 12' high Clearing trail corridor determines tread width	Bridges 4'-8' wide with snow rails.	Purpose built trails routed to avoid double fall lines and favor skier experience over destination distance. Removal of woody obstacles and low profile features.

Appendix D – Response to Public Comment