

# **HAMMOND POND WILD FOREST**

and

**Port Henry Boat Launch** 

# **Draft Unit Management Plan**

# **Draft River Area Management Plans**

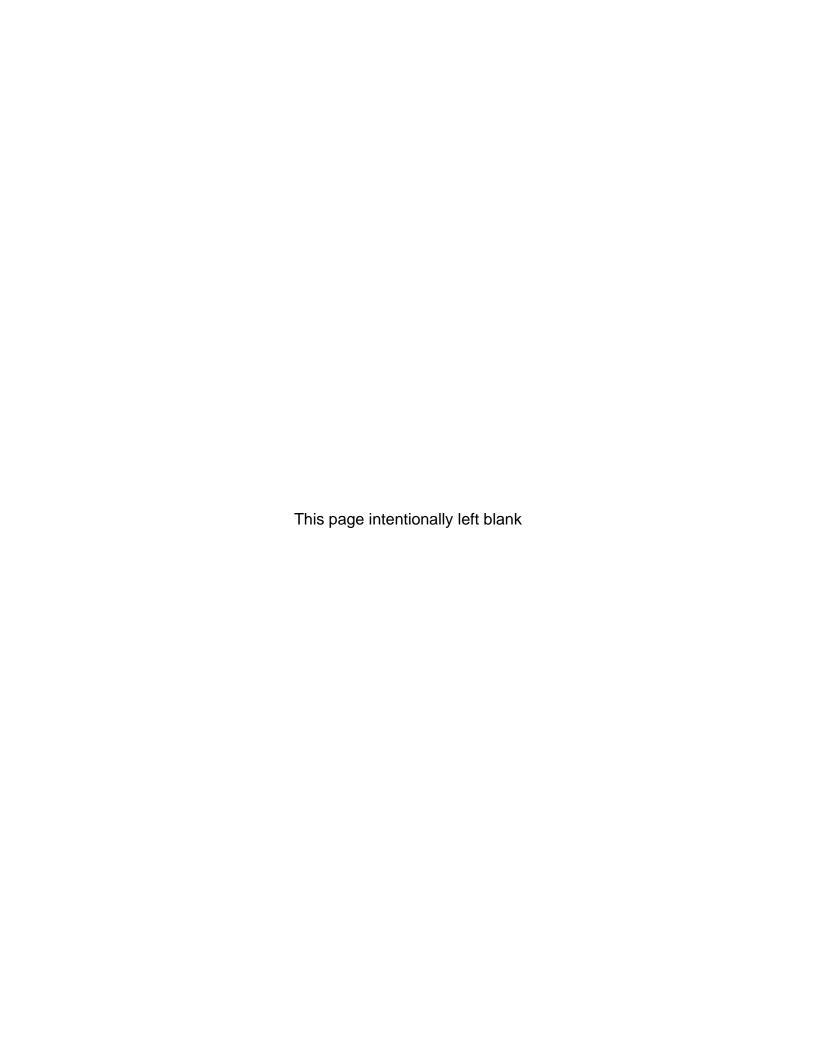
East Branch Ausable River, Boquet River, and Schroon River



NYSDEC, REGION 5, DIVISION OF LANDS AND FORESTS

232 Golf Course Rd, Warrensburg NY 12885 r5.ump@dec.ny.gov

www.dec.ny.gov November 2018



# **Executive Summary**

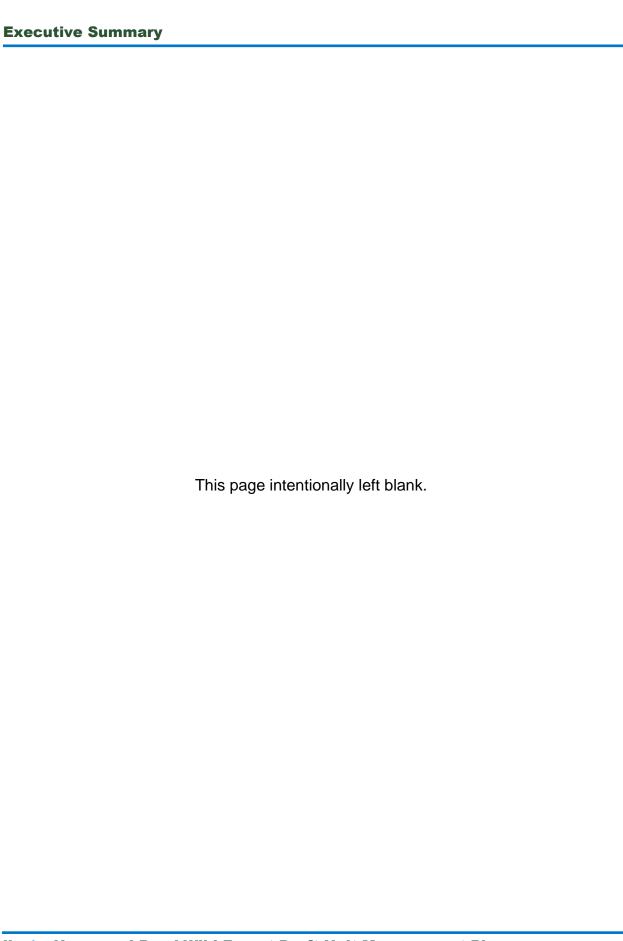
The Hammond Pond Wild Forest (HPWF) is an Adirondack Forest Preserve unit steeped in history, occupying a significant transitional zone between the sharp terrain of the High Peaks region and the fertile Lake Champlain valley. A Unit Management Plan (UMP) for the HPWF was adopted in 1988. Since that time, land area has been added to the unit and recreational trends have evolved. Much of the unit lies within relatively close proximity to the Northway (I-87), giving potentially easy access to large numbers of visitors. On the other hand, the unit is home to a spectacular variety of significant ecological resources, which warrant care and protection.



Moose Mountain Pond Trail

## Management Goals:

- Protect the natural resources and spectacular ecological value of the HPWF landscapes. Identify and respect sensitive areas.
- Recognize that choosing where to create recreational facilities is just as important as choosing where not to create recreational facilities. The Forest Preserve's intrinsic values are a large part of what defines it. People who have never visited (and may never visit) the region hold high value in knowing that pristine natural landscapes exist, both now and for future generations.
- Strategically connect and extend existing linear trails to create loops and interesting longer distance opportunities. This may attract some use from the more heavily used adjacent Forest Preserve units.
- Design trail configurations thoughtfully, so they are complemented by nearby facilities, adjacent Forest Preserve units, and private lands.
- Enhance existing facilities and create new facilities for high quality, universally accessible recreational opportunities.
- Contribute to the completion of the 4,600-mile North Country National Scenic Trail by providing a route connection across the HPWF.



# **Contents**

I. Introduction	1
A. Setting	1
B. Planning Process and Public Participation	6
C. General Guidelines and Objectives for Management of the Unit	6
II. Natural Resources	9
A. Geology	9
B. Soils	1C
C. Topography	12
D. Water Resources	13
E. Vegetation	18
F. Wildlife & Hunting	33
G. Fisheries & Fishing	53
III. Human Uses & Recreational Resources	57
A. Carrying Capacity	57
B. Motorized Access and Parking	62
C. Roads	66
D. Bridges and Dams	70
E. Camping	72
F. Fishing & Waterway Access	77
G. Boating	80
H. Trail Inventory	82
I. Access for People with Disabilities	109
J. Rock and Ice Climbing	115
K. Belfry Mountain Fire Tower	117
L. Split Rock Falls	118

### Contents

M. North Country National Scenic Trail	120
N. Putts Creek Wildlife Management Area	123
Appendix A – Phases of Implementation	125
Appendix B – References	131
Appendix C – Trail Classifications	138
Appendix D – Management and Policy Considerations	140
Appendix E – Pond Narratives	147
Appendix F – Classification and Reclassification	163

# I. Introduction

# A. Setting

## **Description of Unit**

The Hammond Pond Wild Forest (HPWF) is comprised of a collection of State land parcels categorized as Forest Preserve, and as such is protected as "forever wild" by

Article XIV, Section 1 of the New York State Constitution. The unit contains 56 parcels totaling approximately 45,619 acres classified as wild forest, wholly contained within Essex County.

The Adirondack Park State Land Master Plan ("Master Plan") area description for the HPWF reads in part:

"Owl Pate and Hail Mountain provide great distant views, and exceptionally fine overlooks may be had from the many rocky bluffs and ledges dominating the area. Many ponds offer scenic fishing opportunities and have



View from Harris Hill

defined but unmarked trails leading from highways. A great variety of flora and fauna reflect an overlap of forest types where beech, birch, maple and hemlock on the cool, northern slopes give way to oak, ash, basswood and pine on the southerly exposures" (2016, p. 108).

## History

The history of the HPWF is closely linked to the economic development of Essex County. The exploitation of iron ore and timber produced significant effects and far reaching impacts on the character and landscape of the HPWF.

The iron ore industry reached a peak in the 1880's, engaged a sizeable work force and brought large numbers of people into the area. The rapid rise of this industry helped to create the communities of Hammondville, Ironville, Mineville, Moriah, Port Henry and Witherbee. With the exception of Hammondville, all of these villages exist as viable communities today.

Economic depressions in the 1870's and the eventual depletion of the iron ore and timber reserves led to the eventual demise of the industry. However, the industry would linger until the mid-1960's when the Republic Steel Corporation ceased its Mineville operations.

Faced with large, burdensome landholdings, many of the iron companies disposed of or let their lands go for unpaid taxes. With the creation of the Adirondack Forest Preserve in 1885, many of these lands were acquired by the State and now constitute much of the acreage in the HPWF.

The Sharp Bridge Campground was completed in 1920, and was one of the first ever constructed in the Forest Preserve. It is surrounded by the HPWF. With the advent of the Civilian Conservation Corps in 1933, "spike camps" from a base camp in Port Henry were established in the HPWF. Workers from these camps undertook many projects related to outdoor recreation, forest disease and insect control.

In 1972, the HPWF was codified in the Adirondack Park State Land Master Plan.

#### **Historic Points of Interest**

DEC Sharp Bridge Campground

This is one of the first campgrounds ever constructed in the Adirondack Park, around 1920. The campground is classified as Intensive Use, surrounded by HPWF lands.

#### Cedar Point Road

In 1828, construction of the Cedar Point Road across Moriah, North Hudson and Newcomb was authorized. Its purpose was to connect the Tawhaus iron mines to Lake Champlain for shipping transport. This old road was built across both private and public lands. Some segments are still used as road or trail corridors today, while others fade into the forest. The existing DEC trail near Round Pond and along East Mill Flow is likely located on a section of this historic road.

#### Deadwater

A historic settlement known as Deadwater existed in the Deadwater Pond area, where the New York Serpentarium was located in the 1950s. The Deadwater area was near the site of the 19<sup>th</sup> century Weatherhead's Inn and tavern, where there was also a sawmill. Several inns and taverns were located along Route 9 in the Town of North Hudson (the main north-south route before the Northway was constructed), and many

lumbermen, drivers, sawyers, river-drivers and sportsmen frequented those establishments.

### **Location and Access**

The HPWF is located in the eastern portion of the Adirondack Park in the Towns of Keene, Elizabethtown, Westport, North Hudson, Moriah, Crown Point, Ticonderoga and Schroon in Essex County. The unit is generally bounded on the west by the Giant, High Peaks and Hoffman Notch Wilderness Areas and the Northway (I-87); on the south by



the Pharaoh Lake Wilderness Area and State Route 74; on the east by Lake Champlain; and on the north by State Route 9N. Several additional parcels are located in the Town of Keene.

Due to the proximity of the Adirondack Northway (I-87) exits 28-31 and a network of County, State and Town roads, there are a variety of public access points to the HPWF. These include: Johnson Pond Road, Lincoln Pond Road, Ensign Pond Road (also known as the Moriah-North Hudson Road), Tracey Road and State Routes 9 and 74. DEC's Sharp Bridge Campground offers trail access to East Mill

Brook and a large portion of the unit's interior. The Frontier Town Campground, Equestrian and Day Use Area provides access to the unit near the Northway (I-87) exit 29.

Most of the existing trails in the HPWF are "out and back" trails that provide access for cross-country skiers, hikers, hunters, anglers and campers. Trailheads, along with formal and informal parking areas provide numerous entry points into the area.

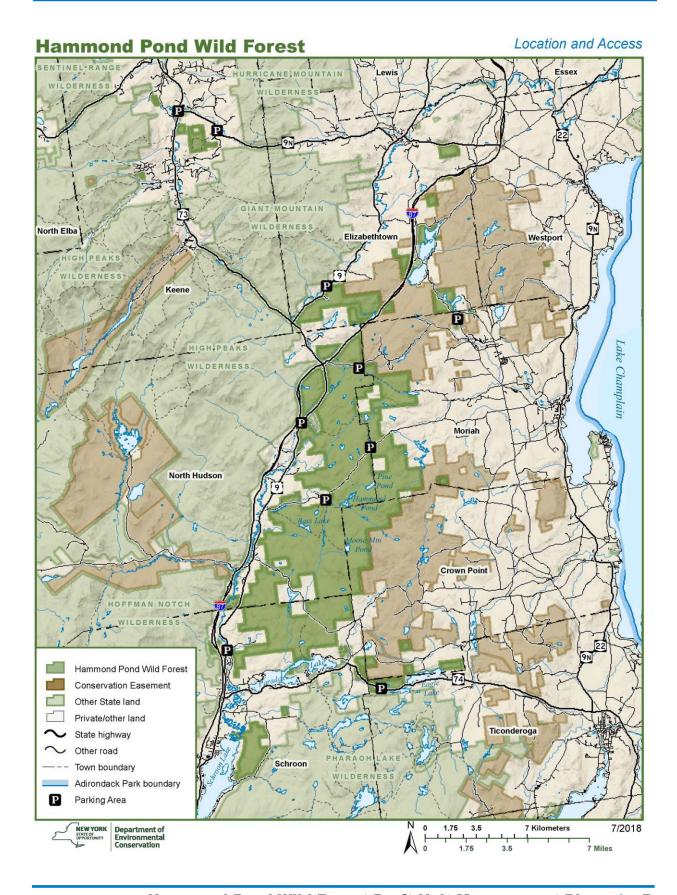
Seasonal water access can be gained via portions of the Schroon River and the Boquet River along State Route 9. Lake access is possible from adjacent larger waters such as Paradox Lake, Eagle Lake and Lincoln Pond.

The 1988 HPWF UMP described several parcels with no legal access. Addition of lands to the HPWF since that time have resulted in some of those parcels no longer being isolated. However, there are several HPWF parcels that currently exist without any legal access. As opportunities present themselves in the future, the Department

## I. Introduction

will consider acquiring lands or rights that make access to these parcels possible. The table below provides information about these parcels.

Parcel Identifier	Lot	Tract	Town	Acres	Status	Book/Page
Little Knob Mountain	29	Paradox	Crown Point	164	No access	193/301
Bald Peak	329	Paradox	Moriah	114	Proposed access via NCNST	198/598
North of Lincoln Pond	197	Iron Ore	Elizabethtown	160	No access	119/400
Kerner Brook	205	Iron Ore	Elizabethtown	30	No access	93/377
Beaver Brook	92	Iron Ore	Westport	45	No access	116/572



# **B. Planning Process and Public Participation**

Article 27, Section 816 of the Executive Law (known as the Adirondack Park Agency Act) mandates the DEC 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.

A Unit Management Plan (UMP) was adopted for the Hammond Pond Wild Forest in March 1988.

The Department began work on this Revised UMP in December 2016, when the Regional Director appointed a team that includes DEC staff from Fisheries, Wildlife, Forest Rangers, Forestry, Operations, and staff from the Adirondack Park Agency. The Department announced the Hammond Pond Wild Forest UMP's planning process via a press release and publication in a local newspaper in January 2017.

# **Scoping/Kickoff Meeting**

The planning process formally began with a public scoping session held at the North Hudson Town Hall on February 16<sup>th</sup>, 2017. The Department gave an overview of the Forest Preserve UMP process, existing opportunities and challenges within the unit, and then those in attendance gave oral comments to the group. In the following weeks and months, individuals, organizations and local governments sent numerous comments to the Department.

# C. General Guidelines and Objectives for Management of the Unit

All of the land covered by this Unit Management Plan is Forest Preserve, and as such, must be managed in a manner consistent with Article XIV, Section 1 of the New York State Constitution. Each sub-section of this UMP contains objectives related to specific uses and/or subjects. The UMP as a whole, 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;
- Environmental Conservation Law;
- Executive Law:
- Department rules, regulations, policies and procedures,

- State Environmental Quality Review Act; and
- Wild, Scenic and Recreational Rivers Act

The following objectives will apply to the implementation of this UMP as a whole:

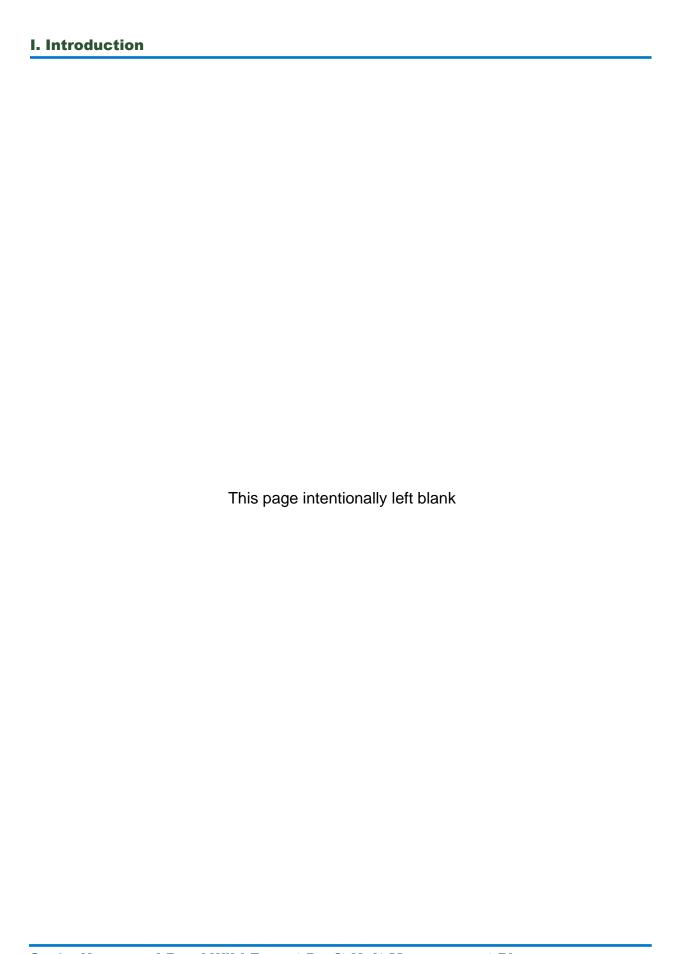
- Prepare a work plan for each construction or major maintenance project;
- Consult the Adirondack Park Agency (APA) on projects in accordance with the current DEC/APA Memorandum of Understanding;
- Comply with the requirements of all applicable laws, regulations, and policies;
- Develop long-term partnerships 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 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, sensitive environmental resources of the unit could be impacted negatively and it is highly likely that the public enjoyment of such resources would decrease.

#### What the Plan Does Not Do

The proposed management actions identified in this UMP are primarily confined to the HPWF lands and waters. Activities on nearby state lands—including Sharp Bridge, Paradox Lake and Lincoln Pond Campgrounds—or private lands, are beyond the scope of this document and will generally be discussed only as they relate to uses and impacts to the HPWF.

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 Master Plan and cannot amend the Master Plan itself.



# **II. Natural Resources**

# A. Geology

The bedrock geology of the HPWF is diverse, preserving over 1 billion years of Earth history. The majority of bedrock exposed in the region belongs to the Grenville Province, which underlies the entirety of the Adirondack Mountains, and extends in a narrow corridor across the St. Lawrence River, through the 1000 Islands region into Canada. The oldest exposed rocks are metamorphosed sedimentary rocks that were deposited in a shallow sea more than 1.2 billion years ago. These rocks are dismembered, deformed, and disrupted by high grade metamorphism and several generations of intrusive igneous plutons. The most abundant intrusive rock within the HPWF is the 1.15-billion-year-old Marcy Anorthosite, a rock type that is composed almost entirely of one mineral: plagioclase feldspar. The anorthosite, with its eastern extent in the Hail Mountain region, continues west, and underlies most of the High Peaks region. Hail Mountain, geologically speaking, could therefore be considered the eastern entrance to the Adirondack High Peaks. Several other anorthosite bodies exist within the Adirondack Mountains, like the Oregon and Snowy Mountain occurrences in the central Adirondacks. Anorthosite complexes similar to the Marcy Anorthosite are special in that they are restricted in both space and time, and do not occur in such quantities at other times in Earth's history. A younger series of intrusions, the Lyon Mountain Granite Gneiss is a pink to light gray rock that hosts many of the historic iron mines in this area. All of the aforementioned rocks originated deep within Earth's crust, and underwent regional strain associated with the amalgamation of the supercontinent Rodinia approximately 1.0 billion years ago. Extensive, sub-vertical, very fine grained, black basaltic dikes occur throughout the region and were emplaced during the break up and subsequent rifting of this supercontinent. These features range from centimeters thick, to tens of meters thick, and are particularly common near major fault zones and along the southern slopes of Skiff Mountain.

Over the next 500 million years the Adirondack metamorphic rocks were slowly uplifted to the surface, eroded, and flooded by a rising ocean. At this time the sea inundated the entire edge of ancient North America and new sediments were deposited in a new continental-scale basin called the lapetus Ocean. Sedimentary rocks such as the Cambrian Potsdam Sandstone and overlying Ordovician Theresa Formation, exposed in the Schroon River, provide local evidence for this ancient ocean. Within the HPWF region, geologic evidence for this event is restricted to linear troughs, such as the valleys of the Schroon River and Penfield Pond, which are ancient fault zones that

dropped the sedimentary units down into structures called grabens. A lack of syndepositional faulting indicates that juxtaposition of these rocks occurred long after sedimentation. The age of this faulting is not as well constrained, but is considered to be Ordovician to Late Cretaceous.

The New York State Geological Association recognizes Split Rock Falls as a unique geologic landform. The falls are located along the Boquet River, which is one of a major set of trending faults and linear valleys that dominate the topography of the eastern Adirondacks.

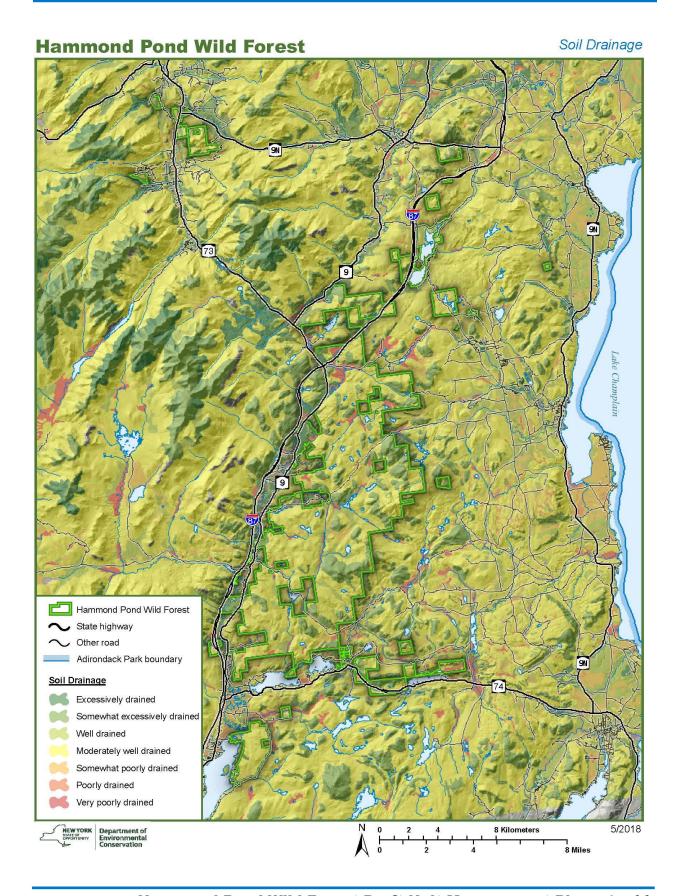
# **B. Soils**

Soils within the HPWF are mostly derived from glacial activity, and can be classified into three very broad categories:

- Glacial Till these soils are a mixture of clay, silt, sand, and stone, are nutrient rich and dominate the upland areas.
- Glacial Outwash these soils are stratified soils deposited as eskers and moraines in areas subject to periods of flash-flooding during the glacial retreat. These soils are low in nutrient-bearing silts and clays.
- Organically derived soils these are rich in vegetative matter in various states of decay, and occur in low lying wetland areas where impeded drainage created saturated soils on top of glacial outwash or bedrock and where upland plants could not survive.

These categories of soils are common within the HPWF, and are considered in the management and planning for use of the unit. In particular, erodibility and drainage are key characteristics that inform management and planning for recreational facilities and resource protection.

Soil conditions are reviewed in much greater detail on a project-level and site-specific basis. For example, a proposed new trail route is broadly assessed using available spatial data. From this, a potential route is field investigated and ground truthed for sustainability based on terrain, slope, vegetation, and drainage. This process is usually fine-tuned in several iterations until the route wholly minimizes trail infrastructure, makes logical sense across the landscape, and avoids potential negative resource impacts (which also maximizes user experience).



# C. Topography

The HPWF is located in between the dramatic topography of the High Peaks region and the Lake Champlain Valley. The topography of the HPWF is composed of mostly mid-elevation hills and slopes, with some significant rock outcrops at the higher elevation summits. Natural features include a variety of rock ridges, streams, wetlands, meadows, lakes and ponds. The most outstanding topographic features are



View from Split Rock Mountain

the summits, including: Bloody Mountain, Hail Mountain, Harris Hill, Bald Peak, Owl Pate, Bald Pate and Baxter Mountain. The Belfry Mountain firetower provides a bird's eye view of the Lake Champlain valley and the Green Mountains of Vermont.

Hail Mountain is the highest summit within the unit at an elevation of 2,598 feet. Notable summits in the unit, that have spectacular views and are proposed for trail access include: Bald Peak (2,313 feet), Bloody Mountain (1,879 feet), Harris Hill (2,208 feet) and Split Rock Mountain (1,948 feet).

The lowest elevations in the HPWF UMP area are located along Lake Champlain. The Port Henry Boat Launch and the outlet of Putnam Creek in the Putts Creek Wildlife Management Area are both at 95 feet in elevation.

## **D. Water Resources**

True to character of the Adirondack region, the HPWF is rich in abundant water resources, which are important components of the natural ecosystems. They provide a wide range of significant aquatic environments across the landscape.



**Boquet River** 

#### **Watercourses**

The majority of the HPWF land area is located in the Upper Hudson River basin, eventually

flowing into the Hudson River. Major rivers in the HPWF follow the generally north-south linear valleys of the eastern Adirondacks, including: Ash Craft Brook, Berrymill Brook, East Mill Brook, the Schroon River, and Paradox Creek.

Waters in the northern periphery of the unit flow through the Boquet and Ausable Rivers into Lake Champlain. These major rivers also follow the generally north-south linear valleys of the eastern Adirondacks, including: the Black River, the Boquet River, and the East Branch Ausable River.

The HPWF land area in the far eastern reaches of the unit flow directly into Lake Champlain. This includes Putnam Creek, which flows into Lake Champlain through Putts Creek Wildlife Management Area, and Mill Brook at the Port Henry Boat Launch.

### Wild, Scenic, and Recreational Rivers

New York State's Wild Scenic and Recreational Rivers System Act (WSRRA) protects those rivers of the State that possess outstanding scenic, ecological, recreational, historic and scientific values. This includes preservation value of fish, wildlife and botanical resources, aesthetics, cultural and historic features. Rivers, and segments of rivers, are legally designated in order to preserve their free flowing condition and protect from development and other negative impacts.

#### East Branch Ausable River

A section of the East Branch Ausable River is designated Recreational in Keene Valley, and flows through or adjacent to several HPWF parcels (for a total of approx. 1.5 miles) in the vicinity of the Route 73/9N intersection.

Boquet River

The Boquet River is designated Recreational as it flows approximately 0.4 miles through the HPWF at Split Rock Falls.

#### Schroon River

The beginning of the Schroon River is located in the HPWF, just above Deadwater Pond, east of Route 9, south of Tracy Road. The Schroon River is a prominent watercourse that is popular for fishing and recreation, as it meanders along the western HPWF area until it flows into Schroon Lake. At its terminus in Warrensburg, the Schroon River is a major tributary to the Hudson River. The entire length of the Schroon River is designated Recreational under the WSRRA.

In 1996, the New York Natural Heritage program described the middle section (approximately 14 miles) of the Schroon River, between the northern part of the Town of North Hudson and Schroon Lake, as "a string of riverside sand and gravel bars on the largest fluvial sand belt in the Adirondacks." This area is described as an exemplary and important ecological community, that is roughly bounded by the Northway (I-87) on the west and State Route 9 on the east. Threats to this river ecosystem include: invasive/exotic species introductions, pollution, siltation, hydrology alterations and human development.

## **Ponded Waters**

There are 53 ponds and lakes associated with the HPWF. These waters range in size from unnamed ponds less than 1 acre in size to the 4,100 acre Schroon Lake. Of the total, 39 lakes/ponds are completely surrounded by HPWF land. The remainder have sections of their shorelines in private ownership, but are still publicly accessible in some capacity. The ownership of the underwater lands is vested with the State on the interior waters and portions of some border waters such as Schroon Lake, Lincoln Pond and Paradox Lake.

Schroon Lake is one of the largest and deepest lakes in the Adirondacks at 4,100 acres in size, with maximum depth of 150 feet. It is an extremely important lake from a fisheries and aquatic resources standpoint. Other large waterbodies include: Eagle Lake, Lincoln Pond and Paradox Lake.

The HPWF also contains a surprising wealth of small ponds, many of which are native brook trout waters.

## **Wetlands**

The APSLMP 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 one acre or more in size or located adjacent to a body of water, including a permanent stream, with which there is a free interchange of water at the surface..." (p. 20).

Wetlands are extraordinarily valuable across landscapes. They have great aesthetic value and offer opportunities for research and 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 not conducive with heavy recreational use.

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 by wetland areas.

Like 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 unit occur along the floodplains of streams and rivers and within and adjacent to deepwater habitats of lakes and ponds.

Available APA wetlands spatial data identifies 1,043 wetlands, totaling 7,798 acres within the HPWF. The table below shows wetland cover types in the HPWF based on

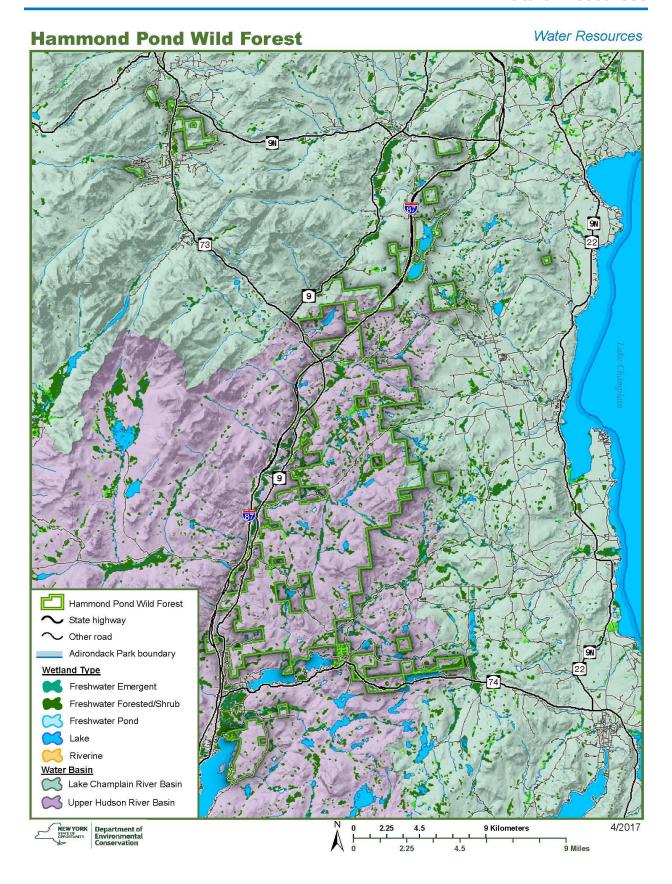
#### II. Natural Resources

National Wetlands Inventory (NWI) classification and APA GIS data. Open water aside, forested evergreen wetlands are the most prevalent cover type in the HPWF.

Wetland Cover Type		% Total Wetland Area
Aquatic bed, rooted vascular	4	0.05%
Persistent Emergent	277	3.55%
Forested, broad-leaved deciduous	208	2.67%
Forested, needle-leaved deciduous	5	0.06%
Forested, needle-leaved evergreen	1619	20.76%
Forested, dead	296	3.80%
Open Water	3649	46.79%
Scrub/shrub (shorter than 6 meters), broad-leaved deciduous	954	12.24%
Scrub/shrub (shorter than 6 meters), broad-leaved evergreen	247	3.16%
Scrub/shrub (shorter than 6 meters), needle-leaved evergreen	494	6.33%
Scrub/shrub (shorter than 6 meters), dead	31	0.39%
Unconsolidated shore - sand	17	0.21%
Total	7798	100%

Wetlands in the HPWF that are located adjacent to open water are of particular value. They provide breeding/spawning habitat, food and cover for many fish and wildlife species, who depend on the wetlands and the adjacent open water. These wetlands are important to the waterbodies, because they can dramatically affect the flow and water quality. Notable wetland areas in the HPWF include: Berrymill Flow (Berrymill Brook), East Mill Flow (East Mill Brook), the large wetland complex at the northern end of Schroon Lake that surrounds the Schroon River, and the wetlands around the East Branch Ausable River in Keene Valley.

East Mill Flow (East Mill Brook) is a large (approximately 70-acre) freshwater emergent wetland. On a statewide scale, freshwater emergent wetlands are being lost, most likely due to agriculture and development. This renders them even more significant, where they exist on protected landscapes such as the HPWF.



# **E.** Vegetation

# **Ecological Communities**

In general, the forests of the HPWF can be categorized into several main ecological communities based primarily on the dominant tree species.

#### Pine-oak-northern hardwood

The pine-oak-northern hardwood cover type is found in the more fertile and well-drained HPWF areas in the Lake Champlain basin and foothills. Typical species include: red oak, white oak, white pine, yellow birch, American beech, basswood, sugar maple



Forest near Peaked Hill Pond

and white ash. The oaks are found in greater frequency on dry ridges and south facing hillsides. The white pine component is usually found in sandy outwash areas along rivers and the adjoining slopes.

## White pine-northern hardwood

The white pine-northern hardwood forest occupies a significant proportion of the land area in the HPWF. This cover type varies across sites, but generally contains a mix of white pine and a variety of northern hardwoods, including: American beech, sugar maple, white birch and yellow birch. Some areas of this cover type emerged following clearcutting for charcoal production.

#### Hemlock-northern hardwood

Hemlock-northern hardwood forests are very prominent across the HPWF, typically occurring on low to middle elevation slopes, bordering wetland areas, in ravines, and on north facing slopes. Species that accompany the hemlock may be a combination of: sugar maple, red maple, American beech, basswood, yellow birch, black birch, red oak and white pine. The shelter provided by a hemlock-dominated closed canopy forest provides a refuge for birds and other wildlife.

The presence of the invasive hemlock woolly adelgid in other parts of New York State is especially concerning for this forest cover type. See Invasive Species section for more information.

## Spruce-fir

While this is a relatively minor cover type in the HPWF, spruce-fir forest areas can be found on either higher summit elevations or low, wet areas near streams and wetlands. The mountain spruce-fir cover type areas are mainly composed of balsam fir and red spruce, usually associated with rock outcrops. The low elevation, wet spruce-fir cover type areas are mainly composed of black spruce, red spruce, balsam fir and red maple.

#### Pioneer hardwood

These early successional forests are common to previously burned over areas and on previously cleared or disturbed areas of the HPWF. This cover type varies greatly, but usually includes a combination of the following species: quaking aspen, paper birch, pin cherry, white pine, black cherry or white ash.

Other forest cover types occur within the HPWF, but occupy comparatively small areas.

## Significant Ecological Communities

Riverside sand/gravel bar - Schroon River

A long section of the Schroon River, between North Hudson and Schroon Lake, is described by New York Natural Heritage Program as the largest fluvial sand belt in the Adirondacks, whose broad river valley forms the eastern edge of the central Adirondacks. This area is generally located between I-87 and Route 9, and despite its proximity to major travel corridors, appears to have maintained an acceptable level of ecological integrity. However, its location also lends itself susceptible to both natural and human disturbances, including: development, fragmentation, and introduction of non-native species.

#### Pitch pine—oak—heath rocky summit

The historically burned southeast-facing ridges of Bloody Mountain and Hail Mountain are a large occurrence of this community type at the extreme reach of its northern range. The pitch pine-oak-heath rocky summit occurs on rocky ridges or summits, and is usually related to a fire regime. Characteristic tree species include pitch pine, red oak, chestnut oak and scarlet oak. Black cherry, red maple, birch species and white pine may also be present. Scrub oak, juniper and blueberry are associated shrubs.

#### Old Growth

A generally accepted definition for old growth forest is the presence of all of the following factors in a forested area:

"An abundance of late successional tree species, at least 180 - 200 years of age in a contiguous forested landscape that has evolved and reproduced itself naturally, with the capacity for self-perpetuation, arranged in a stratified forest structure consisting of multiple growth layers throughout the canopy and forest floor, featuring (1) canopy gaps formed by natural disturbances creating an uneven canopy, and (2) a conspicuous absence of multiple stemmed trees and coppices. Old growth forest sites typically (1) are characterized by an irregular forest floor containing an abundance of coarse woody materials which are often covered by mosses and lichens; (2) show limited signs of human disturbance since European settlement; and (3) have distinct soil horizons that include definite organic, mineral, alluvial accumulation, and unconsolidated layers. The understory displays well developed and diverse surface herbaceous layers" (NYSDEC & NYNHP).

Barbara McMartin's book, *The Great Forest of the Adirondacks*, skillfully chronicled historic land ownership and logging history, and generally described where the oldest forest areas of the Adirondacks are likely to persist. Most of the core land area in the HPWF is part of the Paradox Tract, which is outside (east) of the original Adirondack Park Blue Line. McMartin described that these eastern tracts generally lack old growth forests, although this doesn't mean that there aren't forest stands in the HPWF that exhibit old growth characteristics. The 1988 HPWF UMP described areas around Berrymill Pond and Hammond Pond as *"old growth hemlock, white pine and yellow birch...many diameters exceed 3 feet"* (p. 21). Much of the HPWF land in that vicinity was acquired by the State of New York between the late 1800's and early 1900's (approx. 1870 – 1930).

# Rare, Threatened and Endangered Plants

The New York Natural Heritage Program (NYNHP) documents occurrences of NYS-listed rare, threatened, and endangered species across the state. The following plants have recorded occurrences in the HPWF. This list is not comprehensive, because more species of interest would likely be documented across the HPWF if a comprehensive survey were to be conducted. Species occurrence locations are not disclosed, in order to protect the viability of each community.

Northern running-pine (Diphasiastrum complanatum)

Northern running-pine, also known as Christmas green or ground-cedar, is a member of the clubmoss family (Lycopodiaceae). It is listed as Endangered in New York State (S1), because there are only 6 existing known occurrences statewide, where the species is at the southern edge of its range. Northern running-pine is not listed Federally, and has a Global Rarity Rank of G5, which means that it is a secure species on a global scale, but may be rare at the edges of its range.

Mountain goldenrod (Solidago simplex var. racemosa)

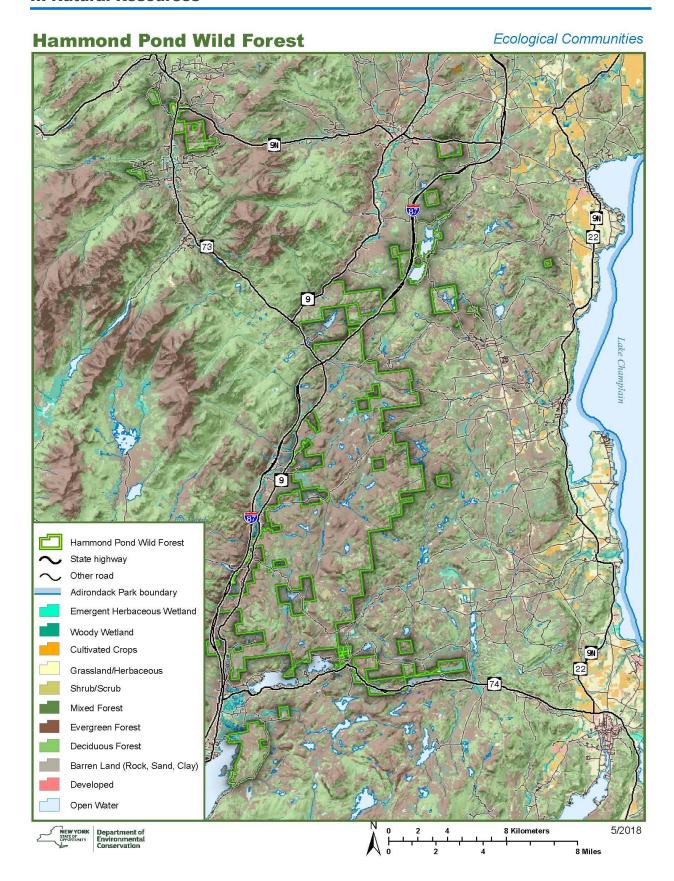
Mountain goldenrod, a member of the Aster (Asteraceae) family, is suited to rock outcrops on or near sunny, open mountain summits in New York. It is listed as Endangered (S1) in New York State because it is only known to exist at two sites statewide.

Northern pondweed (*Potamogeton alpinus*)

Northern pondweed, listed as Threatened (S2) in New York State, has been found at shallow depths of clear, coldwater lakes and slow moving watercourses. Acidification and pollution of pristine waters may threaten Northern pondweed, which occurs in 7 known locations statewide.

Pink wintergreen (Pyrola asarifolia ssp. Asarifolia)

There is a historic record of a pink wintergreen occurrence in the HPWF. Pink wintergreen is a Threatened (S2) species in New York State, and it has been found in forested, shady, mossy, moist peatlands and bogs in the northern part of the state. It is most easily identified in the summer months, when it is flowering.



## **Invasive Species**

#### General

Nonnative, invasive species directly threaten biological diversity and the high quality natural areas in the Adirondack Park. Invasive plant species can alter native plant assemblages, often forming monospecific stands of very low quality forage for native wildlife, and drastically impacting the ecological functions and services of natural systems. Not yet predominant across the Park, invasive plants have the potential to spread - undermining the ecological, recreational, and economic value of the Park's natural resources.



Japanese knotweed. Tom Heutte, USDA Forest Service, www.invasives.org

Because of the Adirondack Park's continuous forested nature and isolation from the normal "commerce" found in other parts of the State, its systems are largely functionally intact. In fact, there is no better opportunity in the global temperate forested ecosystem to forestall and possibly prevent the alteration of natural habitats by invasive plant species.

Prevention of nonnative plant invasions, early detection and rapid response (ED/RR) to existing infestations, and monitoring are primary objectives in the strategy for invasive plant management and necessitates a well-coordinated, area-wide approach. A unique opportunity exists in the Adirondacks to work proactively and collaboratively to detect, contain, or eradicate infestations of invasive plants before they become well established, and to prevent further importation and distribution of invasive species, thus maintaining a high quality natural landscape. The Department shares an inherent obligation to minimize or abate existing threats in order to prevent widespread and costly infestations.

The Department partners with resource managers, non-governmental organizations, industry, citizens, and other State agencies and stakeholders to combat invasive species. Eight Partnerships for Regional Invasive Species Management (PRISMs) exist across New York State. In the Adirondack Park, this PRISM is called the Adirondack Park Invasive Plant Program (APIPP). APIPP coordinates invasive species management functions, including: coordinating partner efforts, recruiting and training citizen volunteers, developing and delivering education and outreach, establishing early detection and monitoring networks, and implementing direct eradication and control efforts.

In March 2018, the Department, APA, and APIPP adopted <u>Inter-Agency Guidelines for Implementing Best Management Practices to Control Invasive Species on DEC</u>

Administered Lands of the Adirondack Park. The goal of the guidelines is to establish Best Management Practices (BMPs) for the control of invasive species, while ensuring that such management activities do not alter the "forever wild" character of the Forest Preserve and comply with all applicable laws, regulations, policies, and other guidance.

Finally, the Adirondack Park is susceptible to new infestations by invasive plant species intentionally or accidentally introduced to the region. While many of these species may not yet be recorded in the park and/or are not currently designated priority species, they may become established within or in proximity to a Forest Preserve unit and require resources to manage, monitor, and control. Ongoing ED/RR efforts are critically important to catch any new infestations before they become a problem.

#### HPWF in Particular

The HPWF's landscape position may make it relatively more susceptible to the introduction and/or establishment of nonnative/invasive species. The unit's western border with the Northway (I-87) and many other secondary travel corridors that crisscross the unit are especially noteworthy, since introductions tend to strongly follow motorized travel corridors (see Invasive Species Map on page 31). The space that the HPWF holds on the eastern edge of the Adirondack Park, near the populous, agricultural Lake Champlain basin also may contribute to its susceptibility.

## Aquatic Invasive Plants

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). Spread prevention is especially critical with aquatic invasives. All aquatic invasives pose a risk of spreading via both motorized and non-motorized watercraft, seaplanes, and associated gear and accessories.

HPWF Waters with Known Aquatic Invasives

Several of the larger water bodies in the HPWF have been surveyed for aquatic invasives, and in 2015 APIPP released a "2015 Aquatic Invasive Species Distribution Map and Table." This was the result of a partnership with the Department, and identifies invaded and non-invaded Adirondack Lakes, based on existing, known data and new surveys. Waters not surveyed may still contain invasives, and waters listed as "no invasives observed" merely indicates that none were detected at that time, does not preclude the possibility of their existence.

This data shows that the following HPWF and adjacent large waters contain the following aquatic invasives:

- Lincoln Pond Eurasian watermilfoil
- Eagle Lake Eurasian watermilfoil and curly-leaf pondweed
- Paradox Lake Eurasian watermilfoil, curly-leaf pondweed and variable-leaf milfoil
- Schroon Lake Eurasian watermilfoil and curly-leaf pondweed

#### Terrestrial Invasive Plants

There are four terrestrial invasive species whose existing recorded extent are priority target species. These are: purple loosestrife (Lythrum salicaria), common reed (Phragmites australis), Japanese knotweed (Polygonum cuspidatum) and garlic mustard (Alliaria petiolata). This target priority is based on their geophysical setting, abundance and distribution, multiple transport vectors, and likelihood of human-influenced disturbance. The vast majority of these species' known infestations occur along road corridors, where soil disturbance, vegetation management, and development are most prominent.

Infestations of these priority species located within and in proximity to a unit may expand and spread to uninfected areas and threaten natural resources within a unit. It is therefore critical to identify all infestations located both within and in proximity to a unit and then assess high risk areas for further spread or forest-interior invasion, and prioritize management efforts accordingly.

#### Forest Health

Many factors can affect the health of a plant community but typically fall into one of two categories - physical or biological. Physical factors influencing forest health in the HPWF are often weather-related and may include lightning strikes, wind events, ice storms, drought, and wildfires.

Biological factors influencing forest health include insect and disease outbreaks, wildlife activity (e.g. deer herbivory, beavers, etc.) and invasive species.

Additionally, environmental factors such as salt damage to roadside trees and acid deposition may impact the health of trees and understory plants.

Several insects and diseases have impacted and continue to impact forest communities in the Adirondack region and New York State. They pose a threat to the health of the forests within the HPWF UMP area.

#### Beech Bark Disease

This disease is an insect-fungus complex that has caused extensive mortality of American beech across northeastern North America. The disease has two parts - an insect vector, the beech scale (*Cryptococcus fagisuga*) and a fungal pathogen (*Nectria coccinea* var. *faginata* or *Nectria galligena*) that attacks the tree via entrance wounds created by the scale insect. Beech bark disease is prevalent across the unit and is contributing greatly to the mortality of overstory beech trees. This shift in species composition of the overstory trees affects wildlife species that consume beech nuts as well as those cavity-dependent species that require large dead and dying trees for den and nest sites.

## Emerald Ash Borer (EAB)

The emerald ash borer (*Agrilus planipennis*), an exotic wood-boring insect from Asia, attacks native ash species and has become established in New York and other Midwestern and Northeastern states, as well as in Ontario, Canada. EAB was discovered in New York State in Cattaraugus County and also near the Catskills. The species has caused extensive mortality to ash species, which usually die within 2-4 years of becoming infested. Although ash is a relatively minor component of HPWF forests, it seems likely that EAB will eventually infect those trees.

### Hemlock Woolly Adelgid (HWA)

HWA (*Adelges tsugae*) is an invasive, aphid-like insect that attacks North American hemlock trees. HWA are very small (1.5 mm) and often hard to see, but they can be easily identified by the white woolly masses they form on the underside of branches at the base of the needles. These masses, or ovisacs, can contain up to 200 eggs and remain present throughout the year. Once hatched, juvenile HWA, known as crawlers, search for suitable sites on the host tree, usually at the base of the needles. They insert their long mouthparts and begin feeding on the tree's stored starches. HWA 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.

In the summer of 2017, HWA was discovered for the first time in the Adirondack Forest Preserve, in the Town of Lake George. Due to the limited extent of the infestation, the Department and its partners were able to treat the area and hopefully eliminate what is thought to be an isolated infestation. Since 2017, monitoring efforts have increased in the southern Adirondacks.

HWA is particularly concerning for the large eastern hemlock component of the core HPWF land area.

## Balsam Woolly Adelgid

Balsam woolly adelgid (*Adelgaes piceae*), a pest of true fir species, was introduced into the U.S. from overseas around the turn of the century. Since then, it has spread throughout the U.S. and Canada. Certain areas of the Adirondacks, such as the Town of Indian Lake, are known to contain significant outbreaks of this pest, while other areas might contain much less.

## Forest Tent Caterpillar

The forest tent caterpillar (*Malacosoma disstria*) is a native insect that 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 utilized.

## Gyspy Moth

Gypsy moth (*Lymantria dispar*) is a hardwood defoliator that has the potential to affect forest health in the unit. Gypsy moth caterpillars feed extensively on oak and willow species, although during severe outbreaks, they will feed on most hardwood species. Since being intentionally introduced to the United States during the 1800s, gypsy moths have become naturalized over much of the eastern United States.

#### II. Natural Resources

#### Oak Wilt

Oak wilt is a disease that affects oak trees. It is caused by *Ceratocystis fagacearum*, a fungus that 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

White pine decline has been attributed to several factors over the last decade or so, including white pine blister rust, *Caliciopsis* canker, *Armillaria* root disease, and several needle casts and blights. White pine decline has recently been listed as a northeastern forest health priority, since there are mature white pine stands from Maine to Pennsylvania suffering significant levels of decline. Transition forests around wetlands seem particularly vulnerable to white pine decline agents as these stands seem to suffer more from seasonal droughts.

### Asian Longhorned Beetle (ALB)

ALB (*Anoplophora glabripennis*) is an invasive wood-boring insect that feeds on a variety of hardwoods including maple, birch, elm, ash, poplar, horsechestnut, and willow, among others. Native to China and Korea, the beetles are approximately 1.5 inches long and shiny black, with white spots on their wing cases. They have black and white antennae that can be up to twice as long as their body.

In 1996, ALB were found infesting Norway maple trees in Brooklyn. Larvae and pupae likely hitchhiked from China in wooden packing material and the adult beetles emerged after the materials reached the New York Harbor. Additional infestations were later discovered in Manhattan, Queens, Staten Island, Islip and central Long Island. To date, the Manhattan, eastern Queens, Staten Island, and Islip infestation sites have been eradicated.

The most significant risk for ALB infestation expansion is human transportation of firewood.

# **Proposed Management**

**Objective:** Protect native aquatic ecosystems; prevent introduction and stop the establishment of aquatic invasive plants.

## **Action Steps**

- Manage aquatic invasive species pursuant to <u>Inter-Agency Guidelines for Implementing Best Management Practices to Control Invasive Species on DEC Administered Lands of the Adirondack Park.</u>
- 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.
- Periodically review staffing, training, and licensure needs to establish capacity to provide invasive species monitoring and response.

**Objective:** Allow natural processes to freely operate to ensure that the succession of native plant communities is not altered by human use, including the prevention of non-native invasive species spread and establishment.

# Action Steps

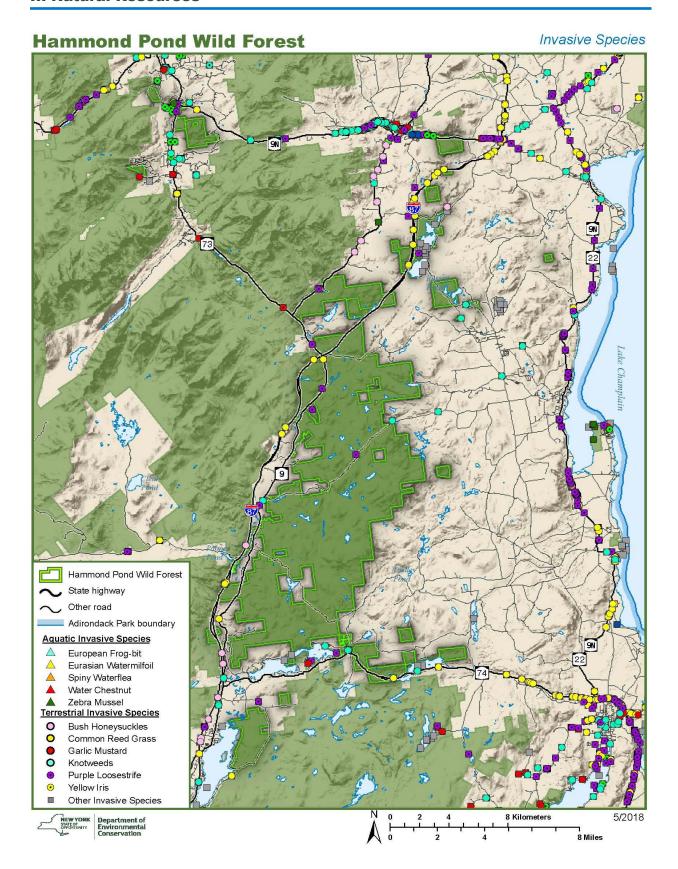
- Where applicable, manage/eradicate invasive species and forest pests pursuant to <u>Inter-Agency Guidelines for Implementing Best Management Practices to</u> Control Invasive Species on DEC Administered Lands of the Adirondack Park.
- Educate natural resource managers, elected officials and the public 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.

**Objective:** Anticipate, prevent the spread of, and mitigate the impacts of forest pests.

## **Action Steps**

- 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.
- 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 gypsy moth, employ annual surveys or influence other professional survey activities to assess the population by evaluating visible defoliation. Develop a red oak value inventory to assign priorities for further monitoring or more intensive sampling to predict defoliation and subsequent red oak decline or mortality.
- For oak wilt, annually monitor for severe, spot or small area decline or mortality in red oak stands. Where symptoms are evident, collect damaged twig samples and/or photographs and forward them to the Forest Health Diagnostic Laboratory.
- 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 specifically 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 Asian longhorned beetle, provide outreach and education to camping visitors in and around the HPWF about the potential impacts of transporting firewood.



# F. Wildlife & Hunting

## **Existing Conditions**

#### Mammals

A wide variety of mammal species inhabit the HPWF, which are representative of the eastern Adirondacks. However, survey data are mostly lacking for mammals in the Adirondack Forest Preserve. The Department has conducted moose and carnivore

surveys in the HPWF 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,



Fisher detected with a camera trap in HPWF, 2018.

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 (except for 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 eastern 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 eastern Adirondacks 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 have the potential to encounter a bear, and negative interactions between black bears, mainly related to bears stealing food from humans, happens on an annual basis in this region. Although bear resistant containers are not required in this unit, the DEC still recommends the use of bear resistant containers to help avoid human-bear conflicts.

#### Moose

Moose entered the state on a continuous basis in 1980, 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 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 12 transects that were partially within the HPWF; however, no moose were observed during these surveys.

Although no moose have been observed during Bureau of Wildlife aerial moose surveys, there have been confirmed sightings of moose from members of the public on and immediately adjacent to HPWF in recent years. Forests in the unit are comprised

primarily of mature second-growth stands and therefore do not represent high-quality moose habitat. However, this unit may act as an important corridor between more suitable moose habitat in the northern and western Adirondacks, and larger moose populations to the east in Vermont.

#### American marten

American marten populations in New York State are geographically-isolated within the higher elevations of the central Adirondacks (in general, ≥ 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, 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 mi<sup>2</sup>) 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). A recent marten habitat suitability model for the Adirondack region (P. Jensen, NYSDEC, unpublished data) indicated that the HPWF contains mostly suitable marten habitat which may be facilitating movements and dispersal of juvenile martens from the High Peaks region through the eastern Adirondacks including HPWF and Pharaoh Lake Wilderness Area.

Additionally, the Bureau of Wildlife conducted forest carnivore surveys using camera traps at 197 sample units in the Adirondacks and Tug Hill region during the winters of 2016-2018. During the study, staff detected American martens, fishers, red fox, weasels, raccoons, and coyotes in HPWF.

#### 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 HPWF (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.

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	Condylura crestata	6
hairy-tailed mole	Parascalops breweri	11
short-tailed shrew	Blarina brevicauda	31
pygmy shrew	Sorex hoyi	1
long-tailed shrew	Sorex dispar	7
smoky shrew	Sorex fumeus	18
water shrew	Sorex palustris	10
masked shrew	Sorex cinereus	25
deer mouse	Peromyscus maniculatus	26
white-footed mouse	Peromyscus leucopus	14
southern red-backed vole	Clethrionomys gapperi	32
meadow vole	Microtus pennsylvanicus	31
yellownose vole	Microtus chrotorrhinus	6
woodland vole	Microtus pinetorum	1
southern bog lemming	Synaptomys cooperi	12
northern bog lemming	Synaptomys borealis	1
meadow jumping mouse	Zapus hudsonicus	22
woodland jumping mouse	Napaeozapus insignis	25

#### **Birds**

The avian community of HPWF 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 135 and 138 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 HPWF. Therefore, these data do not necessarily reflect what is found on the forest, 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.

Of special note in the HPWF, in relation to birds, is the Belfry Mountain fire tower. It is a well-known spot in the birdwatching community to observe migrating hawks, eagles,

and other raptors as they make their way through the Champlain Valley every spring and fall.

#### Birds Associated with Boreal Forest

The HPWF contains lowland boreal forest habitats that are significant for a variety of birds. In total, lowland boreal forest comprises approximately 3,318 acres of this forest, which occurs primarily in the main part of the unit from Johnson Pond northeast to Crowfoot Pond.

Of 27 bird species associated with boreal forest that occur in New York (Tim Post, NYSDEC, personal communication), 16 have been documented in BBA survey blocks within, or partially within, this forest. During the two BBA projects, 9 species of lowland boreal forest birds, 3 species of high elevation boreal forest birds, and 4 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; olive-sided flycatcher and ruby-crowned kinglet were documented in the second atlas project but not the first. American Three-toed woodpecker, bay-breasted warbler, Bicknell's thrush, black-backed woodpecker, boreal chickadee, Cape May warbler, Connecticut Warbler, gray jay, palm warbler, spruce grouse, and Tennessee 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 HPWF.

Common Name	Scientific Name			
Lowland Boreal Forest Species				
Lincoln's sparrow	Melospiza lincolnii			
olive-sided flycatcher	Contopus cooperi			
pine siskin	Carduelis pinus			
red crossbill	Loxia curvirostra			
ruby-crowned kinglet	Regulus calendula			
rusty blackbird	Euphagus carolinus			
white-throated sparrow	Zonotrichia albicollis			
white-winged crossbill	Loxia leucoptera			
yellow-bellied flycatcher	Empidonax flaviventris			
High Elevation Boreal Forest Species				
blackpoll warbler	Dendroica striata			
Swainson's thrush	Catharus ustulatus			
winter wren	Troglodytes			
Species Commonly Associated with Boreal Forest				
blackburnian warbler	Dendroica fusca			
evening grosbeak	Coccothraustes vespertinus			
magnolia warbler	Dendroica magnolia			
northern parula	Parula americana			

#### Other Bird-Habitat Associations

In addition to boreal and mixed-boreal forests, other habitat 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, Bluewinged 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 Broadwinged 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 24 species of reptiles and amphibians in USGS Quadrangles within, or partially within the HPWF. 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 forest, 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, five 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 24-confirmed species, two were classified as special concern (wood turtle & Jefferson Salamander Complex) and none were classified as endangered or threatened. Three occurrences of wood turtle were documented in

#### **II. Natural Resources**

quadrangles within, or partially within, the forest. One occurrence of Jefferson salamander complex was documented in a quadrangle within, or partially within, the forest.

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

Common Name	Scientific Name	
Jefferson salamander complex <sup>a</sup>	Ambystoma jeffersonianum x laterale	
spotted salamander	Ambystoma maculatum	
eastern newt	Notophthalmus v. viridescens	
northern dusky salamander	Desmognathus fuscus	
northern redback salamander	Plethodon cinereus	
northern spring salamander	Gyrinophilus p. porphyriticus	
northern two-lined salamander	Eurycea bislineata	
eastern American toad	Bufo a. americanus	
gray treefrog	Hyla versicolor	
northern spring peeper	Pseudacris c. crucifer	
bullfrog	Rana catesbeiana	
green frog	Rana clamitans melanota	
mink frog	Rana septentrionalis	
wood frog	Rana sylvatica	
northern leopard frog	Rana pipiens	
pickerel frog	Rana palustris	
common snapping turtle	Chelydra s. serpentina	
wood turtle <sup>a</sup>	Glyptemys insculpta	
painted turtle	Chrysemys picta	
northern water snake	Nerodia s. sipedon	
northern brown snake	Storeria d. dekayi	
northern redbelly snake	Storeria o. occiptomaculata	
common garter snake	Thamnophis sirtalis	
eastern milk snake	Lampropeltis t. triangulum	

<sup>&</sup>lt;sup>a</sup>Special 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:

<u>Endangered</u>: 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.

#### II. Natural Resources

<u>Threatened</u>: 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.

<u>Special Concern</u>: 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 HPWF.

Table 4. New York State-listed endangered, threatened, and special concern species documented in survey blocks within, or partially within, the HPWF. 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.

Birds		Breeding Bird Atlas Project	
Common Name	Scientific Name	1980-1985	2000-2005
En	dangered		
peregrine falcon <sup>a</sup>	Falco peregrinus	X	Х
Th	reatened		
bald eagle	Haliaeetus leucocephalus		Х
least bittern <sup>a</sup>	Ixobrychus exilis		Х
northern harrier <sup>a</sup>	Circus cyaneus		Х
Spec	ial Concern		
American bittern	Botaurus lentiginosus	Х	Х
common loon	Gavia immer	Х	Х
Cooper's hawk	Accipiter cooperii	Х	Х
osprey	Pandion haliaetus	Х	Х
sharp-shinned hawk	Accipiter striatus	Х	Х
northern goshawk	Accipiter gentilis	Х	
common nighthawk	Chordeiles minor	Х	Х
red-shouldered hawk	Buteo lineatus	Х	Х
golden-winged warbler	Vermivora chrysoptera	Х	
whip-poor-will	Caprimulgus vociferus	Х	Х
Amphibia	ans and Reptiles	Amphibian and Reptile Project	
Common Name	Scientific Name	1990-1999	
Spec	ial Concern		
Jefferson Salamander Complex	Ambystoma jeffersonianum x laterale	x	
wood turtle	Clemmys insculpta	х	
N	lammals	New York Natural Heritage Program	
Common Name	Scientific Name		
En	dangered		
Indiana bat	Myotis sodalis	х	
Th	reatened		
northern long-eared bat Myotis septentrionalis			х
Spec	ial Concern		
eastern small-footed bat Myotis leibii			Х

<sup>&</sup>lt;sup>a</sup>Also documented by New York Natural Heritage Program (NYNHP) staff.

#### 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. 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, however, there are two records of historic golden eagle nests within Hammond Pond Wild Forest. One nest was located on the cliffs north of Birch Pond and was occupied until the mid-1950's. The other nest was located on cliffs adjacent to Eagles Nest Pond, and showed signs of nesting activity until the early 1970's. 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 there are no lynx from the initial releases or through natural reproduction of released animals remaining 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 level.

The wolf and eastern cougar are still considered to be extirpated from NYS. 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\_j001.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).

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 unit from historical aerial surveys conducted by NYSDEC in the 1950's and 1960's. These general areas were located within extensive wetland complexes and riparian forest and include:

- East Mill Flow and East Mill Brook to the Schroon River
- Schroon River from Courtney Pond South to Jug Pond
- Ash Craft Brook from Birch Pond to Lincoln Pond
- Terminal of the Schroon River at Schroon Lake
- Paragon Brook between Paradox Lake and Eagle Lake
- Lowland area between Penfield Pond and Eagle Lake

- Area directly East of Route 9 up to and including Carey Marsh
- Area around Stevens Pond
- Area of Berrymill Brook Northwest of Owl Pate
- Area from Black Brook Ponds Northwest to Bloody Pond
- Black Brook northeast to and surrounding Pine Pond
- Schroon River from Lindsay Brook South to Lindsay Falls

A more recent predictive GIS model of deer wintering habitat (S. McNulty, Adirondack Ecological Center, unpublished data) suggest additional areas of potential deer wintering habitat throughout the HPWF, with more contiguous areas including:

- A large wetland area along Berrymill Brook from Johnson Pond to Hammond Pond
- Lowland areas surrounding Schroon River
- A wetland complex surrounding Twin Ponds, Munson Pond, Brother Ponds, and Round Pond

#### 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.

In summary, general guidelines for protecting deer wintering areas include:

- Within travel corridors between core wintering areas, avoid placement of trails within a 100 foot buffer on either side of streams.
- Avoid placement of trails through core segments of deer yards to reduce disturbance associated with users stopping to observe deer,
- Trails should not traverse core segments of deer yards in areas adjacent to densely populated areas such as hamlets, villages, or along roadsides developed with human habitation because they provide access to free roaming dogs,
- In areas with nearby human habitation, avoid land uses which result in remnant trails, roadways or other access lanes which facilitate accessibility to freeroaming dogs.

#### Peregrine Falcon Nesting Areas

Although currently classified as an endangered species, Peregrine Falcon populations in New York State have steadily grown due to a successful hacking program initiated by the Department in the Adirondack region in the late 1970s. Peregrines first mate when they are 1-3 years old and lay 3-5 eggs. The same nesting ledge, called an eyrie, may be used year after year. Nesting sites usually include a partially-vegetated ledge (with both herbaceous and woody species) that is large enough for at least several young to move about during the pre-fledging period. The nest is a well-rounded scrape which consists of a shallow depression in the gravel and is sometimes lined with grass. Ideally, the eyrie ledge is also sheltered by an overhang that protects the chicks from inclement weather. Occasionally, Peregrines may nest in old Common Raven nests. Eyries are aggressively protected against predators, and humans, by both the male and female Peregrine. The young hatch after a 28-33-day incubation period. Each chick will stay in and around the nest until it fledges at 35-45 days of age. Young will stay with the parents for a few more weeks to perfect their flying and hunting skills. As cooler weather approaches, peregrines begin to migrate south. In the spring, peregrines tend to return to the same region from which they fledged.

Peregrine falcons were documented in HPWF during both Breeding Bird Atlas projects. There are currently two active or recently active peregrine falcon nesting sites within or immediately adjacent to the HPWF. The first is at Broughton Ledge, which had a breeding pair in 2015 when it was last surveyed. The site has fledged 38 young from 1984-2015. The second site is at Knob Mountain, where adults were observed in 2013, when it was last visited. The site has fledged 15 young from 1984-2012.

#### Peregrine Falcons and Rock Climbers

Human disturbances, such as rock climbing on cliffs containing eyries, can be a potential problem to nesting Peregrines. Human disturbance within the territory of a breeding pair may result in nest abandonment and/or death of the young. Rock climbing routes with known Peregrine Falcon nesting sites are monitored by the Department annually throughout the Adirondacks. Rock climbing routes with active nest sites are temporarily closed to prevent any disturbances that might interfere with the successful raising of the young. The closure of climbing routes is based on a number of factors, including the route's proximity to a nesting site, observations of alarm behavior by the nesting falcons, and professional judgement by Department staff. The specific areas of the cliff that are closed to rock climbing represent a balance between the recreational interests of climbers and the need to protect the breeding and nesting activities of this endangered species. The Department's priority is protecting endangered species; however, attempts are made to maximize the opportunities for climbing at the same time. This is the reason why individual rock climbing routes are closed rather than entire cliffs.

In summary, the Department stresses the following points to Adirondack rock climbers:

- Peregrine Falcons are an endangered species and are protected under state and federal law.
- Human disturbance within the territory of a breeding pair may result in nest abandonment and/or death of the young,
- Certain rock climbing routes are closed and illegal to climb during the breeding season, and
- Falcons are very territorial and will utilize their razor-sharp talons in defense of their domain, including attacks on humans.

#### Bat Hibernacula

Some species of bats hibernate in caves and abandoned mines during winter; these areas, known as hibernacula, are critically important for the survival of several bat species in New York. Unfortunately, White Nose Syndrome (WNS) has devastated cave bat populations in New York and other areas of the northeastern U.S., reducing populations by more than 90% (see <a href="http://www.dec.ny.gov/animals/45088.html">http://www.dec.ny.gov/animals/45088.html</a>). Bureau of wildlife staff visit multiple bat hibernacula around the state each winter to count the number of individuals of each species seen. These counts are not meant to obtain a population size of an individual species at a site, but rather to get an index to population size which can be used to estimate trends. There are no known bat hibernacula located

within the HPWF, but some of the largest and most important hibernacula in the state and northeast occur on lands adjacent to the unit. These hibernacula, which are used by the state and federally-listed endangered Indiana bat (*Myotis sodalis*), threatened northern long-eared bat (*Myotis septentrionalis*), and other species of bats are close enough to the HPWF that individuals that use them in the winter may occupy sites directly on the forest during the summer for foraging and raising young.

#### Guidelines for Protection of Bat Hibernacula

In an effort to protect our bat populations, the Department urges outdoor adventurers to suspend exploration of caves and mines that serve as bat hibernation sites (see <a href="https://www.whitenosesyndrome.org/what-can-you-do-help">https://www.whitenosesyndrome.org/what-can-you-do-help</a> for other recommendations). Research conducted by the Department and its partners has demonstrated that WNS makes bats highly susceptible to disturbances and even a single, seemingly quiet visit can kill bats that would otherwise survive the winter. Experts believe that when bats are disturbed during hibernation periods, it forces them to raise their body temperatures, which causes their limited fat reserves to be depleted. Ultimately, this places the bats in a compromised state which can often lead to death. The Department may post notices restricting the use of caves and mines.

In summary, the Department stresses the following points to cavers:

- Several cave bat species are protected by state and federal laws,
- Cavers should avoid any caves from October 1<sup>st</sup> to April 30<sup>th</sup> which are known to have hibernating bats in them,
- Follow all posted notices and gates restricting the use of caves or mines,
- If you encounter hibernating bats while underground, you should leave as quickly and quietly as possible, and
- Cavers should properly disinfect all gear between visits to different caves or mines

#### Common Loon Nesting Areas

The common loon (*Gavia immer*), referred to as the "spirit of the northern waters," is often recognized as a symbol for pristine wilderness. In New York, they breed on large ponds and lakes throughout the Adirondack and St. Lawrence river valley regions. Loons commonly nest in boggy or marshy areas, or along the shoreline of islands, where they build a nest made of natural materials along the water's edge since they have trouble walking more than a few steps on land. Once eggs hatch, adults will move their young to a secluded area near the nest to raise them.

Their population in New York has been increasing since the 1970's, and is partially attributed to more stringent regulations being placed on power plants and factories in the Midwest, along with the ban of DDT. With an increase in population size over the last 50 years, there has also been an increase of tourists and seasonal residents to the Adirondack region, especially near water bodies, which has led to an increase in human conflicts with loons. The main threats to breeding loons include polluted water, human disturbance around nesting and nursery areas, and the ingestion of lead fishing tackle.

In the HPWF, common loons are known breeders on the following bodies of water: Eagle Lake, Johnson Pond, Lincoln Pond, Mill Pond, Paradox Lake, and Schroon Lake. Additionally, adults will utilize other ponds or lakes over 25 acres with a healthy fish population for foraging throughout the year, especially before nesting, if they are non-breeding adults, if nests fail and adults do not re-nest, or after young become independent.

#### Common Loons and Anglers/Boaters

As loon populations have increased, several impacts to loons have become known to wildlife managers. The use of lead tackle by anglers has led to the decreased health or death of many loons in the region. Loons can unknowingly pick up lead split shot from the lake bottom that they mistake for small pebbles and grit, which is normally ingested to help grind up food in their muscular stomachs. Loons can also ingest lead tackle if they consume a fish that has broken an anglers line with lead tackle attached to it, and will even mistakenly go after lures and rigs that are actively being pulled through the water. Another major issue that loons face is fishing line entanglement. Loons can become entangled in discarded or lost monofilament fishing line, which can permanently injure or kill loon. Boaters can unknowingly disturb nesting loons by getting too close to them. This can cause loons to leave their nests, which can lead to egg predation, overheating, chilling, and even nest abandonment. Finally, boats traveling at high rates of speed close to the shoreline can cause wakes large enough that nests can be flooded out and destroyed. Signs have been placed at water access points like boat launches, campgrounds, and beaches throughout the Adirondack region which are used to educate the public about these and other impacts to loons.

In summary, the Department stresses the following points to anglers and boaters:

 Common loons are a species of special concern and are protected under state law,

- If any nesting loons are observed, give them at least 300 feet to avoid flushing loons off their nests,
- Anglers should avoid using lead tackle whenever possible, especially anything under one ounce,
- Anglers should avoid leaving any fishing line behind, which loons can become entangled in, and
- A no wake zone should be followed within 200 feet of any shoreline to avoid the destruction of nests.

#### **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 DEC 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.

#### **Past Management**

Past wildlife management actions on the HPWF have been limited to those actions authorized under Article 11 of the ECL described above and statewide or regional wildlife surveys (for example, BBA, carnivore surveys, moose surveys) described in the inventory section.

#### **Proposed Wildlife Management Objectives and Actions**

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 this forest. This priority is reflected under the list of management actions outlined below.

#### Objective:

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.

#### Action Steps:

- Manage and protect wildlife through enforcement of the Environmental Conservation Law and applicable Rules and Regulations.
- Support traditional use of the forest's wildlife resources, particularly activities designed to perpetuate hunting and trapping programs and education efforts.

#### Objective:

Assure that wildlife populations are of appropriate size and adequately protected to meet the demands placed on them, including consumptive and non-consumptive uses.

#### Action Steps:

- 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).

#### Objective:

Increase understanding of the occurrence, distribution, and ecology of game and nongame wildlife species and their habitats.

# Action Steps:

- 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.
- Conduct surveys for American marten to better understand changes in abundance and distribution.
- Continue aerial surveys for moose, monitor existing radio-collared moose, and continue collaring new individuals on an opportunistic basis.

- Support future statewide and regional survey efforts that increase our understanding of the occurrence and distribution of flora, fauna, and significant ecological communities (e.g., Mammal Atlas, Breeding Bird Atlas, New York Natural Heritage Program surveys).
- Re-establish or augment, to the extent possible, self-sustaining wildlife
  populations of species that are extirpated, endangered, threatened or of
  special concern in habitats where their existence will be compatible with other
  elements of the ecosystem and human use of the area.

#### Objective:

Minimize wildlife damage and nuisance problems.

#### **Action Steps:**

- Provide information, advice and/or direct assistance to requests for relief from, or solutions to reduce or alleviate problems with nuisance wildlife.
- Provide information to user groups on avoiding problems associated with black bears. Encourage the voluntary use of bear-resistant food canisters.
- Work cooperatively with the Division of Lands and Forests to 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.

#### Objective:

Meet the public's desire for information about wildlife and its conservation, use, and enjoyment.

### **Action Steps:**

 Provide information, advice, and assistance to individuals, groups, organizations, and agencies interested in wildlife resources and whose actions may affect these resources.

# G. Fisheries & Fishing

# **Existing Conditions**

The HPWF contains an impressive collection of fishing opportunities for a relatively small land unit. Although the unit's roster of waters includes four lakes larger than 400 acres, the area is best characterized by its wealth of small ponds, many of which feature the native brook trout. Combined with the nearby Pharaoh Lake Wilderness Area to the

south, this larger area provides some of the best pond fishing for brook trout in the Adirondacks. The unit also has an abundance of warmwater fishing, primarily for bass and sunfish. Three of the larger lakes are considered two-story waters; they support both coldwater and warmwater fisheries.

One of the primary challenges to managing brook trout ponds is the introduction of unwanted fish species, which can decimate a brook trout population. Brook trout evolved in simple aquatic systems in the Adirondacks and generally do not fare well with competition from other fish species. They thrive on a diet of insects and other invertebrates and do not require any forage fishes. Special regulations have therefore been enacted that prohibit the use of baitfish for a handful of ponds in the unit.

There are more than fifty ponded waters in the unit ranging from small (less than one acre) ponds to 4,100-acre Schroon Lake. Most of the waters are part of the Upper Hudson watershed and generally drain towards the Schroon River on the west side of the unit and then south, eventually reaching the Hudson River near Warrensburg. Seven waters, located along the eastern perimeter, are part of the Champlain drainage. These waters flow to the north and then east on their way to Lake Champlain.

There are three public fishing access sites with parking along Putnam Creek in the Town of Crown Point. These sites provide parking and access to the creek, and are solely designed for fishing use.

#### Schroon River

The lotic resources of the unit are dominated by the Schroon River, which forms much of the western boundary of the unit. The river originates in the northern part of the Hammond Pond Wild Forest near Ash Craft Pond, as it begins its approximately 70-mile journey to the Hudson River. The Schroon River offers both coldwater and warmwater fishing opportunities and is currently stocked with brown trout and landlocked Atlantic salmon fry.

There is an existing wooden fish weir structure spanning the Schroon River, at the end of the Schroon River Road. This weir was first built in 1944, in order to serve two purposes. The first was to block upstream movement of warmwater fish into landlocked salmon spawning areas, and the second was to facilitate the capture of landlocked salmon for the purpose of collecting eggs. Sometime in the late 1950s or early 1960s, salmon runs declined and the weir stopped being used and maintained. The weir structure was rebuilt in the 1980's but not really used again for fisheries management.

#### **Proposed Management**

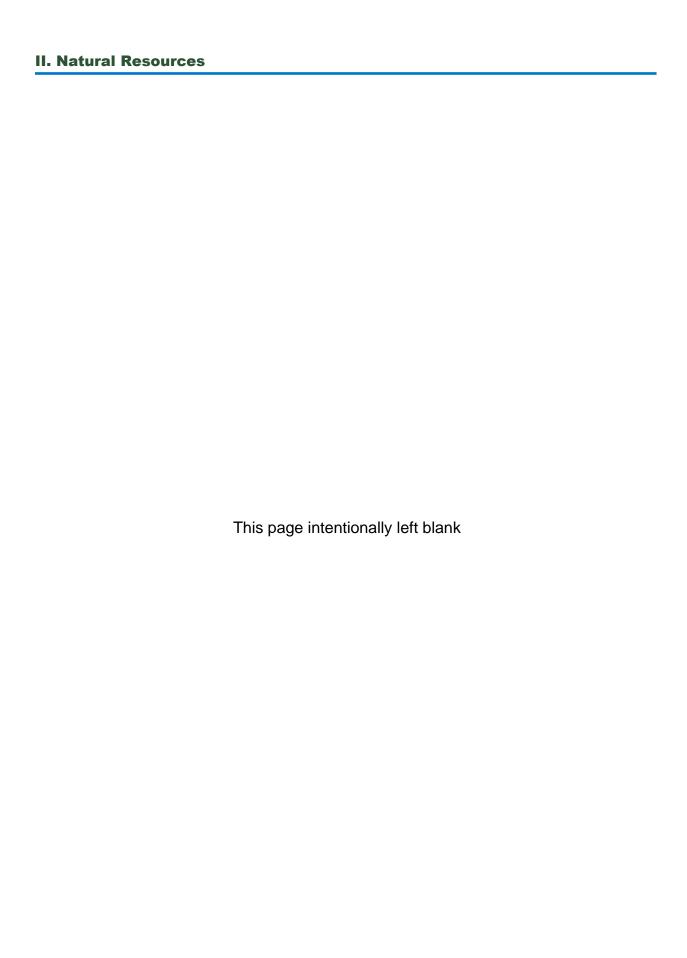
#### Objectives:

Ensure that current and proposed fishing regulations promote the ecological enhancement and protection of fisheries and waterbodies.

Due to human influences, invasive species, and climate change, every effort will be made to create, maintain, or rehabilitate habitat suitable for native strains of fish that are historic to the Adirondacks.

#### **Action Steps**

- Conduct biological and chemical surveys of waters within the unit.
- Continue enforcement of the baitfish prohibition in such designated waters, and consider expansion of the baitfish prohibition in more waters to protect native fisheries.
- Promote awareness of native brook trout fishery sensitivity, through outreach and education.
- The fish weir spanning the Schroon River exists as a "stream improvement structure for fisheries management purposes," which is the term used in the APSLMP. If the structure poses a health and safety hazard, and if there are no plans to begin using it for fisheries management or to maintain it, then removal of the weir may be considered.
- Consider reclamation of the following ponds, if conditions are appropriate:
   Arnold Pond, Bass Lake, Bloody Pond, Challis Pond, Courtney Pond, Eagles
   Nest Pond, Hatch Pond, Howard Pond, Moose Mountain Pond, Triangle
   Pond, Trout Pond, and Twin Ponds.
- Continue fish stocking, compliant with DEC policy, and expand stocking efforts if necessary.
- Restore desirable conditions for native fish communities through pond reclamations, liming, stocking, and other activities consistent with DEC fisheries management policies. For more information on protecting Adirondack fish and pond reclamations:
  - http://www.dec.ny.gov/outdoor/31920.html.



# III. Human Uses & Recreational Resources

# **A. Carrying Capacity**

Carrying capacity, in terms of protected public lands management, has come to be defined as managing for desired natural resource and social conditions. A variety of systems have been developed over the years to get at the root of carrying capacity. The most currently and widely accepted system is the Limits of Acceptable Change (LAC) framework.

The LAC framework "recognizes that change in response to visitor use is inevitable and that decisions have to be made with regard to how much change will be permitted to occur" (Dawson & Hendee, 2009.)

LAC can usefully be applied in some situations and not others. According to an article by Cole & McCool (1998), "LAC's primary usefulness is in situations where management goals are in conflict, where it is possible to compromise all goals somewhat, and where planners are willing to establish a hierarchy among goals."

In terms of UMP development and public land management, there certainly are conflicting goals where LAC is useful. For the LAC framework to inform management decisions (that may or may not require management actions), a hierarchy must be present between goals. An excerpt from the APSLMP reads:

"If there is a unifying theme to the master plan, it is that the protection and preservation of the natural resources of the state lands within the Park must be paramount. Human use and enjoyment of those lands should be permitted and encouraged, so long as the resources in their physical and biological context as well as their social or psychological aspects are not degraded. This theme is drawn not only from the Adirondack Park Agency Act (Article 27 of the Executive Law – "The Act") and its legislative history, but also from a century of the public's demonstrated attitude toward the forest preserve and the Adirondack Park" (p.1).

Considering this APSLMP excerpt and the mandates entrusted to State agencies to steward the integrity of the Forest Preserve, the most important management goal is the

preservation of natural resource integrity. This doesn't diminish the significance of recreational access and public use, but it does hold resource protection as ultimate.

Therefore, the broad conflicting goals are:

- Protect the natural resources and ecological value of the Forest Preserve, preserving wild landscapes for the flora and fauna of the future. (Referred to as the "natural resources" goal, below)
- Create and maintain high quality recreational and access facilities for public outdoor recreation.
   (Referred to as the "recreation" goal, below)

To address and accomplish the natural resources goal to the highest order, it would be unlikely that many public recreational facilities would be constructed. To fully accomplish the recreation goal, overdevelopment of diverse recreational opportunities may fragment or alter the natural landscape. Striking a thoughtful balance between these two goals is where the LAC framework is useful.

#### Goal:

Protect the natural resources and ecological value of the HPWF Forest Preserve, while facilitating high-quality recreational access.

Empirical data is required to achieve the goal(s), therefore, observable indicators and standards will be developed to monitor natural resource conditions and limit impacts. Natural resource condition indicators are measurable (either directly or indirectly) and indicate when conditions become inconsistent with the defined goal(s). This means that there is some level of compromise of natural resources built into the design framework, to accommodate recreation. For example, a measurable indicator may be a certain amount of bedrock exposure from soil erosion along a trail corridor. By setting this bedrock exposure as an indicator of soil erosion (natural resource damage), the framework is acknowledging that there may be harm to natural resources (soil erosion) before a management decision related to recreational objectives is prompted (by bedrock exposure). Social indicators will also be developed in order to monitor social conditions and guide future management actions.

Use Levels, Impacts and Environmental Conditions

This approach shifts land management from defining (or trying to define) maximum recreational use, and instead focuses on natural resource conditions and standards that use levels do not cause to be exceeded.

Research shows that natural resource impacts resulting from recreational use occur most significantly at lower use levels, and especially at newly constructed/designated facilities. The built-in indirect management method that can mitigate user impacts is to locate desirable recreational facilities on durable, sustainable sites. Environmental conditions such as: erosiveness/slope, depth to bedrock, soil type, vegetation, and moisture all have significant effects on how much use will cause negative natural resource impacts. For example, a campsite located in an area with shallow depth to bedrock with sensitive vegetation will exhibit far greater natural resource impacts from low amounts of use than a campsite located on a level, durable surface that receives a high level of use.

Outreach and public education are critical to the success of this program, since many negative social and natural resource impacts are borne from uninformed/unintentional behaviors. Leave No Trace principles are central messages in Forest Preserve public outreach efforts, and will be a concentrated focus of HPWF management. This includes information at trailheads, on webpages/social media, in public spaces, or through any other appropriate avenues.

#### **Objectives**

Define objectives for recreational facilities, that are aligned with the overall goal.

Example: Minimize site creep (expansion) at designated camping sites.



#### **Indicators**

Develop measurable criteria to assess each objective, and monitor for such criteria.

Example: Measure square footage of impacted camping area.



#### **Standards**

Set an indicator standard for each objective, that when exceeded, will prompt management action(s).

Example: Greater than 50% expansion of site from desired size.



#### **Action Steps**

Execute management action(s) that are consistent with each objective.

Example: "Iceburg" rocks around designated camping site, to define the acceptable area size.

#### Wildland Monitoring

A consistent, defined monitoring effort is critical to effective implementation of this framework. The monitoring criteria will be based on the objectives' indicators, based on natural resource or social conditions. The wildland monitoring program to be developed will be consistent and reproducible over time, and will inform the success or failure of management, guided by the diagram above.

The first effort will be to determine existing natural resource and social conditions across the unit, at the time of UMP adoption. Some condition standards are likely to already be exceeded at some existing facilities. The wildland monitoring program is an iterative process, and will be repeated at defined intervals over time. As new recreational facilities (as proposed in this UMP) are constructed, they will be incorporated into the monitoring program. New or improved facilities will be sited in sustainable locations and consistent with current best management practices. However, the monitoring of new facilities is especially important, since we know that

impacts are most prominent with lower levels of use, or as a newly-constructed facilities become used.

#### **Phasing**

New recreational opportunities proposed in this UMP have been placed into a phased hierarchy (see Appendix A), and will be implemented accordingly over the life of this plan. The phases are not iterative, in that not all projects/activities in phase one need to be completed prior to completing something in one of the later phases. Management actions that are indeed dependent or conditional upon one another are described as such, and accounted for in the phasing plan.

The phased approach acknowledges that completion of a facility and subsequent use will determine the future of that facility and the future of any other associated or dependent facility. If use level, user experience, or natural resource conditions are not optimized, then facilities may be relocated or closed and rehabilitated.

#### **Ecosystem-Level Changes**

Ecosystem-level and larger-scale changes occur across time, both as a result of human impacts and as a result of natural evolutionary forces. Some of these changes may be observed over time through the monitoring process, and some may not. However, moving forward it will be critical to understand these broad processes, in order to understand and plan for the future of the area.

#### Landscape Relationships

Land management units don't exist as islands on the landscape; their interactions with surrounding units and other lands are essential to understanding ecological and social conditions. The HPWF Forest Preserve unit occupies an important transitional space between contrasting regions. Ecologically, the HPWF lies between the sharp topography of the High Peaks region and the low-lying, fertile Lake Champlain basin. Socially, the HPWF lies between the heavily-visited recreational areas of the High Peaks and the populous agricultural plains of the Lake Champlain basin.

The HPWF is easily accessible, due to its proximity to the Northway (I-87) and a variety of secondary road corridors. While on one hand it may seem logical to shift human use and recreation to the HPWF from the popular High Peaks region and the settled Lake Champlain basin, on the other hand, the HPWF's transitional landscape position may be all the more important to consciously preserve.

Preservation of this area may be especially true when considering wildlife, since the HPWF land base provides a critical connection for wildlife movement between the two flanking regions. The HPWF is also significant from a fisheries standpoint, since there are a multitude of brook trout ponds sprinkled across the unit. When combined, the brook trout waters of the HPWF and adjacent Pharaoh Lake Wilderness Area comprise a large portion of New York State's Adirondack brook trout resource.

#### **Current Conditions**

Broadly, it appears that the HPWF sustains relatively low recreational use levels, based on natural resource and social conditions. There are a couple notable exceptions to this statement (i.e. Split Rock Falls, Baxter Mountain). Natural resource protection and rehabilitation measures will be implemented at these areas.

#### **Importance**

Developing this specific LAC framework and implementing it across the HPWF is a significant, long-term commitment. However, it is an important aspect of land stewardship and effective management. After adoption of this UMP, a wildland monitoring program will be developed to understand social and natural resource conditions and to guide stewardship of the unit. This will include definition of objectives, development of diverse indicators, standards, and correlated management actions.

# **B.** Motorized Access and Parking

# **Existing Conditions**

Proximity to the Adirondack Northway (I-87) exits 28-31 affords relatively easy access to much of the HPWF land area. After exiting the Northway, a network of State, County and Town roads include: Route 9, Route 74, Johnson Pond Road, Lincoln Pond Road, Ensign Pond Road (also known as the Moriah-North Hudson Road), and Tracey



Hammond Pond Parking Area Sign

Road. These secondary roads pass through and by much of the unit.

#### **Proposed Management**

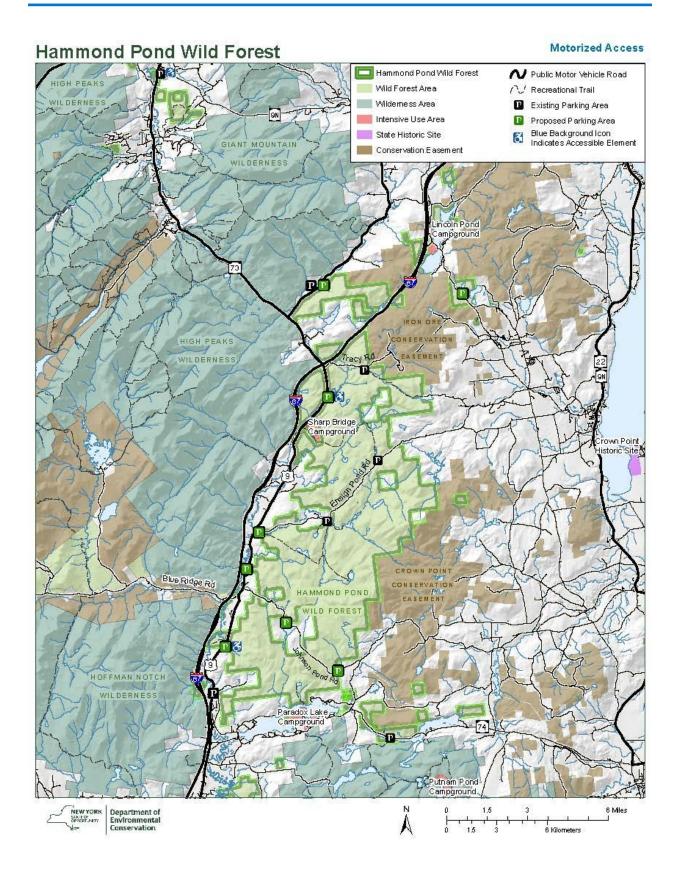
#### Objectives:

- Provide an adequate configuration of parking areas and facilities that accommodate public use while minimizing resource impacts.
- Develop and maintain access points in compliance with requirements of all applicable laws, regulations and policies.

#### **Action Steps**

- Continuously maintain and improve signage and trailhead facilities.
- Continue to coordinate with municipalities and partners to allow snow plowing at HPWF trailheads/parking areas.
- Monitor for and prohibit illegal uses on the Forest Preserve. Signage, barriers, or gates may be built or installed as necessary for this purpose.
- Install boulders or other delineation features at the Deadwater Pond area, to contain public motor vehicle use to the road and parking area. Create accessible parking for 4 vehicles. See "Access for People with Disabilities" section for more information about Deadwater Pond.
- Construct a two vehicle parking area alongside the beginning of the Schroon River Road, in the existing open, grassy area. Construct parking for two vehicles at the end of the Schroon River Road.
- Construct a two vehicle parking area on HPWF land along Route 9 and construct a Schroon River fishing and waterway access site approximately 0.5 miles north of the North Hudson Town Beach.
- Public use of the two Beede Lane area trails up Baxter Mountain appears to be very minimal, and may be due to lack of signage and available parking. Explore securing an agreement with a willing private landowner, and if possible, construct a 2-3 car trailhead parking area and associated signage.
- Consider public safety and overuse issues at Split Rock Falls, along Route 9 in Elizabethtown. Work with NYSDOT where appropriate to adjust, add and remove signage as needed (the road shoulders are already posted against parking). There is an existing pull-off parking area that provides access to the falls. Construct an off-street 4 vehicle parking area on HPWF land approximately 0.5 miles from the falls parking area, to serve the proposed Split Rock Mountain Trail and Ski Loops.

- Build a 2 vehicle parking area for access to Russett, Murrey, Mill and Tanaher Ponds from Lincoln Pond Road. A short trail from the parking area will provide access to the ponds.
- Parking for access to the western end of the Bass Lake Trail currently happens on private land, at an unmarked pull-off along Caza Turn Road. If a willing landowner in this vicinity exists, consider formally establishing a 2-3 vehicle parking lot for this trail.
- If possible, construct a 2 vehicle pull-off parking area on HPWF land along Johnson Pond Road, with fishing and waterway access to Johnson Pond.
- Construct a new 4 vehicle parking area at the Long Sue Loop trailhead on Johnson Pond Road, to service the NCNST and the Long Sue Loop Trail. If an appropriate location exists, and is desired by the equestrian community, construct a parking area for up to 4 horse trailers along Johnson Pond Road. These two parking areas may be shared, or may be two separate areas, depending on HPWF site conditions and useable space.
- Expand the Schroon Falls parking area. Parking will increase at this site in the
  future, since the proposed NCNST route will cross the Schroon River on the
  Route 9 bridge near this location. The existing parking area safely holds
  approximately 4 vehicles, and 4 more spaces will be added. Install boulders or
  other delineation features to limit parking to designated areas.
- Maintain the accessible parking and viewing area at the Route 73/9N intersection, in partnership with DOT.
- Pursue means to provide public access to landlocked or otherwise inaccessible parcels of HPWF land. If and when access to parcels may become available, reasonable public access and parking will be provided.



#### C. Roads

#### **History**

Like most of the Forest Preserve, roads may have been present on HPWF lands when they were acquired by the State of New York. Over time, these roads become reclaimed by the forests. Some old road segments may currently be designated as recreational trails.

#### **Existing Conditions**

There are several sections of existing public roads that traverse HPWF lands. Most notably are sections of Johnson Pond Road,



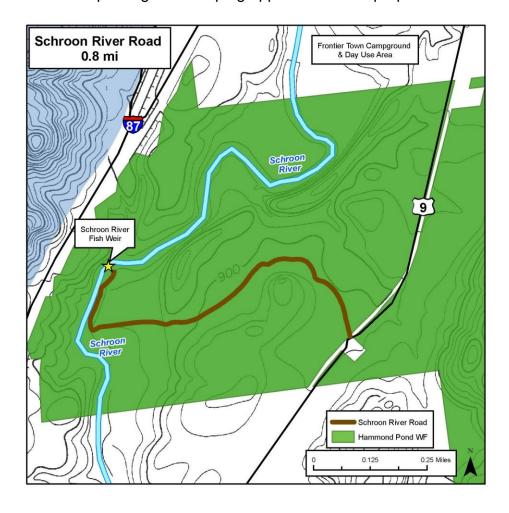
Schroon River Road

Ensign Pond Road, and Tracey Road. In these cases, road maintenance must be undertaken carefully, to maintain the existing character of the road corridor and minimize negative effects on the Forest Preserve. DEC will continue to work with municipalities to ensure that roadwork is consistent with regulations and policies, while accommodating safe public passage. Additionally, proposed road infrastructure work will be designed with larger and more frequent weather events in mind.

Existing locations where vehicles may travel onto HPWF land that are not proposed for such use will be blocked off, as time and resources permit. This includes isolated locations where vehicles leave a public road, travel onto HPWF, resource damage occurs, and are not designated as parking areas. An example of one such area is a location very near the western end of the Tracey Road, near the Northway exit 30. Boulders will be installed there to prevent future vehicle incursion and garbage dumping on HPWF land.

#### Schroon River Road - Forest Preserve Road

The 0.8-mile long Schroon River Road begins on the west side of Route 9, south of the Frontier Town Campground & Day Use Area. The road ends at the Schroon River, where there is an existing open area used for both camping and day use. This road is also sometimes used to access two Northway pedestrian underpasses on the west side of the Schroon River, that provide hiker access to a trailless region of the Hoffman Notch Wilderness Area. There is an old wooden fish weir in the river near the end of the road. Accessible parking and camping opportunities are proposed in this area.



#### Deadwater Pond Road - Forest Preserve Road

There is a 0.25-mile long loop road on the east side of Route 9, approx. one mile south of the Northway exit 30. This road loops east towards Deadwater Pond, and appears to be used for camping and access to Deadwater Pond. Apparently, a historic settlement known as Deadwater existed in this area, and is also reported to be the site of the New York Serpentarium during the 1950s. Motor vehicle use will be contained to the road and a 4 vehicle parking area. Accessible camping opportunities are also proposed in this area.



### Private Rights of Way Across HPWF Land

There are several deeded rights of way across portions of HPWF land for motorized access to private land. These rights of way are legal, deeded rights held by private landowners, whose veracity has been confirmed by the Department. They are not

designated as recreational roads or trails. Any HPWF land that is being used (or proposed to be used) for motorized access to private land will be investigated by the Department, and if no legitimate right of way exists, such use of HPWF land will be prohibited.

# **Proposed Management**

# Objective:

Maintain the wild forest character of roads in the HPWF.

# Action Steps

Private Deeded ROWs Across HPWF Lands

Monitor compliance with deed language, Forest Preserve roads policy,
 Temporary Revocable Permit Policy, and prevent resource damage to the Forest Preserve.

#### Schroon River Road

• The Schroon River Road is currently open to public motor vehicles, and will remain open on a conditional basis. Necessary improvements will be made to the road, while taking care to maintain the existing character of the road corridor. Several appropriate sites may be widened to allow for passage of vehicles traveling in opposite directions. A two vehicle parking area will be constructed at the end of the road, and vehicle use limited to the road and parking area. An accessible tent site will be constructed near the river, and be accessible from the parking area. A two vehicle parking area will also be constructed adjacent to Route 9, at the beginning of the Schroon River Road. Public ATVs, UTVs, and ORV's of any kind are prohibited from using the road.

If usage of the road and area near the river becomes problematic for any reason (i.e. natural resource damage or enforcement issues), then this road may potentially be converted to a motor vehicle CP-3 route for people with disabilities. If this change were to become necessary, the road would be gated, and only CP-3 permit holders would be able to drive the road; all other vehicles would have to park at the parking area at the beginning of the road.

Note: necessary improvements to the road may potentially include: brushing, resurfacing with gravel, grading, crowning, ditching, culvert replacement, and new culvert installation (where necessary) to prevent resource degradation.

#### Deadwater Pond Road

• This 0.25-mile long road is in good condition. This will remain open, and public motorized use will be limited to the road and a new 4 vehicle parking area. The road may be improved and maintained as conditions warrant, which may include brushing, resurfacing with gravel, grading, crowning, ditching, culvert replacement, and new culvert installation (where necessary).
See "Access for People with Disabilities" section for more information about these and other accessible opportunities.

# **D. Bridges and Dams**

# **Existing Conditions**

#### Hammond Pond Dam

The Hammond Pond Dam is an earthen-filled timber crib dam at the outlet of Hammond Pond. It was constructed to impound Black Brook, but water leaks through the cribbing, allowing the impoundment to drain below the spillway crest. Hammond Pond is a relatively shallow pond, with few recorded fish species, but is intrinsically valuable.

#### Kingdom Dam

The Kingdom Dam impounds the Black River, creating the 572-acre Lincoln Pond in the Town of Elizabethtown. The dam, originally built in 1912, underwent major reconstruction in the last few years. Lincoln Pond is also the site of the DEC Lincoln Pond Campground.

#### Eagle Lake Dam

The wooden Eagle Lake Dam is located on the outlet of Eagle Lake, impounding



Hammond Pond Dam

Paragon Brook, just south of Route 74 in the Town of Ticonderoga. It was constructed in 1986 by DEC Operations, in order to maintain a consistent lake water elevation.

There is a foot bridge over the dam, where the Short Swing Trail crosses and traverses south into the Pharaoh Lake Wilderness Area.

# **Proposed Management**

# Objective:

 Maintain, rehabilitate, or remove existing dams in the HPWF, for public safety, natural resource protection, and recreational benefits.

# Action Steps

#### Hammond Pond Dam

The timber crib Hammond Pond Dam exists in an ever-deteriorating condition.
Water drains below the spillway, and the structure lacks integrity. If it's
determined that it would be ecologically valuable and safer to return the area to
its natural state, then the Hammond Pond Dam may potentially be removed.
This would likely occur in phases over time, and would also depend on permitting
and availability of resources.

# Kingdom Dam

Monitor and continue to maintain the Kingdom Dam.

#### Eagle Lake Dam

Monitor and maintain the Eagle Lake Dam, so that the Eagle Lake water level remains as close to natural fluctuations as possible, to benefit ecological communities and processes. If possible, rehabilitate or replace the Eagle Lake dam when it becomes necessary. read if possible as maybe NOT possible in the future for \$ or other reasons

# Objective:

 Construct and maintain bridges that protect riparian and aquatic integrity, while facilitating public recreational uses.

# **Action Steps**

Repair or replace existing bridges as necessary. Replacements will consider
existing site conditions and hydrology, and may be relocated to more sustainable
locations.

 Construct new bridges as new trails are constructed, or as the need arises on existing trails. Bridges will be built in sustainable locations to accommodate natural hydrology and their designed recreational use(s).

Regarding the materials used to construct bridges in Wild Forest areas, the APSLMP reads that bridges should be constructed of natural materials whenever possible, but "following a minimum requirements approach analysis that fundamentally protects the wild forest character of the area." If it is determined, through the minimum requirements approach analysis, that a bridge would be best suited for construction using non-natural materials, then that project will be undertaken as such. Considerations in this analysis include a case-by-case analysis of the site/area, access to the site, the designed trail use, longevity, sensitive resources, and time and economic constraints.

# E. Camping

# **History**

The 1988 HPWF UMP described 48 undesignated tent sites throughout the unit, all located at ponds. The only designated sites mentioned were 11 sites at Lincoln Pond, managed as part of the DEC Lincoln Pond Campground.

Moose Mountain Pond Lean-to

# **Existing Conditions**

Throughout the HPWF, many of the undesignated primitive tent sites listed

in the 1988 UMP still exist in some form, although many do not show signs of recent or regular use. Some also require a bushwhack or location of a herd path to access. Today, there are 10 designated sites around Lincoln Pond on HPWF land that are managed by the campground as primitive tent sites. The DEC Lincoln Pond Campground's webpage shows the location of these sites and other information: <a href="https://www.dec.ny.gov/outdoor/24477.html">https://www.dec.ny.gov/outdoor/24477.html</a>.

The overall condition of tent sites in the unit suggests that overnight use of the HPWF is low. This UMP does not propose designating all of the undesignated sites listed in the 1988 UMP.

This UMP addresses locations used for camping that are not described in the 1988 UMP, and land area that has been added to the HPWF land area since that UMP. A few examples of these areas already used for camping or that may provide desirable camping opportunities include: Deadwater Pond, Split Rock Falls, Crown Point Bay, and the Schroon River corridor.

There are two lean-tos in the HPWF. One is located on Moose Mountain Pond, and usually accessed from the trailhead on Ensign Pond Road. The other is located on Eagle Lake, in Crown Point Bay, and is accessible by boat, canoe or kayak.

# **Proposed Management**

# Objectives:

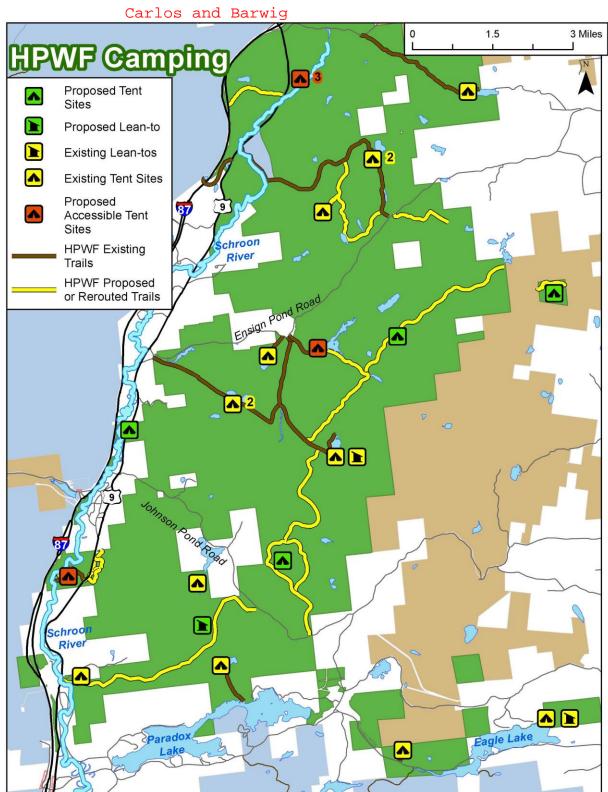
- Reduce, eliminate or mitigate adverse impacts of camping on natural resources.
- Comply with the APSLMP primitive tent-site and lean-to guidelines.
- Build and maintain high quality primitive tent sites and lean-tos with associated infrastructure (access trails, fire rings, privies, hardened level areas for tents, and occasionally picnic tables).
- Improve and enhance multi-day visits to the HPWF. This includes
   providing desirable, appropriate range camping opportunities and providing
   sites that facilitate multi-day excursions through unit and beyond.

see conflict with multi-day later

# **Action Steps**

• The map below shows locations where tent sites and lean-tos exist and where they are proposed to be constructed. Sites shown as "existing" may or may not be officially designated on the ground; they will be officially designated through this UMP. Newly designated or constructed tent sites and lean-tos will comply with APSLMP site-separation criteria. Note: Due to the dispersion of HPWF lands across several towns, some tent sites cannot be displayed on the extent of this core HPWF land area map, but are described in the text following the map.

Additionally, other potentially existing tent sites in the unit will be inventoried. Decisions whether to designate, close, or relocate these other existing sites will be based upon: site sustainability, natural resource impacts, desirability of location, evidence of use, and relationship to other sites.



see second green property @ EL lower right of map between Carlos and Barwig

- Construct one accessible tent site (including a picnic table) near the end of the Schroon River Road. Any other areas previously used for camping will be closed to such use.
- Construct one tent site on HPWF land in the vicinity of the proposed Schroon River fishing and waterway access site, approximately 0.5 miles north of the North Hudson Town Beach.

#### Deadwater Pond

• The 0.25-mi Deadwater Pond Road loops east from Route 9 towards Deadwater Pond. This area has an interesting history, existing open areas, and shows evidence of ad hoc camping use. In addition to Deadwater Pond access, its proximity to popular rock climbing routes and the Northway (I-87) exit 30 may be attributed to this use. Despite this past and current use, the area has remained in good condition and site conditions indicate that this would be an appropriate location for a small grouping of three primitive tent sites. One of these sites will be made universally accessible, from a 4 vehicle parking area adjacent to the roadway. This area will not be designed to accommodate more than 20 people, consistent with APLSMP guidelines regarding Wild Forest primitive tent site groupings. The sites will be more than 100 feet from Deadwater Pond, and screened from the pond and other tent sites. The sites will be monitored and if problems arise that cannot be mitigated, will be closed, relocated or rehabilitated as necessary.

#### Crown Point Bay - Eagle Lake

• There are three existing tent sites and one lean-to on a relatively small HPWF land parcel at Crown Point Bay, on Eagle Lake, along with several longstanding non-conforming elements and enforcement issues. The existing lean-to is appropriately located, more than 100 feet from Eagle Lake, and screened from view. There is more camping demand on Eagle Lake than the one lean-to allows for. Eagle Lake is largely privately owned. Another small HPWF parcel on the lake contains very steep shoreline terrain that precludes the possibility of a tent site.

Longstanding enforcement issues associated with Crown Point Bay will be resolved, including prohibiting mowing and motorized trespass from adjacent private land. The closure of two of the three tent sites, and resolution of longstanding enforcement issues is a significant stride towards APSLMP conformance in this area. The existing lean-to will remain and be maintained in

place. Two existing tent sites will be closed and reclaimed. One tent site will remain (approx. 500-600 feet from the lean-to), and be located out of sight and sound from the lean-to, and screened from the lake. The Crown Point Bay area may be revisited again in the future, and additional management actions taken if necessary.

- Improve, relocate or close and reclaim sites that exhibit natural resource degradation.
- Designate the existing tent site at Hammond Pond, and make it accessible.
- Construct a new lean-to in the vicinity of Johnson Pond Brook, along the proposed North Country National Scenic Trail section between Schroon Falls and Johnson Pond Road.
- Construct two tent sites in the Russett/Mill/Murrey/Tanaher Ponds area. Exact locations of these two sites will depend on site conditions.
- Retain two designated tent sites in the vicinity of Split Rock Falls.
- Retain one designated tent site at Peaked Hill Pond.
- Retain one designated tent site at Arnold Pond.
- Retain two designated tent sites at Round Pond. Relocate the one site that is in the East Mill Flow-Round Pond Trail corridor.
- · Retain one tent site at Challis Pond.
- Designate/construct two tent sites at Bass Lake.
- Designate/construct one tent site on HPWF land at the southern end of Johnson Pond.
- Designate/construct one tent site at Munson Pond.
- Designate/construct one tent site at Crowfoot Pond.
- Designate/construct one tent site at Moose Mountain Pond.
- Construct one tent site on the HPWF parcel that contains Bald Peak, to provide camping along the North Country National Scenic Trail.
- Construct one tent site along the Bloody Mountain Trail, to provide camping along the North Country National Scenic Trail.
- Relocate the existing tent site at Schroon Falls. The existing site exhibits resource degradation. Areas in the Schroon Falls vicinity that are closed to camping will be rehabilitated.

# F. Fishing & Waterway Access

# **Existing Conditions**

There are many ponded waters and flowages in the HPWF, many of which are accessible via designated trail or unmarked herd path.

# **Proposed Management**

# **Objective**:

 Prevent the introduction of aquatic invasive species, while providing recreational access to HPWF waters.



Schroon River

# **Action Steps**

The Schroon River is a prominent watercourse that is popular for fishing and recreation, as it meanders along the western edge of the HPWF and flows into Schroon Lake. This river area is also recognized as an exemplary ecosystem. Access to the river will be provided on HPWF lands in desirable and sustainable locations. The following locations are described from north to south along the river corridor:

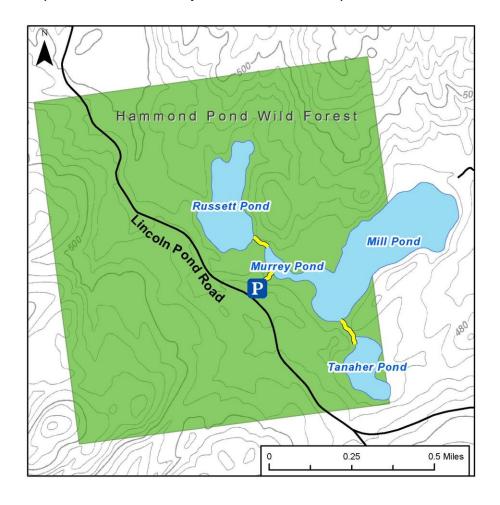
- Construct a new Schroon River fishing and waterway access site on HPWF land, approx. 0.5 mi north of the North Hudson Town Beach. This facility will include parking for 2 vehicles along Route 9, and a short access trail from the road to the river.
- Although not on HPWF land, the North Hudson Town Beach provides access to the Schroon River. This facility has a sandy beach, picnic facilities, restrooms, and parking. The entrance to the Town Beach is located along Route 9, across from the fire house.
- Create a fishing and waterway access site on the Schroon River, near the end of the Schroon River Road and downriver of the fish weir. This area is already used for river access, and a sustainable route to the water's edge will be constructed in order to prevent further bank erosion.
- Create a new Schroon River fishing and waterway access site on the west side of Route 9, just above Schroon Falls. This site will allow paddlers

- coming from upriver to exit the river before the falls. The site is dry, level, and does not show signs of inundation during high water. Complete in coordination with the proposed parking expansion at Schroon Falls.
- If possible, construct a fishing and waterway access site on Johnson Pond, with pull-off parking along Johnson Pond Road for 2 vehicles. The site will not be designed to accommodate motorized watercraft.
- There is a small, existing parking area along Route 9, south of the Sharp Bridge Campground, that provides parking for both the Courtney Pond Trail and the existing Courtney Pond fishing and waterway access site. This will be maintained.
- Construct a fishing and waterway access site at Deadwater Pond. It appears
  that canoe launching already occurs near the old dam, and construction of a
  sustainable site will prevent erosion.
- At all existing and proposed fishing and waterway access sites, provide features that will contribute to natural resource protection and user access. This includes: designating and hardening access routes and launch areas (where necessary), sanitary facilities, and signage/information.
- Include invasive species awareness and spread prevention outreach messages at all designated fishing and waterway access sites.

# Russett, Mill, Murrey, and Tanaher Ponds

- In the Town of Elizabethtown, an approximately 650-acre HPWF parcel
  wholly contains Russett and Murrey Ponds, and partially contains Mill and
  Tanaher Ponds. These small ponds are easily accessible because they are
  close to Lincoln Pond Road. The ponds contain warmwater fish species, and
  ice fishing is allowed on all four ponds. There is an existing short (~300 feet)
  road currently used to access Murrey/Mill Ponds.
- A formal parking area in the vicinity of the existing road will be constructed adjacent to Lincoln Pond Road, to accommodate two vehicles. This fishing and waterway access site will prohibit existing vehicular travel to the shoreline, and will be designed for paddling use. Provide a connection to all four ponds from the parking area by providing trail access to the water from the parking area, and two short canoe carries. Currently, there is a series of plywood and other ad hoc materials placed at the water's edge and out into the water, that serve as an informal dock. This material will be removed, and a small dock (of natural materials) will be installed in order to facilitate continued public access and protect aquatic resources. The proposed future for this area is a net benefit for a balance of natural resource protection and

public access. These proposed facilities will provide access to an underutilized area of the Park that contains relatively little State land. Purposefully built facilities (as opposed to the existing informal access) will also promote sustainability and reduce user impacts.



# **G. Boating**

# **Existing Conditions**

The APSLMP describes only two types of public access locations for waterbodies – boat launches or fishing and waterway access sites. Boat launches allow for trailered boats to be launched directly into the water (floated on or off trailers) and are classified as Intensive Use Areas. Boat launches are usually provided on large lakes of generally at least 1,000 acres in size. Fishing and waterway access sites, in Wild Forest Areas, do not "contain a ramp for or otherwise permit the launching of trailered boats." However, fishing and



Port Henry Boat Launch

waterway access sites may allow trailers to the water's edge, and boats (motorized, where appropriate) may be transferred to the water.

read this section with care!!

Port Henry Boat Launch - Lake Champlain (Intensive Use Area) vs boat launch, and motorized

The Port Henry Boat Launch is located off Route 9N in the Town of Morish and te next thing currently provides parking for 45 vehicles and trailers on 4.59 acres of land. The facility is one of the busier launches on Lake Champlain, due to its location on the lake and proximity to amenities in Ticonderoga. The site was purchased by New York State in 1961 for boating access. A two-lane cast-in-place concrete ramp was constructed in 1984, followed by aluminum sheet pile bulkheads, floating docks, and a vault style bathroom from 1985-1987. A stone break water was constructed in 1992 north of the ramp to protect the launch and bulkhead from ice and wave damage, but also to allow for launching and retrieval of boats in rougher water. A Maintenance Agreement with the Town of Moriah was signed in 1988 and a Use and Occupancy Agreement in 1995 to create a town park on the eastern side of the property. The park provides picnic tables and seating for visitors. Both agreements are still active. Discussions and plans to convert the vault toilets to flush units connected to the towns sewer system have been ongoing for over 30 years, along with paving the entire launch parking area. Due to lack of dedicated funds these improvements have not been completed. Currently, the parking area needs to be re-paved to provide better traffic flow and to designate parking spots. The Department has also received calls about the development of a powerloading hole at the end of the concrete ramp, which will be inspected and addressed. In 2018, some of the wooden bollards surrounding the facility were replaced with rocks. As bollards continue to deteriorate or become damaged, they may be replaced with new bollards or rocks.

### Eagle Lake Fishing and Waterway Access Site (Wild Forest Area)

The Eagle Lake fishing and water way access site is located off State Route 74 in the Town of Ticonderoga. The facility consists of an approximately 6 vehicle and trailer parking area near the outlet of Eagle Lake. The paved parking area is uneven and in relatively poor condition, which sometimes restricts the amount of available parking. There is an existing wooden dock that facilitates access into the water. To access the full portion of the lake, boats must travel under the Route 74 causeway. The size of this narrow causeway restricts the size of boat that may use Eagle Lake. Eagle Lake contains two or more aquatic invasive species.

This existing access to Eagle Lake is classified as Wild Forest (not Intensive Use), and is 410 acres in size.

# **Proposed Management**

"sometimes restrict" making it a carry in will open up space as there will be NO trailers, causeway restricts— then why do we need further restrictions?

# Objective:

 Facilitate safe public boating opportunities, while implementing measures to protect sensitive, natural aquatic ecosystems.

# Action Steps

- Include invasive species awareness and spread prevention outreach messages at boat launches and fishing and waterway access sites.
- Install boat washing stations and/or invasive species disposal bins, when feasible
  and appropriate. This may be done under an agreement or contract with an
  outside agency or organization.

# Port Henry Boat Launch – Lake Champlain

- Continue to operate boat launch under MOU with Port Henry/Moriah. If necessary, revisit the MOU, in partnership with the Town.
- Assess the feasibility of flush toilets at the Port Henry Boat Launch. If appropriate, install flush toilets, pending available funding and favorable environmental review.

 Resurface the parking area, install parking signs/ stripes, and replace bollards to demarcate parking sites.

### Eagle Lake Fishing and Waterway Access Site

- Reshape (to be more level) and resurface (with gravel) the parking area, potentially in partnership with DOT, given the site's proximity to State Route 74.
- Due to the size of Eagle Lake (410 acres) and the Wild Forest land classification, this site is a fishing and waterway access site. This site will accommodate the approach to the water's edge of small and light trailered boats, but will not provide float-off or float-on trailered boat launching. The boat would be pushed/lifted off the trailer, and pushed/rolled off a small, short barrier into the water. The design of these sites may allow the wheels of the trailer to the water's edge, but prevent floating boats off the trailer. The existing wooden dock will remain. This will provide relatively easy access, particularly for those who would have difficulty moving their boat, or for single people/smaller groups. The Department commits to develop a solution that will maximize ease of use.

# **H. Trail Inventory**

Note: This section discusses individual uses within the context of the whole unit, and contains an inventory and discussion of existing and proposed trails.

# **History**

Much of the HPWF land area was used for iron ore mining or timber harvesting sometime in recorded history. Many of the existing trails in the unit are relics of travel corridors that connected industrydriven communities and camps.

At the time of the 1988 HPWF UMP adoption, there were relatively few designated trails in the HPWF, but numerous undesignated trails. The 1988 UMP designated many of these as foot trails.



Baxter Mountain Trail

# **Existing Conditions**

There are over 26 miles of existing trails in the HPWF.

#### **Bicycling**

A 1993 UMP Amendment amended several Adirondack Forest Preserve units (including the HPWF) to open selected trails in each unit for bicycling. This occurred at a time when bicycling was entering the recreational scene as a desired activity on the Forest Preserve. The trails selected in the HPWF were mostly old roads that were considered appropriate to withstand the use of bicycles. These trails were: Crowfoot Pond Trail, Hammond Pond–Bloody Pond Trail, Schroon River Access Road, Berrymill Flow Trail, and East Mill Flow–Round Pond Trail.

An assessment of the current bicycle situation in the HPWF finds that the trails designated from the 1993 UMP Amendment receive very little, if any, bicycle use. The current conditions of these trails reveal that increased bicycle use would result in natural resource degradation.

There's a wide spectrum of desires and preferences within all recreational pursuits, and bicycling is no exception. Rural road bicycle riding has proven to be a very popular activity across the Northeastern U.S., with published maps showing routes and information about various rides and amenities/destinations. The communities across the HPWF area have a unique opportunity to support this popular bicycling style. Many of the roads in this area sustain low traffic volumes, traverse beautiful areas, and connect to existing destinations and amenities. Assessment and development of rural road bicycling opportunities might be coordinated through partnerships with outside entities.

There are also several DEC Campgrounds across the HPWF UMP area, including Frontier Town, Sharp Bridge, Lincoln Pond, Crown Point, Putnam Pond, and Paradox Lake. Bicyclists could basecamp at one of these campgrounds and ride day trips around the area, or create a multiple day traverse – camping at different campgrounds over several days.

One major bicycling connection across the HPWF UMP area is the connection to the Empire State Trail. When completed, this will be the longest multi-use trail in the U.S., a 750-mile route spanning from New York City to Canada and from Buffalo to Albany. Many of the roads in the HPWF area that are well-suited to bicycling make this important connection possible.

# Equestrian Use

Equestrian use was not a component of the 1988 HPWF UMP. In this UMP, several existing and proposed trails will be designed for equestrian use.

There was a small network of trails on Town of North Hudson land before the construction of the Frontier Town Campground & Day Use Area. This trail network was designed for equestrian and bicycle use. The campground features equestrian camping and other equestrian facilities. To complement these new facilities, equestrian trails will be designed and constructed on the surrounding Town of North Hudson lands and on adjacent HPWF lands. These trails will focus on shorter, family-friendly riding opportunities, while providing a trail connection to the longer distance trails that lead to surrounding units and communities. These trails are described in more detail in the "Proposed Trails" section.

There is a wide spectrum of desires and preferences within all recreational pursuits, and equestrian use is no exception. Equestrian riding on rural roads, emphasizing gravel roads, is a desirable recreational opportunity for a subset of the equestrian trail riding community. In particular, the secondary public roads in southern Essex County are a mixture of pavement and gravel surfaces with low traffic volumes. These roads traverse beautiful areas and connect to existing destinations and amenities. A parking area near the eastern end of Johnson Pond Road may be constructed to accommodate horse trailers, if a suitable location is located. From this parking area, equestrians would be able to directly ride the southern Essex County rural roads to various destinations and amenities.

To ensure enjoyable equestrian experiences, maps and information will be published that highlight a series of suggested routes, including surface types. Up-front information about such opportunities will clarify expectations for equestrian riders and allow them to properly prepare for a riding experience. Assessment and development of rural road equestrian opportunities might be coordinated through a partnership with an outside entity.

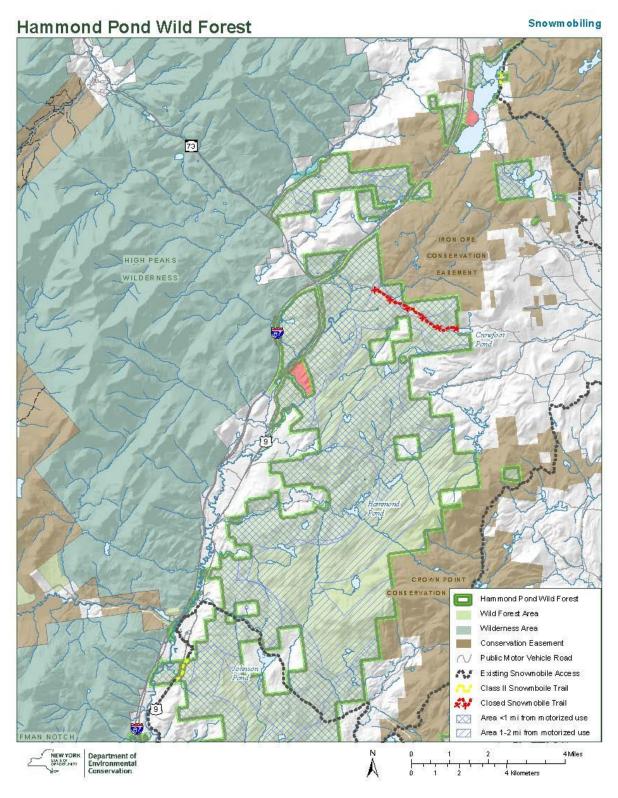
There is also a portion of the equestrian community that, once a basecamp is established somewhere (i.e. a campground), will trailer their horses to access nearby high quality trail riding opportunities. This might include: Santanoni Historic Area, Essex Chain Lakes Complex Area, Boreas Ponds, Pharaoh Lake Wilderness Area and beyond. There are also other equestrian events close enough to the HPWF UMP area for day trips that may interest this user group, including rodeos, fairs, etc.

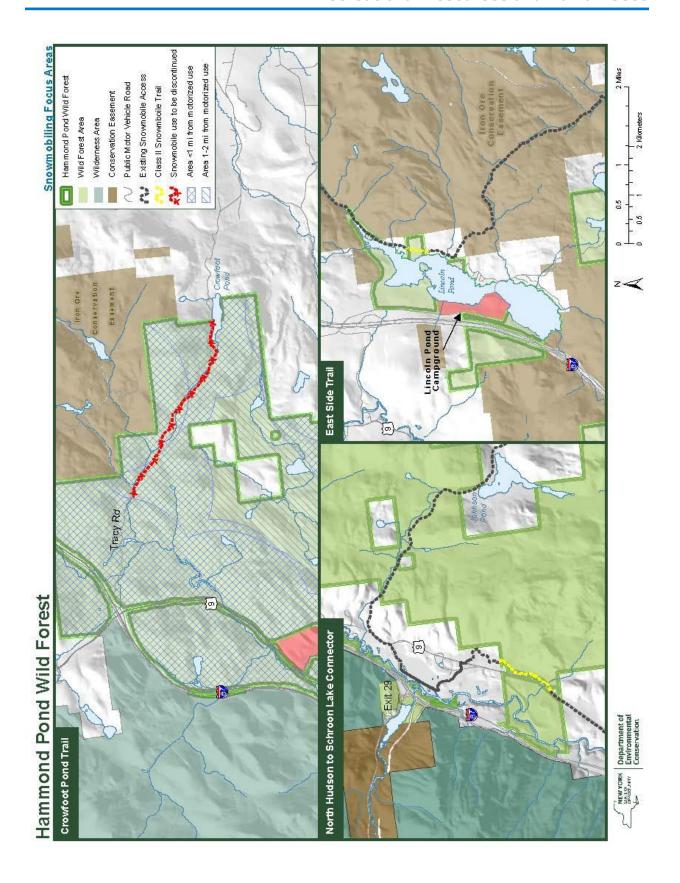
### Snowmobiling

Snowmobile trails in the HPWF are considered in the context of the larger snowmobile trail network and broad community connections. Three existing snowmobile trail segments travel across HPWF lands in three different locations:

- A 0.8-mile section on HPWF land east of Route 9, between the Schroon River Road and Town of North Hudson land (near Frontier Town). This trail is not described in the 1988 HPWF UMP, nor is it currently designated for snowmobile use. However, field inspections have found the condition and configuration of the trail to be appropriate for continued snowmobile use, and this UMP formally designates this as a Class II Community Connector trail. The trail tread will be hardened as necessary (through rock turnpiking, or other standard trail maintenance/rehabilitation practices), and the trail will be designated for multiple uses, including equestrian use.
- The second location is on HPWF land for 0.3 miles on the eastern end of Paradox Lake, between Paradox Creek and Route 74. The trail travels through a wetland area, and out across the length of Paradox Lake to Severance. Since this trail guides use through a wetland and across a large lake, it is not consistent with Department policies and guidance regarding snowmobile trails. Additionally, this particular trail is absent from public snowmobile trail maps, and is not funded. This UMP will not designate this trail segment, and its closure to snowmobile use will be enforced.
- The third location is a 0.3-mile section of snowmobile trail on the east side of Lincoln Pond, in the Town of Elizabethtown. This is a section of the community connector snowmobile trail facilitated by surrounding conservation easement and other private lands. This trail is now designated as a Class II Community Connector snowmobile trail, and is called the East Side Trail.
- The Crowfoot Pond Trail was designated as a public snowmobile trail in the 1988 HPWF UMP, but when the bridge over Crowfoot Brook washed away, this trail became unusable for snowmobiles. Anecdotally, this trail received very little snowmobile use prior to the bridge washout, because it's a relatively short out-and-back trail that is isolated from the larger snowmobile trail network. When this bridge was rebuilt in 2016, it was rebuilt as a foot trail bridge. The Crowfoot Pond Trail is closed to snowmobiles, but will remain

open as a Class IV trail, primarily for hiking, cross-country skiing and snowshoeing.





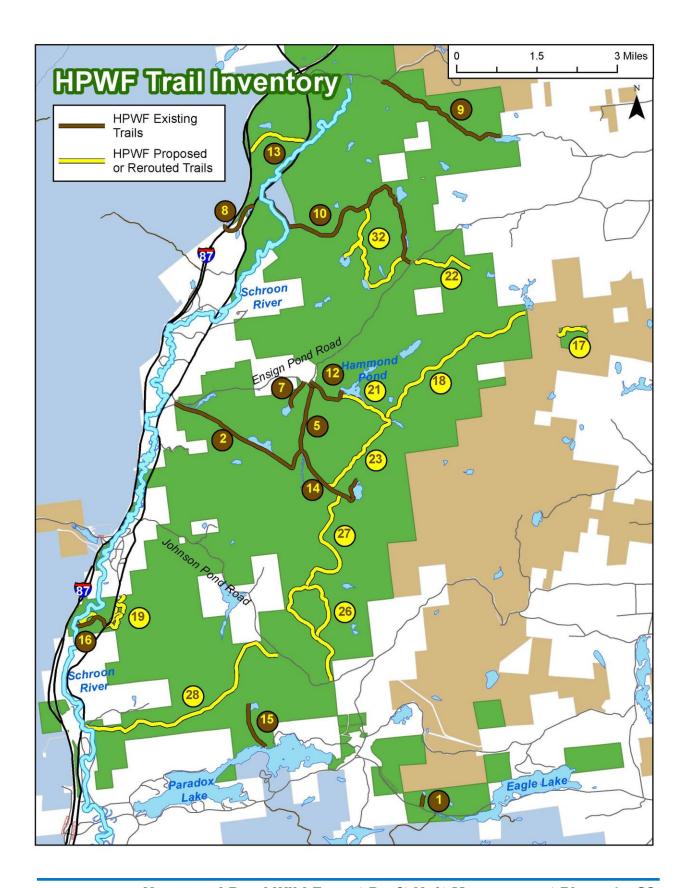
# **Proposed Management**

# Objectives:

- Protect the natural resources of the HPWF through optimal trail configurations and sustainable design, construction and maintenance.
- Enhance existing trail network and create new trails that provide a variety of interesting recreational opportunities for varying abilities.

# **Action Steps**

- Design and lay out new trails in order to create enjoyable, sustainable trails that minimize trail infrastructure.
- Discourage marking and/or maintaining of any trails on HPWF not recognized by the Department (unofficial trails). Efforts will be made to either legitimize such trails (if appropriate, and through the UMP process) by marking and maintaining them or closing them.
- Collect recreational use data through through trail registers and/or other methods. Use this data to prioritize work planning.
- Continue existing partnerships and foster more volunteerism in the HPWF for trail maintenance and participation in approved trail projects.
- If and when an existing trail section is found to have negative natural resource and/or recreational impacts (and keeping a trail segment in its current location is not a reasonable option), create reasonable reroutes to avoid these negative impacts and facilitate appropriate recreational use. These reroutes may include bridges or tread improvements when necessary.
- Construct and maintain trails in accordance with Department guidance/policies, and using the best available sustainable trail practices.
- Design, construct and maintain facilities with maximum accessibility in mind.



# Icon Legend

於 Hiking



Bicycling



X-country Skiing



Equestrian



\*Note: Motor vehicles, ATVs, UTVs and all other motorized vehicles are prohibited on all trails, unless otherwise described.

Trails appear on maps as they are numbered here.

# **Existing Trails**

### 1. Arnold Pond Trail

Recommended Uses:

Secondary Uses:

**Prohibited Uses:** 















# Description:

The Class III Arnold Pond Trail is a short 0.3-mile trail that begins on the north side of Route 74 and rises steeply to the shore of Arnold Pond. The steep rock faces around the northern shore of the pond are an interesting sight from the end of the trail. There is an existing primitive tentsite on the southern shore of the pond. Parking for the Arnold Pond Trail is located on the south side of Route 74, at the trailhead for the Short Swing Trail, which leads south into the Pharaoh Lake Wilderness Area.

#### 2. Bass Lake Trail

Recommended Uses:

**Prohibited Uses:** 









# Description:

The Bass Lake Trail has a western and an eastern end. The western end of the trail reaches private land, off of Caza Turn Road in North Hudson. Currently, parking occurs at an unmarked pull-off on private land. If a willing landowner is found, the Department would consider formalizing a 2-3 vehicle parking area in this vicinity. From this western end, the trail slowly ascends to the height of land, then traverses along Bass Lake through attractive forest cover, then gradually descends to an intersection with the Berrymill Flow Trail. The eastern end of the trail begins at a junction with the Berrymill Flow/Moose Mountain Pond Trail. This is a Class IV trail.

The 1993 multi-unit Bicycle UMP Amendment included several trails in the HPWF that were appropriate for bicycling. It appears that this trail receives very little, if any, bicycle use. The current condition of the trail is not suitable for bicycle use, and this UMP will close the Bass Lake Trail to bicycle use. Other trails that are suitable for bicycle use will remain open, and consideration given to new bicycle trails in the future.

#### 3. Baxter Mountain Trails

Recommended Uses: Secondary Uses: Prohibited Uses:









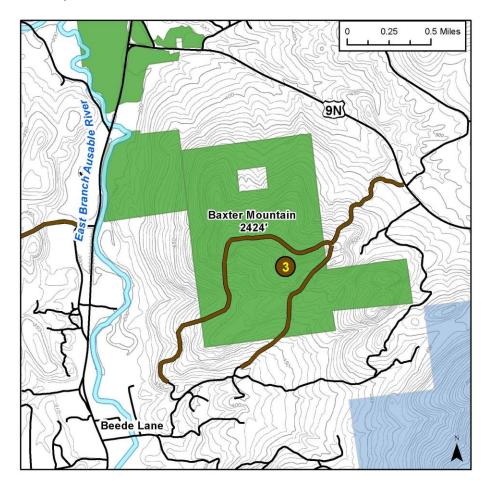




# Description:

There are three trails up Baxter Mountain, all located in the Town of Keene. Each trail begins on private property, but the summit and surrounding area are part of the HPWF. By far, the most popular Baxter Mountain trail begins from Route 9N, and is maintained to a Class IV standard. This trailhead receives a high level of use, and is often suggested to those seeking a shorter hike than a High Peak, but with a similar mountaintop view. It has been commented that, because of its relative ease and rewarding view, Baxter Mountain might be the first mountain a child hikes up, and the last one they hike back down many decades later. The other two lesser-used trails up Baxter Mountain are located off of Beede Lane in Keene Valley, and are Class III primitive trails. The Department may explore trail agreements or easements with any willing private landowners for the private land trail segments and parking areas. Due to

the low public use of the two Baxter Mountain trails from the Beede Lane area, the Department will assess condition, use level, and ease of public access/parking. One of these two trails may be closed.



### 4. Belfry Mountain Fire Tower Trail

Recommended Uses:







**Prohibited Uses:** 







#### Description:

The Belfry Mountain Trail begins at a gated access road on Dalton Hill Road in the Town of Moriah. Currently, parking occurs along the shoulder of Dalton Hill Road near or across from the gate. At this time, the access road is also the designated trail, which leads 0.3 miles (ascending 120' in elevation) to the summit and fire tower. This

access road is used by the landowner, and by Essex County to access communications buildings near the summit.

This is the shortest fire tower hike in the Adirondack Park and is a nice short hike for families with children. The views from the tower are spectacular, including the Champlain Valley and the Green Mountains of Vermont. It is reputed that some spring and fall bird migrations can be observed from the tower, and the tower is part of the "Adirondack Fire Tower Challenge." See "Belfry Mountain Fire Tower" section for more history and proposed management.

### **5. Berrymill Flow Trail**

Recommended Uses:







Prohibited Uses:







#### Description:

The Berrymill Flow Trail is a Class IV trail that extends south 1.4 miles from the Hammond Pond/Berrymill Flow trailhead (on Ensign Pond Road) to Berrymill Flow. Most of the trail is an old roadbed, with a portion of trail rerouted above a wetland area of Berrymill Brook. The trail passes a small waterfall, and ends at a bridge over Berrymill Brook, where there's a scenic view of Berrymill Flow. The Moose Mountain Pond Trail continues on past the bridge for an additional 2.1 miles to a lean-to on the western shore of Moose Mountain Pond.

The 1993 multi-unit Bicycle UMP Amendment included several trails in the HPWF that were appropriate for bicycling. It appears that this trail receives very little, if any, bicycle use. The current condition of the trail is not suitable for bicycle use, and this UMP closes the Berrymill Flow Trail to bicycle use. Other trails that are suitable for bicycle use will remain open, and consideration given to new bicycle trails in the future.

# **6. Bloody Pond Trail**

Recommended Uses: Secondary Uses: Prohibited Uses:

KA 🕹 🖎

#### Description:

An unmarked herd path leaves the proposed Hammond Pond Extension Trail and leads 0.2 miles north to the shore of Bloody Pond. This Class I unmarked path (which appears to be used solely by fishermen) will remain unmarked, and will not receive substantive trail maintenance.

#### 7. Challis Pond Trail

Recommended Uses: Secondary Uses: Prohibited Uses:



#### Description:

The Class III Challis Pond Trail begins on Ensign Pond Road and gradually climbs 0.6 miles to the northern shore of Challis Pond, where there is an existing, undesignated tentsite. Parking for this trail is available at the Berrymill Flow/Hammond Pond trailhead.

### 8. Courtney Pond Trail

Recommended Uses: Prohibited Uses:



#### Description:

Courtney Pond is located adjacent to Route 9, just south of Sharp Bridge Campground. There is roadside parking and canoe access to Courtney Pond. From the parking area, a 0.8-mile Class III primitive trail traverses around Courtney Pond, across private land, to a Northway (I-87) pedestrian underpass, which provides passage into a trailless area of the High Peaks Wilderness Area.

#### 9. Crowfoot Pond Trail

Recommended Uses:





**Prohibited Uses:** 





# **Description:**

The Crowfoot Pond Trail begins at a parking area off of Tracy Road, east of exit 30 of the Northway (I-87). This trail was designated as a public snowmobile trail in the 1988 HPWF UMP, but when the bridge over Crowfoot Brook washed away, this trail became unusable for snowmobiles. Anecdotally, this trail received very little snowmobile use prior to the bridge washout, because it's a relatively short out-and-back trail that is isolated from the larger snowmobile trail network. When this bridge was rebuilt in 2016, it was rebuilt as a foot trail bridge. The Crowfoot Pond Trail is closed to snowmobiles, and is a Class IV trail, primarily for hiking, cross-country skiing and snowshoeing.

From the trailhead, the 2.5-mile trail follows along Crowfoot Brook, crossing it several more times, before ending at a scenic view on the western shore of Crowfoot Pond. The alignment and character of this trail makes it an enjoyable cross-country ski trail.

#### 10. East Mill Flow-Round Pond Trail

Recommended Uses:





**Prohibited Uses:** 



#### Description:

The 5.3-mile East Mill Flow–Round Pond Trail traverses a core HPWF area between the Sharp Bridge Campground and the Ensign Pond Road. This aptly-named Class IV trail passes by several streams and ponds (including East Mill Flow and Round Pond), and is sometimes referred to as the Trout–Round–Triangle Ponds Trail. East Mill Flow is an ecologically significant and scenic wetland area.

The 1993 multi-unit Bicycle UMP Amendment included several trails in the HPWF that were appropriate for bicycling. It appears that this trail receives very little, if any, bicycle use. The current condition of the trail is not suitable for bicycle use, and this UMP will close the East Mill Flow–Round Pond Trail to bicycle use. Other trails that are suitable for bicycle use will remain open, and consideration given to new bicycle trails in the future.

#### 11. East Side Trail

Recommended Uses:



# **Prohibited Uses:**



#### **Description:**

The East Side Trail is a short 0.3-mile section of snowmobile trail across a small HPWF parcel on the east shore of Lincoln Pond. This is a section of the community connector snowmobile trail facilitated by surrounding conservation easement and other private lands. The East Side Trail is only for snowmobile use in winter, and will be maintained to Class II Community Connector snowmobile trail standards. There are gates on either end of the trail at the Forest Preserve boundaries, but trespass by ATVs/UTVs appears to be an ongoing issue that has led to significant rutting and resource degradation on this HPWF parcel. Future management of this trail will include continuing to monitor for and discourage motorized trespass, and rehabilitation of degraded areas.

#### 12. Hammond Pond Trail

Recommended Uses:









**Prohibited Uses:** 



#### Description:

The 0.80-mile Hammond Pond Trail begins from a parking area on Ensign Pond Road ends near the Hammond Pond dam, where there is an existing (but undesignated) primitive tentsite. The existing tent site will be designated and upgraded for universal accessibility.

This is currently designated as an ATV CP-3 route, but the bridge near the beginning of the trail isn't wide enough to accommodate an ATV. Travel across private land to avoid the bridge requires users to ford the brook. This trail doesn't have the character of an administrative road, and conditions make it apparent that this trail has may receive extremely low use, if any at all. The Hammond Pond Trail must be closed to ATV (and all other potential motorized uses) in order to comply with policy and regulation. Through this UMP, other high quality universally accessible opportunities will be provided for access to interesting scenic and recreational opportunities.

Overall, the Hammond Pond Trail is a pleasant, easy walk to the pond. The accessible tent site at the pond will provide a desirable camping experience. A UTAP assessment will be performed on this trail itself, to provide objective information about the trail, making it potentially usable to a wider range of visitors. See the "Access for People with Disabilities" section for more information about UTAP assessments.

# 13. Lindsay Brook Trail

Recommended Uses:

Prohibited Uses:









### Description:

The existing Class III Lindsay Brook Trail begins across Route 9 from the Sharp Bridge Campground, and leads 1.0-mile north to a Northway (I-87) pedestrian underpass. This underpass facilitates access to a trailless area of the High Peaks Wilderness Area. The Lindsay Brook Trail has been posted as "Trail Closed" for many years, due to extensive beaver activity near the beginning of the trail that renders it impassable. This trail will remain closed. A reroute (of similar mileage and same trail classification) will be constructed that connects Route 9 with the same pedestrian underpass. The rerouted trail will begin near Deadwater Pond and traverse westward to the same Lindsay Brook pedestrian underpass. There is already a large existing pull-off along Route 9 at this location. This trail will also likely serve rock climbers, who access climbing routes via a herd path in this vicinity.

#### 14. Moose Mountain Pond Trail

Recommended Uses:







Prohibited Uses:







# Description:

The Moose Mountain Pond Trail begins at the end of the Berrymill Flow Trail, where a bridge crosses the Berrymill Flow outlet. From there, the Moose Mountain Pond Trail extends 2.1 miles to Moose Mountain Pond. There is a lean-to at the end of the trail, on the northwest shore of the pond. This is a Class IV trail.

#### 15. Peaked Hill Pond Trail

Recommended Uses:



**Prohibited Uses:** 



# **Description:**

The Peaked Hill Pond Trail is accessible by water only, from the northern shore of Paradox Lake. From the DEC Paradox Lake Campground, it's a relatively short paddle across the lake to the trailhead. The trail quickly gains elevation from the lake, and arrives at Peaked Hill Pond at 1.0 mile. This 1.0-mile trail between Paradox Lake and Peaked Hill Pond will be maintained as a Class III foot trail.

Past the pond, the trail continues another 1.2 miles to the summit of Peaked Hill. While this was once reputed to be a scenic vantage point, the vegetation near the summit has grown up enough that the view is almost completely obscured. The 1.0-mile trail from the shore of Paradox Lake to Peaked Hill Pond will remain unchanged as a designated, maintained trail. The 1.2-mile trail past Peaked Hill Pond, up to the Peaked Hill summit will no longer be substantively maintained, and will remain as a Class I path.

#### 16. Schroon River Road

Recommended Uses:

A or or

Secondary Uses:

**Prohibited Uses:** 





### Description:

The 0.8-mile long Schroon River Road begins on Route 9, south of the Frontier Town Campground & Day Use Area and ends at the Schroon River. There is an old wooden fish weir in the river at this location.

The Schroon River Road is currently open to public motor vehicles, and will remain open on a conditional basis. Necessary improvements will be made to the road, while taking care to maintain the existing character of the road corridor. Several appropriate sites may be widened to allow for passage of vehicles and other users traveling in opposite directions. A two vehicle parking area will be constructed at the end of the road, and vehicle use limited to the road and parking area. An accessible tent site will be constructed near the river, and be accessible from the parking area. A two vehicle parking area will also be constructed adjacent to Route 9, at the beginning

of the Schroon River Road. Public ATVs, UTVs, and ORV's of any kind are prohibited from using the road.

Signage and etiquette information about shared use will be posted at all affected trailheads. This is particularly relevant in the isolated locations where motor vehicle, equestrian and bicycle use may interface, such as with the Schroon River Road. Simple, clear messages about accepted shared trail use etiquette will inform user experiences and reduce potential for negative encounters.

If usage of the road and area near the river becomes problematic for any reason (i.e. natural resource damage or enforcement issues), then this road may potentially be converted to a motor vehicle CP-3 route for people with disabilities. If this change were to become necessary, the road would be gated, and only CP-3 permit holders would be able to drive the road; all other vehicles would have to park at the parking area at the beginning of the road. All other use types, including equestrian and bicycle use, will not be affected by this potential management action.

A loop trail will be added off of the Schroon River Road, for horses, skiers, snowshoers and hikers. This will provide a more enjoyable trail experience for the non-motorized users than a simple out and back forest road.

The proposed East of Route 9 Multiple Use Trail will provide a direct connection to this road from the Frontier Town Campground & Day Use Area.

\*Note: Motor vehicles, ATVs, UTVs and all other motorized vehicles are prohibited on all trails, unless otherwise described.

# **Proposed New Trails**

#### 17. Bald Peak Trail

Recommended Uses:



**Prohibited Uses:** 



#### Description:

A small, landlocked HPWF parcel contains Bald Peak, which is surrounded by private conservation easement lands. The NCNST will traverse HPWF lands from the east, cross a portion of the easement land, and cross over this HPWF parcel, including

the summit of Bald Peak. Bald Peak has a fantastic open view of the Champlain Valley and beyond, and this trail will offer public access to this view for the first time. This Class IV trail segment is approximately 0.6 miles long.

# **18. Bloody Mountain Trail**

Recommended Uses:

Prohibited Uses:





# Description:

This approximately 3.5 – 4.0-mile Class IV trail begins at the end of the Hammond Pond Trail Extension and climbs Bloody Mountain, which has a wonderful scenic open view. It's been commented that Bloody Mountain has one of the best views along the NCNST in entire the Adirondack Park. From the summit of Bloody Mountain, the trail traverses along lower shoulders of Hail Mountain, ending at the privately-owned conservation easement land boundary near Upper Feeder Pond. From there, the proposed NCNST route will continue across the easement land, over Bald Peak, and across other private lands, ending the New York State portion of the NCNST at the Crown Point Bridge over Lake Champlain.

#### 19. East of Route 9 Multiple Use Trail

Recommended Uses:

Secondary Uses:

**Prohibited Uses:** 







#### Description:

A north-south trail currently exists on HPWF and Town of North Hudson lands, on the east side of Route 9 between the Schroon River Road and the Frontier Town Campground & Day Use Area. Of this, 0.8 miles is located on HPWF land. This trail currently exists as a portion of the Schroon Lake-North Hudson snowmobile community connector trail, but it is not approved in a UMP. The configuration and conditions are largely favorable for a year-round, multiple use connection between the Frontier Town Campground and the Schroon River Road area. This will also legitimize the existing snowmobile trail. This trail will be upgraded and maintained to Class VII Horse Trail standards.

# 20. Frontier Town Equestrian Trail Network

Recommended Uses: Secondary Uses: Prohibited Uses:







### **Description:**

A Class VII horse trail network, complementary to the Frontier Town Campground equestrian facilities, will be established on HPWF lands east and south of the campground, and on the adjacent land owned by the Town of North Hudson, subject to a conservation easement. This area has generally sandy soils in the more level portions near Route 9, and is mostly upland conifer forest. The terrain becomes more steep and challenging further east of Route 9. Up to 10 new Class IV horse trail miles may be constructed on a combination of HPWF and Town-owned lands (subject to a conservation easement).

A campground is a front country facility by nature, and thus, emphasis will be placed on family friendly horse trail opportunities adjacent to the campground. This network will consist of open and flowing trails that are well within a day's ride of the campground. Longer distance horse trail community connections will also be accessible from this network.

This trail network may be shared with the bicycle use in limited locations, primarily along a trunk corridor through the Town-owned lands north of the campground, to connect to longer distance, shared use trails west of Palmer Pond. Information will be provided at trailheads and elsewhere about appropriate shared use trail etiquette. Incorporating locations of shared use into a user's expectations will increase the probability of positive recreational experiences.

# 21. Hammond Pond Trail Extension

Recommended Uses:

**Prohibited Uses:** 







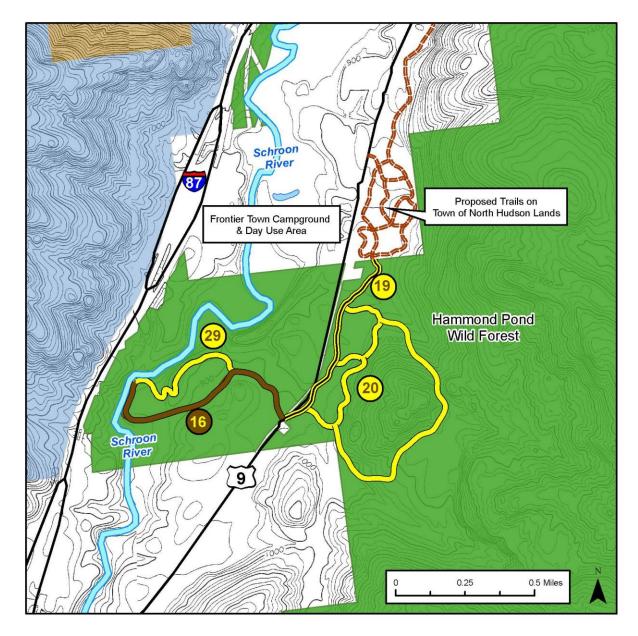






### Description:

The existing Hammond Pond Trail ends at Hammond Pond. This 1.0-mile Class IV extension of that trail will provide a foot trail connection along Black Brook to the Bloody Mountain Trail, providing an access point to the NCNST route.



#### 22. Harris Hill Trail

**Recommended Uses:** 





**Prohibited Uses:** 







#### **Description:**

Harris Hill (located south of Ensign Pond Road) has been a relatively popular bushwhack for many years, due to the relatively short mileage required to attain a spectacular view. The location of this Class IV trail will depend on the most appropriate

and sustainable trail location, and will be approximately 2.0 mi in length. This trail will either begin on from Ensign Pond Road and climb to the summit, or it climb Harris Hill from the Tub Mill Pond tract (to be added to the HPWF in the future).

#### 23. Moose Mountain Pond to Hammond Pond Trail

Recommended Uses:

Prohibited Uses:





#### Description:

This approximately 2.0-mile Class IV trail will connect the proposed Hammond Pond Trail Extension to the existing Moose Mountain Pond Trail. The route is gently rolling, and passes through an attractive forest containing large diameter white pines.

The primary purpose for this trail is to provide the NCNST route across the HPWF, but also to create a pleasant, scenic loop trail opportunity. The proximity of the existing Moose Mountain Pond lean-to also creates an overnight option for this loop.

#### 24. Lincoln Pond Trail

Recommended Uses:

**Prohibited Uses:** 





#### Description:

A 0.5-mile ADA accessible trail (Class VI front country) trail will be built from the beach area in the Lincoln Pond Campground, across HPWF land to a scenic overlook of Lincoln Pond on the Lower Ponds' western shore. This trail will be available to all day users and campers at Lincoln Pond Campground, and is likely to be enjoyed by many people of all ages and abilities.

#### 25. Lincoln Pond Overlook Trail

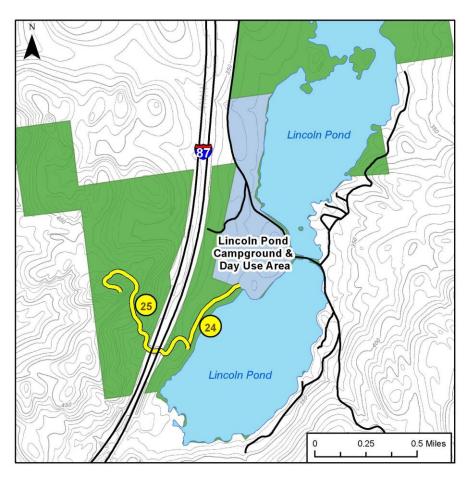
Recommended Uses: Secondary Uses: Prohibited Uses:





#### **Description:**

This proposed, approximately 1.0-mile Class IV trail will extend northwest from the terminus of the Lincoln Pond Accessible Trail (see above), and cross under the Northway (I-87) via a pedestrian underpass. Once on the western side of the highway, the trail will climb to an unnamed rocky summit that has a scenic view of Lincoln Pond and surrounding area. This proposed trail, combined with the proposed Lincoln Pond Accessible Trail, will provide attractive recreational assets for visitors of the campground.



#### 26. Long Sue Loop Trail

Recommended Uses: Secondary Uses: Prohibited Uses:

於意

#### Description:

The proposed Long Sue Loop Trail begins at Johnson Pond Road, and traverses north around a topographic feature named "Long Sue." The trail travels past a tall rock face on the east side of this feature, and the loop is shaped like a lollipop, so the beginning trail segment is also the ending trail segment, served by one parking area. This proposed new Class IV foot trail is approximately 4+ miles, and a portion will be designated as a segment of the NCNST.

#### 27. Long Sue to Moose Mountain Pond Trail

Recommended Uses: Secondary Uses: Prohibited Uses:



#### Description:

In order to provide a NCNST connection across the HPWF, this trail will connect the proposed Long Sue Loop with the existing Moose Mountain Pond Trail. This trail connection will either traverse over the shoulder of Owl Pate or along the Berrymill Brook drainage.

#### 28. Schroon Falls to Johnson Pond Road Trail

Recommended Uses: Secondary Uses: Prohibited Uses:



#### **Description:**

The proposed NCNST will leave the eastern edge of the Hoffman Notch Wilderness Area and cross the Northway (I-87) at the Dirgylot pedestrian underpass. The NCNST is then routed onto the wide shoulder of Route 9 for 0.3 miles, crossing over the Schroon River along Route 9 at the Schroon Falls bridge. The trail then turns east onto River Road, and then into the HPWF on this proposed Class IV trail for approximately 4.5 miles to Johnson Pond Road. This proposed trail crosses Johnson

Pond Brook near a scenic waterfall, where a lean-to will be constructed. The description of this NCNST segment differs slightly from what is described in the NCNST Adirondack Trail Plan (adopted in 2015). That Plan describes the NCNST route using a portion of the existing Peaked Hill Trail. This HPWF UMP supersedes that plan, because field reconnaissance indicates that a more sustainable and scenic trail would avoid the Peaked Hill Trail altogether, and instead traverse around the northwest shoulder of the hill to Johnson Pond Road. From there, the NCNST will use Johnson Pond Road for 1.5 miles to connect east to the Long Sue Trail. This is an acceptable long term scenario for the NCNST, because this section of Johnson Pond Road is a seasonal gravel road that sees very little traffic.

#### 29. Schroon River Loop Trail

Recommended Uses:

**Prohibited Uses:** 







#### **Description:**

The existing Schroon River Road ends at the Schroon River, where a two vehicle parking area and accessible tent site will be constructed. The road is usable for motor vehicles, equestrians, bicycles and other non-motorized means. A new (approximately 0.5 mile) Class VII loop trail will be constructed to continue past the end of the road, north along the river, and finally loop back to the road corridor. This loop trail will be designed primarily for equestrian use, and motor vehicles and bicycles prohibited. This loop will create an enjoyable trail experience with a direct equestrian connection to the Frontier Town Campground & Day Use Area.

#### **30. Split Rock Mountain Trail**

Recommended Uses:

Prohibited Uses:









#### Description:

A new 1.5-mile Class IV trail will be constructed from Route 9 to the summit of Split Rock Mountain. The trail passes by several interesting stone walls, and the route is a pleasant climb to the summit. From an exposed rock area near the summit, there is a fantastic view of Split Rock Falls below and the across to the High Peaks. Portions of this trail will be incorporated into the proposed Split Rock Loop Trail system.

A new 4 vehicle parking area will be built to service this new trail. This parking area will be located approximately 0.5-miles south of the existing pull-off parking area at Split Rock Falls.

#### 31. Split Rock Loop Trails

Recommended Uses:

Prohibited Uses:

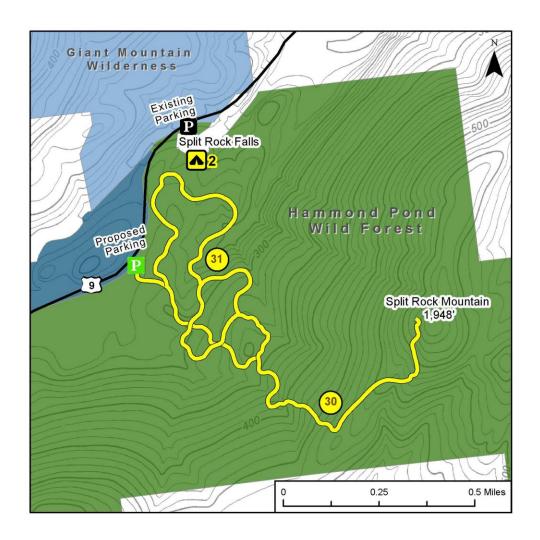




#### Description:

The orientation and terrain of the HPWF area south of Split Rock Falls lends itself well to cross-country skiing. This well-drained area faces north/northwest and slopes downward from Split Rock Mountain toward Route 9 and the Boquet River. The design and layout of these Class VIII ski trails will provide a flowing alignment for a desirable user experience. Up to 4 miles of trails (not including the summit trail) may be built as part of this ski loop network. These loops will use a new proposed parking area, which will also serve the Split Rock Mountain Trail. Full build out of this network will depend on use numbers, natural resource conditions resulting from use, and available workforce(s), which may include local partnerships.

Due to the non-winter seasonal overuse occurring at the area immediately surrounding the nearby waterfall, this area is not proposed to be open for bicycling. Additionally, cross-country ski trails, which utilize frozen snow and ice conditions, don't necessitate the significant trail tread work usually required to create sustainable bicycle or other non-winter trails.



#### 32. Three Ponds Loop

**Recommended Uses:** 







**Prohibited Uses:** 







#### Description:

This trail will be a loop, added to the existing linear East Mill Flow-Round Pond Trail, traversing to Munson, Howard and Brother Ponds. It will use existing parking areas, and minimize bridge and other infrastructure construction. The proposed new Class IV trail will be approximately 3-4 miles in length, which will include a spur trail to Munson Pond. With the existing East Mill Flow-Round Pond Trail completing the loop (and its connection to the Sharp Bridge campground) this will create an interesting recreational opportunity in a relatively low use (but very scenic) area.

#### I. Access for People with Disabilities

#### **History**

1988 HPWF UMP

The 1988 HPWF UMP did not include any explicitly accessible recreational opportunities.

2016 UMP Amendment: Route 73/9N Viewing Area

In June 2016, the HPWF UMP was amended to enhance the existing pull off parking area at the Route 73/9N intersection in the Town of Keene and create a short accessible



Lincoln Pond

walkway to a scenic viewing platform. This area is the site of the former "Keene red barn." This 43-acre tract was purchased by New York State in 1966, and the barn was a non-conforming structure. In December 2016, the barn was demolished because its continuing deterioration had become a health and safety hazard. It was determined to be beyond reasonable repair and posed an increased risk for collapse. The red barn with its scenic backdrop are immortalized in the thousands of photographs taken at the site over many years.

#### **Existing Conditions**

Route 73/9N Viewing Area

The parking area, short accessible walkway and viewing area provide an iconic view of the High Peaks with the East Branch Ausable River area in the foreground. This facility will be maintained in partnership with NYSDOT.

Schroon River Road

The Schroon River Road is currently open to public motor vehicles, and will remain open on a conditional basis. Necessary improvements will be made to the road, while taking care to maintain the existing character of the road corridor. Several appropriate sites may be widened to allow for passage of vehicles traveling in opposite directions. A two vehicle parking area will be constructed at the end of the road, and vehicle use limited to the road and parking area. An accessible tent site will be constructed near the

river, and be accessible from the parking area. A two vehicle parking area will also be constructed adjacent to Route 9, at the beginning of the Schroon River Road. Public ATVs, UTVs, and ORV's of any kind are prohibited from using the road.

If usage of the road and area near the river becomes problematic for any reason (i.e. natural resource damage or enforcement issues), then this road may potentially be converted to a motor vehicle CP-3 route for people with disabilities. If this change were to become necessary, the road would be gated, and only CP-3 permit holders would be able to drive the road; all other vehicles would have to park at the parking area at the beginning of the road.

The term "CP-3" refers to Commissioner's Policy #3, which is the Motorized Access Program for People with Disabilities (MAPPWD). CP-3 permit holders are permitted uncommon access to activities such as hunting, fishing, camping and wildlife observation. These routes have been carefully selected in order to protect natural areas and provide unique opportunities for people with disabilities. This access is restricted to designated routes only. More information about this program can be found at: <a href="http://www.dec.ny.gov/outdoor/2574.html">http://www.dec.ny.gov/outdoor/2574.html</a>.

#### Universal Trail Assessment Process

The Universal Trail Assessment Process (UTAP) was developed as an objective method of measuring outdoor features (such as trails, campsites, and beyond). The goal of UTAP is to provide this useful information to anyone considering using the facility, no matter their ability. This information will allow the user to determine what the various conditions of the trail are and help better inform them how the conditions may fit their own abilities. UTAP information can be provided at trailheads, online, and elsewhere.

#### Accessible Opportunities on Adjacent Lands

The new Frontier Town Campground & Day Use Area contains accessible features, including equestrian camping sites and associated amenities. An all-season day use area contains accessible parking and restrooms along Frontier Town Road (outside of the campground entrance). This has been completed, and is available for use. Inside the campground, a day use area near the Schroon River will include accessible parking and pathways, restrooms, a playground and a pavilion. This is proposed to be completed and open for public use in 2019.

An accessible fishing pier will be constructed at Palmer Pond, across the Northway (I-87) from the HPWF land area, in the Vanderwhacker Mountain Wild Forest. Accessible

features at this future facility will include: parking, a privy, a pathway and a fishing/wildlife viewing pier.

#### **Proposed Management**

#### Objective:

 Enhance existing facilities and create new facilities to provide high quality universally accessible opportunities.

Note: Universally accessible opportunities are proposed where they are reasonably feasible, provide an interesting or enjoyable experience, do not fundamentally alter the nature of the opportunity, are compliant with Department regulations/policies, and conform to APSLMP guidelines.

#### Action Steps

- Construct and maintain all HPWF facilities with accessibility in mind, understanding that while many will not fully meet the Americans with Disabilities (ADA) Act standards, the intent is to maximize the degree of accessibility for the widest range of abilities.
- Develop a priority list of HPWF facilities for which to perform the UTAP analysis. UTAP information gathered will be made available at associated trailheads/parking areas, and online. The Hammond Pond Trail is one such trail that a UTAP analysis will be performed on, especially since the tent site at the pond will be made accessible.

#### Hammond Pond Trail

 The 0.80-mile Hammond Pond Trail begins from a parking area on Ensign Pond Road ends near the Hammond Pond dam, where there is an existing (but undesignated) primitive tentsite. The existing tent site will be designated and upgraded for universal accessibility.

This is currently designated as an ATV CP-3 route, but the bridge near the beginning of the trail isn't wide enough to accommodate an ATV. Travel across private land to avoid the bridge requires users to ford the brook. This trail doesn't have the character of an administrative road, and conditions make it apparent that this trail has may receive extremely low use, if any at all. The Hammond Pond Trail must be closed to ATV (and all other potential motorized uses) in

order to comply with policy and regulation. Through this UMP, other high quality universally accessible opportunities will be provided for access to interesting scenic and recreational opportunities.

Overall, the Hammond Pond Trail is a pleasant, easy walk to the pond. The accessible tent site at the pond will provide a desirable camping experience. A UTAP assessment will be performed on this trail itself, to provide objective information about the trail, making it potentially usable to a wider range of visitors. See the "Access for People with Disabilities" section for more information about UTAP assessments.

#### Schroon River Road

• The Schroon River Road is currently open to public motor vehicles, and will remain open on a conditional basis. Necessary improvements will be made to the road, while taking care to maintain the existing character of the road corridor. Several appropriate sites may be widened to allow for passage of vehicles and other users traveling in opposite directions. A two vehicle parking area will be constructed at the end of the road, and vehicle use limited to the road and parking area. An accessible tent site will be constructed near the river, and be accessible from the parking area. The accessible tent site will include: a tent camping surface, hardened access routes, an accessible privy, picnic table, and a viewing area near the river.

If usage of the road and area near the river becomes problematic for any reason (i.e. natural resource damage or enforcement issues), then this road may potentially be converted to a motor vehicle CP-3 route for people with disabilities. If this change were to become necessary, the road would be gated, and only CP-3 permit holders would be able to drive the road; all other vehicles would have to park at the parking area at the beginning of the road. All other use types, including equestrian and bicycle use, will not be affected by this potential management action. See the "Roads" section for more information about the Schroon River Road.

#### Deadwater Pond Road

 Create universally accessible parking, camping, fishing, and wildlife viewing opportunities in the vicinity of Deadwater Pond, east of Route 9 and north of the

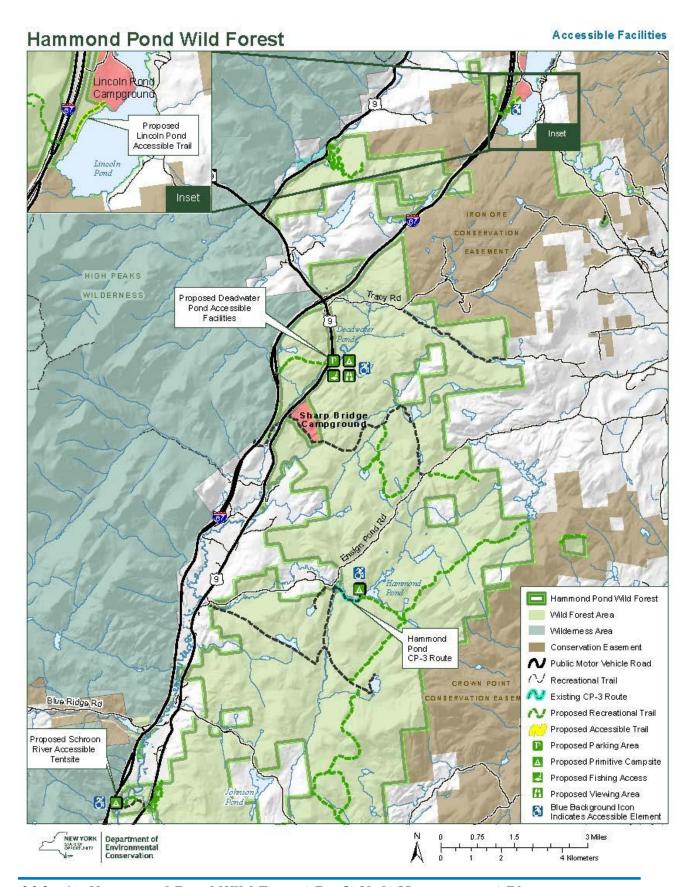
Sharp Bridge Campground. There is an existing 0.25-mile long loop road off the east side of Route 9. Boulders or other delineation features will be installed to contain motorized use to the road and a 4-vehicle parking area. Three tent sites will be constructed in this area, and at least one will be universally accessible from the parking area.

If feasible and warranted by public use, build a hardened, accessible fishing/wildlife viewing surface near the old Deadwater Pond dam.

#### Lincoln Pond Trail

 A 0.5-mile ADA accessible trail will be built from the beach area in the Lincoln. Pond Campground through HPWF lands to a scenic overlook of Lincoln Pond, on the Lower Ponds' western shore. This trail will be available to all day users and campers at Lincoln Pond Campground, and is likely to be enjoyed by many visitors.

A foot trail will be built from the end of this trail, through a Northway (I-87) underpass, up to an unnamed rocky summit that overlooks Lincoln Pond.



#### J. Rock and Ice Climbing

#### **Existing Conditions**

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 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.

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...").

Recently, it appears that rock climbing has experienced increased popularity throughout the Adirondacks. Increased interest and information on rock climbing can provide new and positive recreational opportunities, but could potentially have negative effects if resource protection strategies are not based on a collaboration with the climbing community. Currently, informal trails lead to most climbing locations. As climbing use grows and climbing routes are published through different outlets, informal trails may increase in number and impact.

There are relatively few climbing locations on the HPWF, as compared to the surrounding areas. The most notable HPWF climbing area is near Deadwater Pond, where an informal trail leads to climbing routes, east of Route 9.

#### **Proposed Management**

#### Objective:

 Accommodate climbing on HPWF lands that maintains and enhances natural resource integrity, and develop management strategies that are based on collaboration.

#### Action Steps

- Stabilize the soil at the top and base of climbing routes, where unacceptable erosion is identified.
- Develop sustainable access routes to more heavily-used climbing areas.
- Partner with the climbing community to better understand climbing routes in the HPWF. Inventory sites for existing resource degradation or susceptibility for resource impacts.
- Temporarily close specific climbing routes in order to protect wildlife (i.e. peregrine falcon closures where necessary).
- Install a kiosk and trailhead register in the Deadwater area, to provide relevant notices and user-specific Leave No Trace Principles.
- A rerouted Class III trail will provide access to Northway (I-87) underpass at Lindsay Brook. This trail will begin at Route 9, near Deadwater Pond. This route may also serve climbers, who will likely use a portion of the trail to access the climbing routes in this vicinity.
- Participate in the Department, APA, and climbing community-focused effort to develop a Park-wide policy on fixed anchors on the Forest Preserve.

## K. Belfry Mountain Fire Tower

#### **History**

The original observation station on Belfry Mountain was established in 1912. No tower was needed at that time because the mountain had been cleared of trees and used for grazing. The tower was erected in 1917 and still stands today.



Belfry Mountain Fire Tower

In 1933, New York State purchased the summit where the tower is located, along with a twelve-foot-wide strip of land from Dalton Hill Road to the summit. In 1934, the State constructed an observer's cabin at the summit, which was staffed by at least 13 different observers between 1912 and 1988. The cabin was removed in the 1990's due to vandalism.

In 1999, the tower was partially restored; it was painted and all flooring and steps were replaced.

#### **Existing Conditions**

The Belfry Mountain Trail begins at a gated access road on Dalton Hill Road in the Town of Moriah. The access road is on private conservation easement land, to the Forest Preserve boundary near the summit. Currently, parking occurs along the shoulder of Dalton Hill Road near or across from the gate. At this time, the access road is also the designated trail, which leads 0.3 miles (ascending 120' in elevation) to the summit and fire tower. This access road is used by the landowner, the Department, and by Essex County to access communications buildings near the summit.

This is the shortest fire tower hike in the Adirondack Park and is a nice hike for families. The cab of the tower is open to the public, and the views from the tower are spectacular, including the Champlain Valley and the Green Mountains of Vermont. It is reputed that some spring and fall bird migrations can be observed from the tower. DEC radio communication equipment is attached to the tower, which is important to the health and safety of the region.

#### **Proposed Management**

#### Objective:

 Enhance public use and enjoyment of the Belfry Mountain Fire Tower while accommodating private land and communication elements.

#### **Action Steps**

- Improve signage and information at the entrance to the trail and the tower. Install interpretive signage as appropriate at the tower.
- Install a trail register near the tower, in order to begin capturing use data. Anecdotally, this is a fairly popular hike.
- If necessary or desirable, survey and mark the HPWF corridor leading from Dalton Hill Road to the Belfry Mountain summit and fire tower. Consider relocating the trail from the road to this corridor, depending on site conditions. If this is not an appropriate trail relocation for any reason, then continue to use the access road as the designated trail.
- Maintain the fire tower structure to a safe and usable standard.
- Explore the possibility of securing an agreement with a willing private landowner to construct a 2-3 vehicle trailhead parking area.

#### L. Split Rock Falls

#### **History**

The Split Rock Falls gorge, located along Route 9 in the Town of Elizabethtown, was acquired by New York State in 1981. A much larger surrounding area was acquired by the State in 1992. The falls and gorge have historically been used for tourism and public enjoyment, especially before the Adirondack Northway (I-87) was constructed in the late 1960s. Route 9 was the major north-south travel corridor before the highway was built.

#### **Existing Conditions**

This area currently receives very high use during the warmer summer months. Human waste, tree



Split Rock Falls

cutting, and garbage are problems in this area. Parking is limited to a small paved pulloff area along Route 9.

There are no designated trails or access points to or around Split Rock Falls. Some old pathways, roads, stone walls and foundations are reminiscent of the area's prior ownership, when it was a privately-held tourism location.

The 1988 HPWF UMP proposed that this area be restricted to day use only, however, there are two existing designated tentsites in the area around Split Rock Falls.

The 1988 HPWF UMP also proposed to repair and strengthen the existing chain link fencing along the gorge wall. This fencing pre-dates State ownership of the area. Sections of this fencing are broken, dilapidated, or missing.

Finally, the 1988 HPWF UMP described the erosion and bank destabilization occurring from heavy public use, and proposed to develop a mitigation plan. Since there are no designated trails or access points to view the falls, user impacts (erosion, bank destabilization, vegetation loss) are spread throughout the area.

#### **Proposed Management**

#### Objective:

 Accommodate public use and enjoyment of the Split Rock Falls area in a manner that is safe, orderly and protective of the unique natural resources of the area.

#### **Action Steps**

- Remove the broken or dilapidated sections of existing chain link fencing.
- Install sanitary facilities, where appropriate, to address the human waste problem at Split Rock Falls.
- Install a kiosk with register box at the parking area. On the kiosk, feature the natural and geologic significance of the falls, promote Leave No Trace Principles, and provide other important information.
- Develop an erosion and bank stabilization work plan to halt soil loss and river bank degradation. Eroded or potentially erosive areas will be stabilized, and public use of those areas will be discouraged. Use will be concentrated to durable, stable surfaces.
- Construct a short hardened pathway from the pull-off parking area to an area where the falls may be viewed, that is designed for maximum accessibility. If a

sustainable route is found, consider constructing a hardened route to the area below the falls. Without a designated route, visitors will still pick their way down to the area below the falls in an ad hoc fashion, furthering impact spread and erosion.

- There are currently two designated tent sites in the area around Split Rock Falls. Designated sites are those sites signed for camping, usually with a "Camp Here" disk, a fire ring, and a privy. While camping will be allowed to continue at designated sites in this area, sites exhibiting resource degradation may be relocated, and closed sites rehabilitated. If resource degradation continues to occur or worsen, then promulgate a regulation to make the Split Rock Falls area "day use only."
- Work with NYSDOT on management of areas within the Route 9 ROW, and on maintenance of the existing pull-off parking area. This includes continuous signage improvements, safety features, and replacing the deteriorated wooden bollards that delineate the parking area.
- Construct a 4 vehicle parking area on HPWF land approximately 0.5 miles above the falls area, to serve the proposed Split Rock Mountain Trail and ski loops.
- Foster existing and create new partnerships that benefit the management of this
  area. Partnerships will be encouraged across the entire HPWF, but the Split
  Rock Falls area will be a focal point, due to its longstanding issues and heavy
  use.

#### M. North Country National Scenic Trail

#### **History**

In March 1980, federal legislation authorized the establishment of the North Country National Scenic Trail (NCNST) as a component of the National Trails System (which includes other long distance trails such as the iconic Appalachian Trail.) The total length of the NCNST is projected to be approximately 4,600 miles, traversing the northern United States. Of that total mileage, roughly 2,700 miles have been completed. The legislation that created the NCNST requires that it be managed through a federal-state-local-private partnership, with the National Park Service providing overall administration and coordination. Positive collaboration between agencies, organizations, landowners and individuals is critical to the creation of this trail.

A UMP for the conceptual NCNST route across the Adirondack Park was adopted in September 2015. The specific location of the trail across the included Forest Preserve units is described and approved in that unit's individual UMP. Therefore, this UMP

provides the proposed route across the HPWF. The HPWF has the most new NCNST trail miles of any Adirondack Forest Preserve unit.

#### **Existing Conditions**

The proposed NCNST route traverses the length of the core HPWF land area, and utilizes both existing and new trails. Sections of new trail are mainly named/described by their road or existing trail crossings. Several of these sections will provide a more remote trail experience that has previously been unavailable on existing trails in this unit.

The overall goal of the NCNST is to be an off-road, non-motorized trail with spectacular scenery throughout. The trail is designed for hiking, and new trail sections will be designed to primarily accommodate that use as a Class IV trail.



View from Bald Peak, along proposed NCNST route

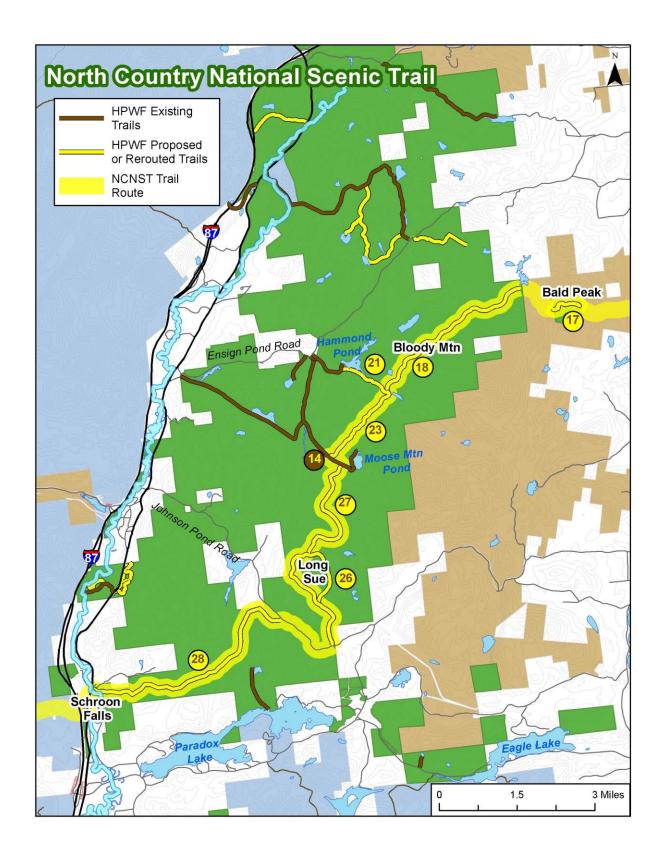
#### **Proposed Management**

#### Objective:

• Combine existing and new trail sections to create a NCNST traverse across the HPWF.

#### **Action Steps**

- Design and construct new NCNST trail segments across the HPWF that avoid sensitive natural resources, and provide scenic, enjoyable trail experiences.
- Provide primitive camping opportunities at trail intervals suitable for multi-day excursions.



#### N. Putts Creek Wildlife Management Area

#### **History**

Within the Adirondack Park and the HPWF UMP area lies the Putts Creek Wildlife Management Area (WMA). It is a 113-acre parcel of land located in the Town of Crown Point, containing Putnam Creek where it flows directly into Lake Champlain. It was purchased by the State of New York in 1967 using Park & Recreational Land Acquisition Bond Funds.

#### **Existing Conditions**

The Putts Creek WMA is a WMA in name only. It's part of the HPWF, and vegetation is not managed for wildlife species/habitat (unlike other WMAs outside the Adirondack Park). It is preserved for its intrinsic value, and is mostly used for hunting and fishing. Putnam Creek (aka "Putts Creek") is an important tributary into the southern end of Lake Champlain.

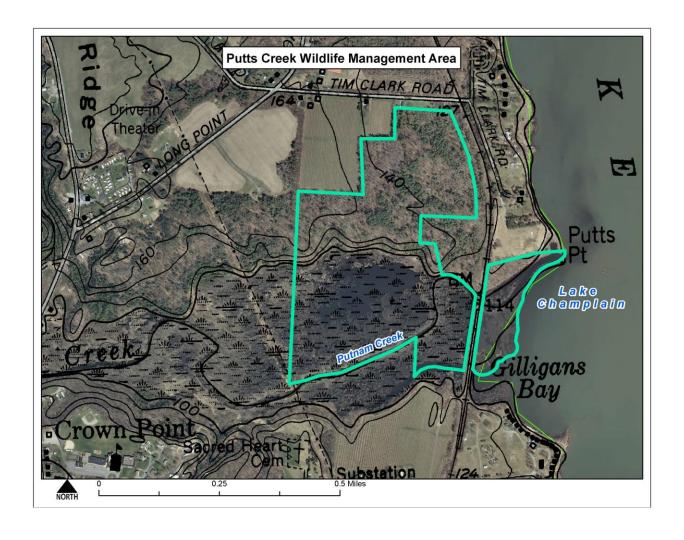
#### **Proposed Management**

#### Objective:

Preserve the natural resource integrity of the Putts Creek WMA.

#### Action Steps

- Continue to preserve this tract for its intrinsic natural values. Vegetation will not be actively managed; this tract will be managed as Forest Preserve.
- If found to be appropriate and desired, a small, 2 vehicle parking area may be developed to provide better access to this WMA.



# **Appendix A – Phases of Implementation**

The following five phases of implementation appear in priority order; Phase One lists the projects/activities likely to be undertaken first (given adequate allocation of time and resources). However, the phases are not iterative, in that not all projects/activities in Phase One need to be completed prior to completing something in one of the later phases. Management actions that are indeed dependent or conditional upon one another are described as such, and accounted for in the phasing plan.

The phased approach acknowledges that completion of a facility and subsequent use will determine the future of that facility and the future of any other associated or dependent facility. If use level, user experience, or natural resource conditions are not optimized, then facilities may be relocated or closed and rehabilitated.

#### Phase One

Develop wildland monitoring plan, including indicators and standards for natural resource and social conditions. Develop and implement (throughout all phases) action steps that may be triggered by exceedance of standards, as identified through the monitoring process.

Inventory conditions of existing facilities throughout the unit. Implement action steps where necessary to protect natural resource integrity and desired social conditions.

Maintain all existing facilities. Continuously improve education and outreach programs.

Improve the Schroon River Access Road for motor vehicles, equestrians, bicycles, and other non-motorized uses. Construct a two vehicle parking area at the end of the road, and another two vehicle parking area at the beginning of the road.

Construct an accessible tent site near the end of the Schroon River Access Road, to be accessible from the parking area. Construct a sustainable fishing and waterway access site downriver of the fish weir.

Construct up to 5 miles of the Frontier Town Equestrian Trail Network, on both HPWF and Town of North Hudson lands.

Designate and improve the East of Route 9 Multiple Use Trail.

Develop and begin execution of the erosion and bank stabilization work plan for the Split Rock Falls area.

Install sanitary facilities and an informational kiosk at Split Rock Falls.

Construct a short, hardened pathway from the pull-off parking area to an area where Split Rock Falls may be viewed from above. If feasible, build a sustainable, hardened route to an area below the falls. This will be completed as part of the erosion and bank stabilization work plan.

Bring the Eagle Lake fishing and waterway access site into APSLMP compliance, and maximize ease of use.

Expand the Schroon Falls Parking Area to accommodate 4 more vehicles. Then construct a fishing and waterway access site above Schroon Falls. Relocate the existing tent site at Schroon Falls, and rehabilitate the closed site.

#### Phase Two

Maintain all existing facilities. Continuously improve eduation and outreach programs.

Inventory conditions of existing facilities throughout the unit. Implement action steps where necessary to protect natural resource integrity and desired social conditions.

Improve the existing tent site at Hammond Pond to be universally accessible. Perform the UTAP analysis on the Hammond Pond Trail.

If warranted by use of the existing Frontier Town Equestrian Trails, build up to 5 more miles of this network (full build out).

Construct a 2 vehicle parking area and fishing and waterway access site for the Russett, Mill, Murrey and Tanaher Ponds area. Construct two short canoe carries to connect all four ponds. Construct two tent sites.

Construct the Schroon Falls to Johnson Pond Road Trail.

After completion of the Schroon Falls to Johnson Pond Road Trail, construct a lean-to at Johnson Pond Brook.

Construct the Schroon River Loop Trail.

Rehabiliate the natural resource damage along the East Side Trail (caused by illegal, non-winter motorized use).

Construct a two vehicle parking area, Schroon River fishing and waterway access site, and tent site on HPWF land adjcent to Route 9 approx. 0.5 mi north of the North Hudson Town Beach.

#### Phase Three

Maintain all existing facilities. Continuously improve education and outreach programs.

Inventory conditions of existing facilities throughout the unit. Implement action steps where necessary to protect natural resource integrity and desired social conditions.

Construct 4 vehicle parking area and three tent sites (one accessible) at Deadwater Pond. Construct Deadwater Pond fishing and waterway access site after parking area completed.

Construct the rerouted Lindsay Brook Trail.

Stabilize soil, through terracing, at the top and base of Deadwater climbing routes.

Construct the Long Sue Loop Trail and associated primitive tent site.

Construct a 4 vehicle parking area for the Long Sue Loop Trail.

If possible and desirable, construct a parking area for up to 4 horse trailers near the eastern end of Johnson Pond Road.

Construct the Split Rock Mountain Trail and 4 vehicle parking area.

Construct the Split Rock Loop Trails, if supported by public volunteer engagement.

Construct a 2 vehicle parking area and fishing and waterway access site at Johnson Pond. Then construct one tent site at the southern end of Johnson Pond.

#### **Phase Four**

Maintain all existing facilities. Continuously improve education and outreach programs.

Inventory conditions of existing facilities throughout the unit. Implement action steps where necessary to protect natural resource integrity and desired social conditions.

Construct the Hammond Pond Trail Extension and the Moose Mountain Pond to Hammond Pond Trail.

If warranted by public use of existing Deadwater Pond accessible facilities, construct a hardened, accessible fishing/wildlife viewing surface at the pond.

Construct the universally accessible Lincoln Pond Trail.

Construct the Lincoln Pond Overlook Trail after completion of the Lincoln Pond Trail.

Construct the Long Sue to Moose Mountain Pond Trail.

Designate or construct one tent site at Moose Mountain Pond.

Assess the two trails up Baxter Mountain from the Beede Lane area. If possible, construct a two vehicle parking area. Consider closing one of the trails, depending on condition and use level.

Designate or construct one tent site at Crowfoot Pond.

Resurface the Eagle Lake Parking Area.

#### **Phase Five**

Maintain all existing facilities. Continuously improve education and outreach programs.

Inventory conditions of existing facilities throughout the unit. Implement action steps where necessary to protect natural resource integrity and desired social conditions.

Determine the location of the HPWF corridor from Dalton Hill to the summit of Belfry Mountain. If the location of this corridor is favorable for a trail, construct a foot trail in this corridor (if this is a desirable alternative to using the access road).

If NCNST access across adjoining conservation easement land is approved and completed, construct the Bloody Mountain Trail and associated primitive tent site.

If NCNST access across surrounding conservation easement land is approved and completed, construct the Bald Peak Trail and associated primitive tent site.

Determine the best location for the Harris Hill Trail, and construct it.

Construct the Three Ponds Loop Trail, then construct one tent site at Munson Pond.

### **Appendix B – References**

Adirondack History Center Museum – Essex County Historical Society. "Travel Timeline." Accessed 4/12/2017. https://adkhistorycenter.org/esco/timelines/travel.html

Adirondack Park Agency. State of New York Adirondack Park State Land Master Plan. Approved December 2016. Ray Brook, NY.

Adirondack Park Invasive Plant Program. Distribution of Lakes Monitored and Aquatic Invasive Species in the Adirondack PRISM. 2015.

Cole, David N.; McCool S.F. 1997a. Limits of Acceptable Change and Natural Resources Planning: When is LAC Useful, When is it Not? In: McCool, Stephen F.; Cole, David N., comps. 1997. Proceedings: Limits of Acceptable Change and Related Planning Processes: Progress and Future Directions; May 20-22, 1997; Missoula, MT. INT-GTR-371. Ogden, UT: United States Department of Agriculture, Forest Service, Rocky Mountain Research Station, pp. 69-71.

Hendee, J. C. and C. P. Dawson, 2009. Wilderness Management: Stewardship and Protection of Resources and Values (Fourth Edition). Fulcrum Publishing, Golden, Colorado.

Hesselbarth, Woody; Vachowski, Brian; Davies, Mary Ann. 2007. Trail Construction and Maintenance Notebook: 2007 Edition. Tech. Rep. 0723-2806-MTDC. Missoula, MT: U.S. Department of Agriculture Forest Service, Missoula Technology and Development Center. 166 p.

Hunt, David M. and Lori L. Hunt. 1996. Field survey to Upper Schroon River of June 8, 1996. New York Natural Heritage Program.

Manchester, Lee. "Old Roads Abound in the Backcountry." Lake Placid News. December 16, 2005.

McMartin, Barbara. The Great Forest of the Adirondacks. North Country Books, Utica, New York, 1994.

New York Natural Heritage Program. 2015. Online Conservation Guide for Diphasiastrum complanatum. Available from: http://guides.nynhp.org/guide.php?id=9841. Accessed March 29<sup>th</sup>, 2017.

New York Natural Heritage Program. 2015. Online Conservation Guide for *Potamogeton alpinus*. Available from: http://guides.nynhp.org/guide.php?id=9792. Accessed March 29<sup>th</sup>, 2017.

New York Natural Heritage Program. 2015. Online Conservation Guide for *Pyrola asarifolia* ssp. *asarifolia*. Available from: http://guides.nynhp.org/guide.php?id=9261. Accessed March 29<sup>th</sup>, 2017.

New York Natural Heritage Program. 2015. Online Conservation Guide for *Solidago simplex* var. *racemosa*. Available from: http://guides.nynhp.org/guide.php?id=8826. Accessed March 29<sup>th</sup>, 2017.

New York Natural Heritage Program. 2017. Online Conservation Guide for Hemlock-Northern Hardwood Forest. Available from: http://guides.nynhp.org/guide.php?id=9991. Accessed March 30<sup>th</sup>, 2017.

New York Natural Heritage Program. 2017. Online Conservation Guide for Riverside Sand/Gravel Bar. Available from: http://guides.nynhp.org/guide.php?id=10010. Accessed April 20<sup>th</sup>, 2017.

New York Natural Heritage Program. 2018. Online Conservation Guide for Pitch Pine-Oak-Heath Rocky Summit. Available from: http://www.acris.nynhp.org/guide.php?id=9968. Accessed April 13<sup>th</sup>, 2018.

NYSDEC, Bureau of State Land Management: Old Growth Forest Definition.

NYSDEC. Draft Amendment to the Vanderwhacker Mountain Wild Forest Unit Management Plan. 2018.

NYSDEC. Draft Wilcox Lake Wild Forest Unit Management Plan. 2018.

NYSDEC. Hammond Pond Wild Forest Unit Management Plan. 1988.

NYSDEC. Hoffman Notch Wilderness Area Unit Management Plan. 2012.

NYSDEC. Wild, Scenic and Recreational Rivers System Overview. <a href="https://www.dec.ny.gov/permits/6033.html">https://www.dec.ny.gov/permits/6033.html</a>

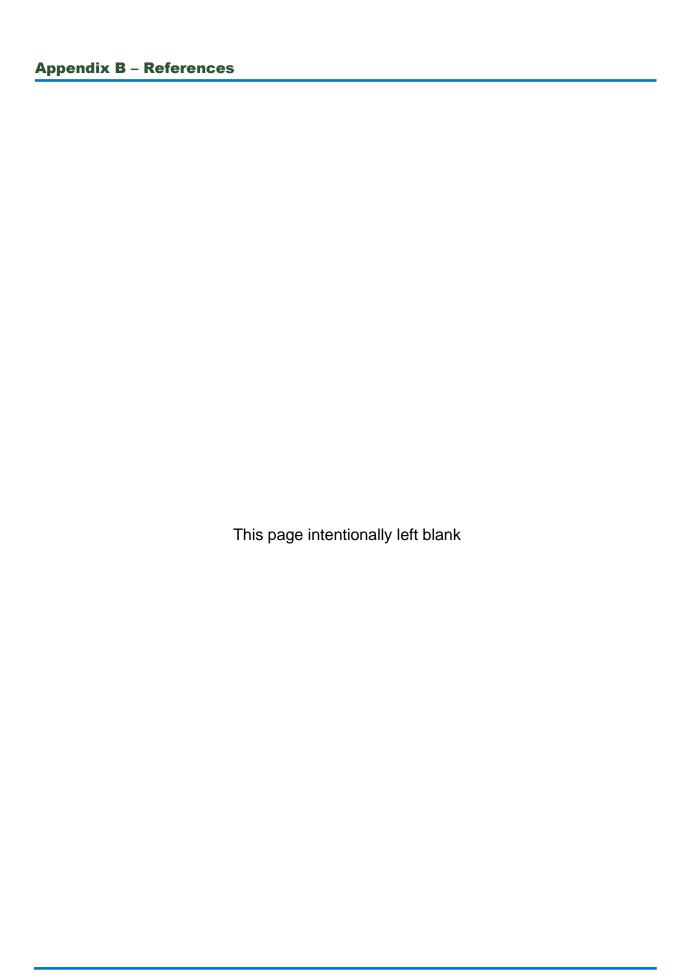
"North Hudson, NY History." Edited by H.P. Smith, D. Mason & Co. Publishers, Syracuse, NY 1885. http://history.rays-place.com/ny/n-hudson.htm.

Preall, Richard. NYSDEC Schroon Lake Report. 1997.

Regan, Sean. United States Geological Survey. Personal Communication.

Split Rock Falls: NYS Geological Association Field Trip Guidebook, NYS Geological Association Field Trip Guidebook, 74th Annual Meeting 2002; Best Kept Geologic Secrets of the Adirondacks and Champlain Valley.

U.S. Fish & Wildlife Service. Classification of Wetlands and Deepwater Habitats of the United States. https://www.fws.gov/wetlands/documents/classwet/forested.htm



## **Appendix C – Trail Classifications**

<u>Trail</u> <u>Type</u>	<u>Marking</u>	Tread and Tread Width	<u>Trail</u> <u>Corridor</u>	Bridges/ Ladders	<u>Design and</u> <u>Maintenance</u>
Class I Unmarked Route	None	Intermittently apparent, relatively undisturbed, organic soil horizon	Intermittent ly 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 obstruction s 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 information signs	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.

<u>Trail</u> <u>Type</u>	<u>Marking</u>	Tread and Tread Width	<u>Trail</u> <u>Corridor</u>	Bridges/ Ladders	<u>Design and</u> <u>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. Extens ive 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 – Management and **Policy Considerations**

#### **Article XIV of the New York State Constitution**

Most of the State land which is the subject of this Unit Management Plan is 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."

#### **Adirondack Park State Land Master Plan**

The Adirondack Park State Land Master Plan (APSLMP) was initially adopted in 1972 by the Adirondack Park Agency (APA), with advice from and in consultation with the Department, pursuant to Executive Law §807, now re-codified as Executive Law §816. The Master Plan 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.

The Master Plan 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 forth management guidelines for the lands falling within each major classification. The Master Plan classifies the lands which are the subject of this UMP as part of the Hurricane Mountain Primitive Area.

The Master Plan 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; recreation 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 Master Plan. The UMPs must conform to the guidelines and criteria set forth in the Master Plan. Thus, UMPs implement and apply the Master Plan'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."

#### Wild Forest Guidelines for Management and Use

From the Adirondack Park State Land Master Plan:

Those areas classified as wild forest are generally less fragile, ecologically, than the wilderness and primitive areas. Because the resources of these areas can withstand more human impact, these areas should accommodate much of the future use of the Adirondack forest preserve. The scenic attributes and the variety of uses to which these areas lend themselves provide a challenge to the recreation planner. Within constitutional constraints, those types of outdoor recreation that afford enjoyment without destroying the wild forest character or natural resource quality should be encouraged. Many of these areas are under-utilized. For example, the crescent of wild forest areas from Lewis County south and east through Old Forge, southern Hamilton and northern Fulton Counties and north and east to the Lake George vicinity can and should afford extensive outdoor recreation readily accessible from the primary east-west transportation and population axis of New York State.

#### Wild Forest Basic Guideline #4: No Material Increase

The original guideline in the Adirondack Park State Land Master Plan reads:

Public use of motor vehicles will not be encouraged and there will not be any material increase in the mileage of roads and snowmobile trails open to motorized use by the public in wild forest areas that conformed to the master plan at the time of its original adoption in 1972.

In March of 2008, APA adopted a resolution which found that existing DEC policy, which places a limit on the total snowmobile trail mileage on all wild forest units in the Adirondack Park at 848.88 miles, is consistent with the Wild Forest Basic Guideline #4. The resolution also outlined the format in which snowmobile trail mileage should be presented in UMP's to ensure continued compliance with Basic Guideline #4.

This information is presented below, and only includes mileage within what is currently classified as the HPWF, on roads and trails under DEC's jurisdiction, that are proposed in this UMP to be designated as snowmobile trails, and of existing trails to remain open.

### Hammond Pond Wild Forest Snowmobile Trail Mileage

Base Snowmobile Trail Mileage (pre-UMP):	2.5 miles
Proposed Closure Mileage:	2.5 miles
Proposed New Trail Mileage:	1.1 miles
Total Proposed Trail Mileage (post-UMP):	1.1 miles

#### Park-wide Snowmobile Trail Mileage

1972 Mileage	Estimated Existing Mileage in All Wild Forest Units	Proposed Net Gain/(Loss) of Mileage in HPWF	New Total Estimated Mileage in All Wild Forest Units	Total Allowable Wild Forest Mileage *  *Mileage beyond which would be considered a "material increase"
740	788.81	-1.4	787.41	848.88

## **APA/DEC Memorandum of Understanding**

As agencies of the same New York State Executive Department, the Department and the Adirondack Park 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 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 HPWF 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 is to identify mitigating 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 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, State legislation was passed creating a wild, scenic, and recreational rivers system on State and private lands to protect and maintain certain designated rivers in their free-flowing condition and natural setting. Statutory authority for the management of the rivers system is found in the Environmental Conservation Law Article 15, Title 27, and 6NY CRR Part 666; Regulation for Administration and Management of the Wild, Scenic and Recreational Rivers System in New York State Excepting Private Land in the Adirondack Park. The purpose of Part 666 is to implement the Act by establishing statewide regulations for the management, protection, enhancement and control of land use and development in river areas on all designated wild, scenic and recreational rivers in New York State, except for private land in river areas within the Adirondack Park.

## **Snowmobile Management Guidance**

In 2009, DEC drafted the Management Guidance: Snowmobile Trail Siting, Construction and Maintenance on Forest Preserve Lands in the Adirondack Park. The Management Guidance established a trail classification system, which is described as follows:

Class II (Community Connector Trails) - Snowmobile trails or trail segments that serve to connect communities and provide the main travel routes for snowmobiles within a unit are Community Connector Trails. These trails are located in the periphery of wild forest or other Forest Preserve areas. They are always located as close as possible to motorized travel corridors, given safety, terrain and environmental constraints, and only rarely are any segments of them located further than one mile away from the nearest of these corridors. They are not duplicated or paralleled by other snowmobile trails. Some can be short, linking communities to longer Class II trails that connect two or more other communities.

Class I (Secondary Snowmobile Trails) - All other snowmobile trails that are not Community Connector Trails are Secondary Snowmobile Trails. These trails are located in the periphery of wild forest and other Forest Preserve areas where snowmobile trails are designated. They may be spur trails—perhaps leading to population areas and services such as repair shops, service stations, restaurants and lodging—, short loop trails or longer recreational trails. If directly connected to Class II trails, new and rerouted Class I trails are always located as close as possible to - and no farther than one mile from - motorized travel corridors, although some - with high

recreational value - may be located beyond one mile and may approach a remote interior area.

**Snowmobile Use on Roads** – Designated snowmobile routes can exist on Forest Preserve roads, such as the Chain Lakes Road (South). DEC management of all such roads for motor vehicle use, including snowmobiles, is guided by the DEC "CP-38 Forest Preserve Roads" policy.

# **Invasive Species Management Guidance**

In March 2018, the Department, APA, and APIPP adopted Inter-Agency Guidelines for Implementing Best Management Practices to Control Invasive Species on DEC Administered Lands of the Adirondack Park. The goal of these guidelines is to establish parameters known as best management practices (BMPs) for the control of terrestrial and aquatic invasive species while ensuring that such management activities do not alter the "forever wild" character of Forest Preserve lands. These guidelines are intended to harmonize the Constitution's "forever wild" provisions with the Master Plan's overriding directive to manage Forest Preserve lands for their protection and preservation. They have been developed pursuant to, arid are consistent with, relevant provisions of the New York State Constitution, the Environmental Conservation Law (ECL), the Executive Law, the State Environmental Quality and Review Act (SEQRA), the Master Plan, and all other applicable rules and regulations, policies and procedures.

### **Mountain Bike Trail Guidance**

The Management Guidance: Siting, Construction and Maintenance of Single-track Bike Trails on Forest Preserve Lands in the Adirondack Park Management Guidance provides guidelines solely for the management of DEC single-track bicycle trails on wild forest lands. It is intended to help land managers consistently design, construct and maintain bike trails and bike trail networks that protect natural resources and wild forest character while also providing a valuable recreational opportunity.

## **Minimum Requirements Analysis (MRA)**

The Minimum Requirements Analysis (MRA) is a structured process to evaluate multiple criteria as part of planning for trail bridges within areas classified as Wild Forest by the APSLMP. The MRA is similar to the Minimum Requirements Decision Guide (MRDG) used by managers on Federal public lands designated as Wilderness. This MRDG is a process for land managers to identify, analyze, and select management actions that are

the minimum necessary for stewardship of Wilderness. Like the MRDG, the MRA is designed to assist Forest Preserve planners and managers in making appropriate decisions. The guiding principle—for both decision making models—is that only the minimum tools, regulation, or force necessary to achieve established objectives are justified.

The MRA enables an objective evaluation of criteria when possible. The selection of a bridge design, however, is also based on considerations that have a varying degree of measurability. A selection will be made only after careful consideration of each alternative by APA and DEC staff of both the quantifiable and non-quantifiable criteria.

### **Americans with Disabilities Act**

The Americans with Disabilities Act (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 Department incorporates accessibility for people with disabilities into the planning, construction and alteration of recreational facilities and assets supporting them. This UMP 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 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 Department issues Temporary Revocable Permits (TRPs) in its sole discretion for the temporary use of State lands and conservation easement lands for approved 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, the Department 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 or 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

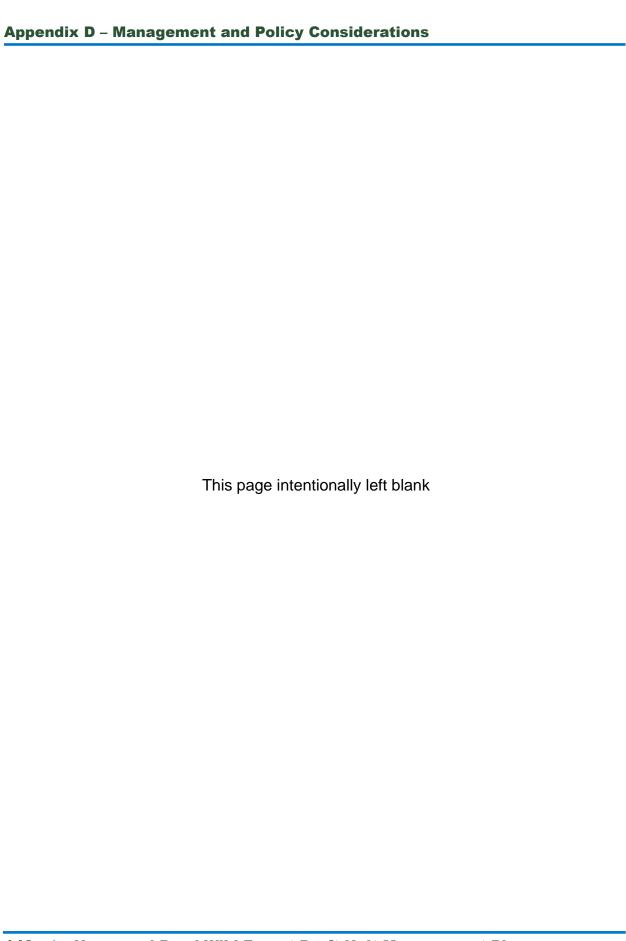
Many great things are accomplished on State lands through the volunteering of individuals and groups. There are instances where coordinating work through the DEC proves challenging due to logistics, staffing or funding levels. In some of these instances, great work is able to be accomplished through 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 is a good fit for volunteers and there is an individual or group willing to take on the project, the Land Manager will help the potential volunteers through the VSA process, which consists of an application and then a final Agreement. This process is necessary, as it communicates 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

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



# **Appendix E – Pond Narratives**

Champlain watershed:

#### Lincoln Pond (C315)

Lincoln Pond is a large (572 acres) waterbody located on the northern fringes of the unit in the Town of Elizabethtown. The majority of the pond is shallow with only a small section of the southern basin eclipsing 20 feet in depth. The most recent survey was in 2012 when the following fish species were captured: northern pike (up to 26"), smallmouth bass (up to 20"), largemouth bass (up to 21"), black crappie, yellow perch, pumpkinseed, golden shiner, yellow bullhead and brown bullhead. The largemouth bass are especially plentiful and offer an outstanding fishery. Water chemistry values were exceptional: pH of 7.65 and an acid neutralizing capacity (ANC) of 304  $\mu$ eq/l. There is a DEC campground on the pond that provides boat access via a beach launch.

A stocking policy for tiger musky was discontinued after the 2012 survey failed to document any surviving fish. Lincoln Pond will continue to be managed as a warmwater fishery and musky may be considered as a future stocking alternative. Ice fishing is allowed on this water.

Management Class: Warmwater

#### Mill Pond (C318)

Mill Pond is located in an isolated parcel of the unit in the Town of Elizabethtown. The pond is only partially within the unit; the eastern end is private land. It is a 58-acre pond with a maximum depth of 30 feet and was last surveyed in 2000 when the following fish species were caught: northern pike (up to 26"), pumpkinseed, black crappie, yellow perch, golden shiner, white sucker and brown bullhead. The most recent water chemistry data are from a survey by the Adirondack Lakes Survey Corporation (ALSC) in 1984 when the pH was 7.26 and the ANC was 169  $\mu$ eq/l. Access points to Mill Pond and the following three ponds are along the Lincoln Pond Road.

Mill Pond is not currently stocked and will continue to be managed as a warmwater fishery. Ice fishing is allowed on this water.

Management Class: Warmwater

#### Murrey Pond (C317)

Although it has a separate pond number, Murrey Pond is essentially an arm of Mill Pond. This shallow, three-acre pond was last sampled in 1984 by ALSC and the following fish species were present: northern pike, pumpkinseed, black crappie, yellow perch and brown bullhead. Water chemistry values at that time were: pH of 7.32 and ANC of 201 µeq/l.

Murrey Pond has no history of stocking and will continue to be managed as a warmwater fishery. Ice fishing is allowed on this water.

Management Class: Warmwater

#### Russet Pond (C316)

Russet Pond is a 24-acre pond with a maximum depth of 30 feet and is located in the same parcel as Mill Pond. The most recent data are from an ALSC survey completed in 1984 when the pH was 7.02 and the ANC was 209 µeq/l. Fish species captured at that time were: northern pike, largemouth bass, pumpkinseed, yellow perch and golden shiner.

Russet Pond is not currently stocked and will continue to be managed as a warmwater fishery. Ice fishing is allowed on this water.

Management Class: Warmwater

#### **Tanaher Pond (C5217)**

Tanaher Pond is a shallow (10 ft. deep), 11-acre pond located just south of Mill Pond. It was last surveyed in 1984 by ALSC and the following fish species were captured: northern pike, pumpkinseed, black crappie, yellow perch, golden shiner and brown bullhead. Water chemistry values from that same survey were: pH of 7.3 and ANC of 182 µeq/l.

Tanaher Pond is not currently stocked and will continue to be managed as a warmwater fishery. Ice fishing is allowed on this water.

Management Class: Warmwater

#### **Unnamed Water (C5218)**

Pond #5128 in the Champlain drainage is a small (2.7 acres) unnamed water within the Moriah Shock Correctional Facility. 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

#### **Upper Feeder Pond (C347)**

Upper Feeder Pond is a shallow, 18 acre pond whose shoreline is mostly privately owned. The most recent data were gathered by ALSC in 1985. Fish species identified from that survey were: blacknose dace, creek chub, white sucker and brown bullhead. The pH was 7.42 and the ANC 207 µeq/l.

Upper Feeder Pond will be managed to preserve its aquatic community for its intrinsic value.

Management Class: Other

#### **Upper Hudson watershed:**

#### **Arnold Pond (UH437A)**

Arnold Pond is a 20-foot-deep, 2.7-acre waterbody located at the southern edge of the unit near Eagle Lake. Although it has a history of brook trout stocking, the most recent fisheries survey (1988) only caught golden shiner and brown bullhead. That same survey, conducted in August, had good pH readings, but documented poor dissolved oxygen (D.O.) levels. A water chemistry survey in June, 2015 revealed excellent D.O., a pH of 7.2 and an ANC of 91  $\mu$ eq/l. The pond is reached by a short, but steep hike on a trail from Route 74.

Arnold Pond will be surveyed in the future to determine if mid-summer D.O. levels are conducive to brook trout survival and to assess the feasibility of a pond reclamation. A brook trout stocking policy will be initiated subsequent to a reclamation.

Management Class: Adirondack Brook Trout

#### Ash Craft Pond (UH497)

Ash Craft Pond is a 16-acre pond located in the northern part of the unit. Even though it is entirely within public land, legal entry to the water is a challenge since the pond is situated alongside the Northway (I87), precluding vehicle access and parking. 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

#### Bass Lake (UH464)

Bass Lake is a 40 acre, 30-foot-deep lake that was reclaimed with rotenone in 1994 in an effort to eradicate golden shiner, bluntnose minnow and creek chub. The lake had been reclaimed once before in 1951. A post-reclamation netting in 1995 confirmed success and the pond was subsequently stocked with brook trout and rainbow trout. The most recent survey in 2008 indicates a robust trout fishery still exists despite catching three creek chubs. A previous survey from 2001 had not captured any competing fish species, only brook and rainbow trout. Water chemistry results from the 2008 survey were: pH of 7 and ANC equal to 92 µeq/l. Access to the lake requires a two-mile hike from the north starting at the Hammond Pond parking area on the Ensign Pond Road (aka County Route 4) or a 1.5-mile hike from the west starting near Route 9.

Bass Lake will continue to be stocked with brook and rainbow trout and be managed for its brook trout fishery. Trout condition and species composition will be monitored through periodic biological surveys to ascertain if a pond reclamation is warranted in the future. A trout stocking policy will be reinstated subsequent to a reclamation.

Management Class: Adirondack Brook Trout

#### **Berrymill Pond (UH5453)**

Officially listed as a 10-acre pond, Berrymill is more accurately described as a flow within Berrymill Brook. Although seasonal and yearly fluctuations in water level are likely, the characteristics of this waterbody are more creek-like than ponded and fisheries management options are therefore limited. We have no fish or water chemistry data for this pond. Access to Berrymill is via a 1.3-mile trail from the Hammond Pond parking area on the Ensign Pond Road (aka County Route 4).

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

Management Class: Unknown

#### **Birch Pond (UH495)**

Located in the northern part of the unit, Birch Pond is a 6-acre pond with a maximum depth of 25 feet. The most recent survey of the pond was in 1987 by ALSC when they captured brook trout along with golden shiner, white sucker and pumpkinseed. Water chemistry values were 7.2 for the pH and 147  $\mu$ eq/I for ANC. Approximately half of the shoreline is private land and combined with its proximity to I87, access to the pond is not easily obtained. Because of this, the brook trout stocking policy was cancelled in the 1990's.

Since it has a proven ability to support brook trout, Birch Pond will be considered an Adirondack brook trout water and stocking may be renewed in the event that access improves.

Management Class: Adirondack Brook Trout

#### **Bloody Pond (UH477)**

Bloody Pond is a small (4.7 acres), relatively deep (34 feet) waterbody just east of Hammond Pond. A 2015 survey revealed brook trout as the sole fish species and excellent water chemistry: pH of 7.3, ANC of 127 µeq/l. The brook trout monoculture is a result of a 1992 pond reclamation that successfully removed golden shiner, creek chub, brown bullhead and yellow perch. A brook trout stocking policy was initiated soon after the reclamation. The pond is reached after a nearly two-mile hike from the Hammond Pond parking area on the Ensign Pond Road (aka County Route 4).

Bloody Pond will continue to be stocked with brook trout and be managed for its brook trout fishery. Trout condition and species composition will be monitored through periodic biological surveys to ascertain if a pond reclamation is warranted in the future. A brook trout stocking policy will be reinstated subsequent to a reclamation.

Management Class: Adirondack Brook Trout

#### **Brother Ponds (Lower - UH473)**

Lower Brothers Pond is a 5.7-acre pond that is mostly shallow except for a 20-foot-deep section at the north end of the pond. The pond has a longstanding brook trout stocking policy, but only a single brook trout was captured in the most recent survey of September, 2016. Also netted were: golden shiner, common shiner, northern redbelly dace and brown bullhead. Water temperatures and D.O. were marginal at the time of the survey in what was an abnormally dry and hot year. Water chemistry analysis from the 2016 survey showed a pH of 7.2 with an ANC of 92 µeq/l. The pond is less than a half mile from the Ensign Pond Road (aka County Route 4).

Lower Brothers Pond will be surveyed in the future to determine if mid-summer water temperatures and D.O. levels are conducive to brook trout survival and to monitor species composition. It was previously determined that a reclamation would not be feasible due to extensive wetlands on this pond and the hydrologically connected Upper Brothers Pond.

Management Class: Adirondack Brook Trout

#### **Brother Ponds (Upper - UH474)**

Located immediately north of Lower Brothers Pond, 2.7 acre Upper Brothers Pond is lacking fish and water chemistry data. Aerial photos reveal a waterbody that has mostly filled in with vegetation and has little open water.

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

Management Class: Unknown

#### **Bullpout Pond (UH488)**

Bullpout Pond is a 4-acre waterbody with no fish or water chemistry data.

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

Management Class: Unknown

#### Challis Pond (UH465)

Challis Pond has a surface area of 14 acres and is relatively deep with a maximum depth of 45 feet. The pond has excellent pH (7.3) and ANC (141 µeq/l.) values along with water temperature and D.O. levels that are favorable for brook trout survival based on the most recent survey completed in 2012. Fish captured from that survey were brook trout and banded killifish, a small fish that is not normally a competitive threat to brook trout. This fishery was achieved courtesy of a 1992 reclamation with rotenone that removed golden shiner, creek chub, white sucker and redbreast sunfish from the pond. The pond was soon stocked with the Little Tupper heritage strain of brook trout. Stocking ceased in 1998 when it was determined that there was sufficient natural reproduction to sustain the brook trout population. A 0.6-mile hike from the Ensign Pond Road (aka County Route 4) is necessary to reach the pond.

Challis Pond will continue to be managed for its brook trout fishery. Trout condition and species composition will be monitored through periodic biological surveys to ascertain if stocking or a pond reclamation are warranted in the future.

Management Class: Adirondack Brook Trout

#### **Courtney Pond (UH483)**

Courtney Pond is found along Route 9 just south of DEC's Sharp Bridge Campground on the western edge of the unit. The roadside location provides easy access to the 6 acre, 15-foot-deep pond. The last fish data are from a 2017 survey that netted rainbow trout, brown trout, brook trout, golden shiner, brown bullhead and pumpkinseeds. The pond was reclaimed with rotenone in 1957 and again in 1982. The pond currently has a stocking policy for brook and brown trout and also receives rainbow trout from the Essex County Hatchery.

Courtney Pond will continue to be managed as a coldwater fishery, with the existing stocking policy, and will be surveyed to update our water chemistry information. Trout condition and species composition will be monitored through periodic biological surveys to ascertain if a pond reclamation is warranted in the future.

Management Class: Coldwater

#### **Crowfoot Pond (UH507)**

Crowfoot Pond is located on the eastern edge of the unit and much of its eastern shoreline is privately owned. The pond has a surface area of 35 acres and is approximately 30 deep. There are no current fish or chemistry data for the pond; it was last sampled in 1956. Smallmouth bass, yellow perch and bullhead were found at that time and the pH was 6.2. Public access to the pond is limited to a nearly 2.5-mile hike on a trail that starts from the Tracy Road west of the pond.

Crowfoot Pond is not currently stocked and will continue to be managed as a warmwater fishery. Ice fishing is allowed on this water.

Management Class: Warmwater

#### Deadwater Pond (UH5459)

Deadwater Pond is actually a flow on a large bend of the Schroon River and is located in the headwater reaches of that river. Management options are therefore more limited than a ponded waterbody and we have no fish or water chemistry data for this pond. The pond is currently stocked with brown trout by the Essex County Hatchery.

Deadwater Pond will continue to be managed as a coldwater fishery.

Management Class: Coldwater

#### Eagle Lake (UH438)

Eagle Lake is a large waterbody along Route 74 on the southern edge of the unit. The 400-acre lake is split by the roadway with the vast majority of the lake north of Route 74. There is a small public boat launch located on the smaller, southern portion of Eagle Lake. The northern portion contains the bulk of the deep water, with most of the basin greater than 30 feet reaching a maximum depth of 40 feet. The lake supports both a coldwater fishery (brown trout) as well as warmwater species featuring bass and pike. The most recent survey was in 1997 and the following fish species were caught: brown trout, northern pike, smallmouth bass, black crappie, yellow perch, golden shiner, white sucker, brown bullhead and rock bass. Water chemistry at that time was excellent with a pH of 8.1, ANC of 591  $\mu$ eq/l and favorable temperatures and D.O. levels.

Eagle Lake will continue to be stocked with brown trout and be managed to preserve both the coldwater and warmwater fisheries. Ice fishing is allowed on this water.

Management Class: Two-Story

#### Eagles Nest Pond (UH476)

Eagles Nest Pond is an 8 acre, 40-foot-deep pond that was last surveyed by ALSC in 1987. Species composition at that time was: brook trout, eastern silvery minnow, golden shiner, blacknose dace, creek chub, pearl dace, white sucker, brown bullhead and banded killifish. The pH was 7, the ANC was 107 µeq/l and D.O. readings were suitable for brook trout survival. The pond is currently stocked with brook trout.

Eagles Nest Pond will continue to be stocked with brook trout and be managed for its brook trout fishery. The pond will be surveyed to update our biological information and to assess the feasibility of a pond reclamation. A brook trout stocking policy will be reinstated subsequent to a reclamation.

Management Class: Adirondack Brook Trout

#### Gero Pond (UH465A)

Gero Pond is an impoundment of Black Brook along the Ensign Pond Road in the central part of the unit. The pond is a narrow, shallow waterbody of approximately 21 acres that is maintained by a masonry dam. We have no fisheries data since a 1987 survey completed by ALSC. That survey caught a single brook trout and five largemouth bass along with cutlips minnow, common shiner, creek chub, white sucker, brown bullhead and redbreast sunfish. The pH was 7.4 and the ANC was 368 µeq/l at that time. There is no history of stocking in Gero Pond.

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

Management Class: Unknown

#### Gui Pond (UH491)

We have no fish or water chemistry data for 11 acre Gui Pond, located just east of l87 in the northern part of the unit. The waterbody appears to be shallow and heavily vegetated with little open water based on aerial photos.

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

Management Class: Unknown

#### Hammond Pond (UH468)

The eponymous waterbody of the unit, Hammond Pond is a 60 acre, shallow and largely vegetated impoundment. The ponded water is preserved by a timber crib dam. We have no water chemistry data for the pond and the fisheries information is limited to a 1972 survey that captured two white suckers.

This water will be managed to preserve its aquatic community for its intrinsic value. Ice fishing is allowed on this water.

Management Class: Unknown

#### Hatch Pond (UH463)

Hatch Pond is a small (7.7 acres) pond that is 40 feet deep and located near the center of the unit just downstream of Bass Lake. The pond contained brook trout, golden shiner, creek chub and brown bullhead as of the most recent survey in 2017. The pond was reclaimed in 1953 and is currently stocked with brook trout. There are wetlands on the outlet that would preclude another reclamation except for abnormally dry years.

Hatch Pond will continue to be stocked with brook trout and be managed for its brook trout fishery. The pond will be periodically surveyed to update our biological information and to assess the possibility of a pond reclamation. A brook trout stocking policy will be reinstated subsequent to a reclamation.

Management Class: Adirondack Brook Trout

#### **Howard Pond (UH472)**

Howard Pond has a surface area of 11.4 acres, a maximum depth of 25 feet and is stocked with brook trout. Prior to a 1992 reclamation, the following fish species were present: brook trout, golden shiner, northern redbelly dace, blacknose dace, brown bullhead and banded killifish. All of these species had returned, except for blacknose dace and banded killifish, as of 2006, the year of the most recent survey. Water chemistry results from that survey included a pH of 7.1 and an ANC of 97 µeq/l. The pond is close (about .3 mile) to the Ensign Pond Road (aka County Route 4) and is accessed by an informal foot trail.

Howard Pond will continue to be stocked with brook trout and be managed for its brook trout fishery. Trout condition and species composition will be monitored through periodic biological surveys to ascertain if a pond reclamation is warranted in the future. A brook trout stocking policy will be reinstated subsequent to a reclamation.

Management Class: Adirondack Brook Trout

#### Joe Pond (UH493)

There is limited survey information for Joe Pond and none since 1959. That survey noted the absence of brook trout and that brown bullhead were common and small minnows were abundant. Chemistry results revealed that the pond lacked suitable water temperature and D.O. levels for trout and the existing stocking policy for brook trout was cancelled. The pond is 7 acres with a maximum depth of approximately 15 feet.

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

Management Class: Unknown

#### Johnson Pond (UH434)

Johnson Pond is a mostly shallow 80-acre pond, but with a couple of deeper holes in excess of 20 feet deep. Much of the shoreline is privately owned. It is a typical warmwater fishery as indicated by the most recent biological survey completed in 1965. At that time, the principal gamefish was largemouth bass, but the following fish species were also caught: smallmouth bass, northern pike, pumpkinseed, yellow perch, banded killifish, golden shiner, white sucker and brown bullhead. Water temperatures and D.O. levels were satisfactory for warmwater species and the pH was 6.4.

Johnson Pond has no history of stocking and will continue to be managed as a warmwater fishery. Ice fishing is allowed on this water.

Management Class: Warmwater

#### **Little Howard Pond (UH507A)**

Fish data for Little Howard Pond are limited to a single survey from 1995. Only four golden shiner were caught on the small (1.5 acre) pond at that time. The pond is relatively deep at 23 feet and that morphometry likely inhibits the mixing ability of the pond and contributes to poor D.O. levels, although pH (7) and ANC (140  $\mu$ eq/l) were very good. Since no brook trout were caught coupled with the unsuitable oxygen readings, the existing stocking policy for brook trout was cancelled.

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

Management Class: Unknown

#### Lost Pond (UH496)

Located in the north part of the unit near I87, Lost Pond has a surface area of approximately 5 acres, but that number can fluctuate depending on beaver activity. The pond was described as "warm and shallow" and no fish were captured or observed in the sole survey of record completed in 1961.

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

Management Class: Unknown

#### **Moose Mountain Pond (UH467)**

Moose Mountain Pond is a 33 acre, 27-foot-deep waterbody that is stocked with brook trout. The most recent survey was in 2004 and captured brook trout, fathead minnow, pearl dace and banded killifish. The pH was 7.3 and the ANC was 100 µeq/l at that time. The pond was reclaimed with rotenone in 1995 in an effort to remove golden shiner. The pond is reached after an approximately 3-mile hike on a trail from the Hammond Pond parking area on the Ensign Pond Road (aka County Route 4).

Moose Mountain Pond will continue to be stocked with brook trout and be managed for its brook trout fishery. Trout condition and species composition will be monitored through periodic biological surveys to ascertain if a pond reclamation is warranted in the future. A brook trout stocking policy will be reinstated subsequent to a reclamation.

Management Class: Adirondack Brook Trout

#### Moriah Pond (UH490)

Moriah Pond has a surface area of 11 acres and is shallow; most of the pond is less than 10 feet deep. The pond was most recently surveyed in 1995 and the following fish species were caught: golden shiner, creek chub, brown bullhead and yellow perch. Water chemistry results were very good with a pH of 7.2 and an ANC of 199  $\mu$ eq/l, however D.O. levels were insufficient to support a coldwater fishery. The pond is not currently stocked and we have no records to indicate that it was stocked previously.

Moriah Pond will continue to be managed as a warmwater fishery. Ice fishing is allowed on this water.

Management Class: Warmwater

#### Munson Pond (UH486)

Munson Pond is a 19 acre, 25 feet deep pond that is currently stocked with brook trout and brown trout. This stocking strategy was initiated after an ALSC survey in 1987 failed to find brook trout, but captured golden shiner and four other competing species. Since a reclamation was determined to be infeasible, it was hoped that the brown trout would suppress the

competitors to a degree that would also allow a viable brook trout fishery. There has been a single survey (in 2000) since the stocking policy was changed from a brook trout-only policy in 1996. That sampling caught brown trout, golden shiner, white sucker, brown bullhead and pumpkinseed, but no brook trout. D.O. readings were acceptable at this time, as were pH (6.8) and ANC (40 µeq/l). The pond is approximately one mile from the Ensign Pond Road (aka County Route 4).

Munson Pond will continue to be stocked with brook and brown trout and be managed for its brook trout fishery. Trout condition and species composition will be monitored through periodic biological surveys to determine if a brook trout fishery can be sustained in the face of the competition. Stocking policies may be adjusted as new data are acquired.

Management Class: Adirondack Brook Trout

#### Owl Pate Pond (UH446)

We have no fish or water chemistry data for 7-acre Owl Pate Pond, located in the southern part of the unit. The waterbody appears to be shallow and heavily vegetated with little open water based on aerial photos.

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

Management Class: Unknown

#### Paradox Lake (UH432)

Paradox Lake is a large lake (approximately 880 acres) situated along Route 74 in the southern part of the unit. The lake has two distinct basins separated by a "Narrows" section. The western basin is the much deeper of the two with the majority of the water being greater than 30 feet and attaining a maximum depth of 55 feet. The western basin is the focus for the coldwater fishery and the lake is currently stocked with landlocked Atlantic salmon, lake trout and rainbow trout. The eastern basin is shallower (20 feet or less) and contains a trailer launch within the DEC campground. The lake also supports a warmwater fishery, primarily for bass, pike and pickerel. Other fish species inhabiting the lake include: cisco, rainbow smelt, golden shiner, white sucker, yellow bullhead, brown bullhead, rock bass, redbreast sunfish, pumpkinseed, yellow perch and various minnows. Water chemistry values are very good with a pH of 7.7, an ANC of 371 µeq/l and very favorable D.O. levels based on a 2014 survey.

Paradox Lake will continue to be stocked with landlocked Atlantic salmon, lake trout and rainbow trout and be managed to preserve both the coldwater and warmwater fisheries. Ice fishing is allowed on this water.

Management Class: Two-Story

#### Peaked Hill Pond (UH433)

Peaked Hill Pond is a 15-acre pond that is 30 feet deep and is located just north of Paradox Lake. The most recent data are from a 1990 survey that captured largemouth bass, yellow perch, rock bass, redbreast sunfish and pumpkinseed. The species composition is a typical warmwater fishery and is consistent with earlier results from 1951 and 1965. The pond does not currently have a stocking policy and we have no records indicating it was ever stocked. The pH was 7.1 and ANC µeq/l was 132 based on the 1990 sampling effort. Access to the pond is from a trail that begins on public land on the north shore of Paradox Lake in the Narrows.

Peaked Hill Pond will continue to be managed as a warmwater fishery. Ice fishing is allowed on this water.

Management Class: Warmwater

#### Pine Pond (UH470)

Pine Pond has a surface area of 33 acres and is relatively shallow with a maximum depth of 14 feet. Based on the most recent fisheries survey of 1959, the pond is a warmwater fishery with the following species: northern pike, golden shiner, white sucker, brown bullhead and redbreast sunfish. The pond received a one-time stocking of 300 largemouth bass in 1994. Water chemistry results from the 1959 survey revealed water temperatures that were too warm for trout (78 - 80 °F) with a 6.8 pH.

Pine Pond will continue to be managed as a warmwater fishery. Ice fishing is allowed on this water.

Management Class: Warmwater

#### Round Pond (UH489)

Round Pond is a 24-acre pond with a warmwater fishery despite being 60 feet deep. It is located in the northern part of the unit and is accessed by hiking a little over a mile on a trail from the Ensign Pond Road (aka County Route 4). The pond was last surveyed by ALSC in 1987 and the following fish species were present: northern pike, largemouth bass, golden shiner, white sucker, redbreast sunfish, pumpkinseed and yellow perch. Water chemistry values from that same survey were excellent with a pH of 7.2 and an ANC of 183  $\mu$ eq/l. A 1995 investigation determined that the large amount of wetlands in the outlet area would preclude a pond reclamation.

Round Pond will continue to be managed as a warmwater fishery. Ice fishing is allowed on this water.

Management Class: Warmwater

#### Schofield Pond (UH445)

Schofield Pond is a small (13 acre) and shallow (less than 10 feet deep) pond that becomes heavily vegetated during the summer. Both the size and depth of the pond have fluctuated over the years due to beaver activity. The pond has not had a biological survey since 1963, when creek chub and brown bullhead were the only fish species captured. That survey noted that the surface of the pond was almost entirely covered with floating aquatic vegetation.

Schofield Pond will be managed to preserve its aquatic community for its intrinsic value.

Management Class: Other

#### Schroon Lake (UH374)

Schroon Lake is one of the largest and deepest lakes in the Adirondack region at 4100 acres and a maximum depth of 150 feet. Much of the lake is deeper than 60 feet with shallower areas at the north and south ends where the Schroon River enters and leaves the lake. It is approximately nine miles long and is situated just east of I87 in southern Essex and northern Warren counties. Although the vast majority of the shoreline is privately owned, a small portion of the northern shore is part of the Hammond Pond unit. Public boat access is available through three sites that provide launches for trailered vessels: a Town-owned/ DEC site on the north end of the lake in the Village of Schroon Lake, a DEC launch at the southern end of the lake at Horicon and a third within DEC's Eagle Point campground.

Schroon Lake provides excellent fishing for both coldwater and warmwater species. The coldwater fishery is highlighted by a very good lake trout fishery and the lake supports landlocked Atlantic salmon as well. Both of these species are currently stocked in the lake as yearlings (~ 7 inches) with additional salmon stocked in the tributary system as fry (~ 1 inch). The feature species for warmwater fishing is smallmouth bass along with largemouth bass, northern pike and chain pickerel. Each of the last two fishery surveys (2013, 2014) caught smallmouth that exceeded 18 inches. Other fish species present in the lake include: rainbow smelt, rock bass, yellow perch, golden shiner, white sucker, black crappie, bullhead and sunfish. The water chemistry results from the 2014 survey were outstanding: pH of 7.5, ANC of 237 µeq/l and confirmation of an abundance of cold, well-oxygenated water.

Schroon Lake will continue to be stocked with landlocked Atlantic salmon and lake trout and be managed to preserve both the coldwater and warmwater fisheries. Ice fishing is allowed on this water.

Management Class: Two-Story

#### **Snake Pond (UH439)**

Snake Pond is a small (less than 3 acres) pond in the southern part of the unit near Eagle Lake. It is located north of Route 74 and although no formal trail exists, it is only about a quarter mile from the road. The pond was formerly stocked with brook trout, but that policy was cancelled

after a 1998 survey captured only brown bullhead and pumpkinseed. The same survey, conducted in August, revealed D.O. levels in the 15-foot-deep pond that were insufficient for brook trout.

Snake Pond will be managed to preserve its aquatic community for its intrinsic value.

Management Class: Other

#### Stevens Pond (UH462A)

Stevens Pond is a 1.7-acre pond located just north of Johnson Pond. 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

#### Stump Pond (UH502)

Officially listed at 8.4 acres, Stump Pond is currently more wetland than a ponded water and we have no fish or water chemistry data.

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

Management Class: Unknown

#### **Triangle Pond (UH487)**

Triangle Pond has a surface area of 5 acres and is approximately 15 feet deep. It is located just east of Sharp Bridge Campground and can be accessed via a trail that runs from the campground to the Ensign Pond Road (aka County Route 4) to the southwest. The pond was reclaimed with rotenone in 1995, in an effort to remove golden shiner, pumpkinseed and brown bullhead, and later stocked with brook trout. Decent numbers of brook trout were caught in follow-up surveys in 1998 and 2003, but white sucker and brown bullhead were also captured in the latter survey. The 2003 water chemistry results were very good with a pH of 7.1 and an ANC of 90 µeg/l.

Triangle Pond will continue to be stocked with brook trout and be managed for its brook trout fishery. Trout condition and species composition will be monitored through periodic biological surveys to ascertain if a pond reclamation is warranted in the future. A brook trout stocking policy will be reinstated subsequent to a reclamation.

Management Class: Adirondack Brook Trout

#### **Trout Pond (UH475)**

Trout Pond is a 7 acre, 25-foot-deep pond with a long history of brook trout stocking. A biological survey completed in 2016 only caught one brook trout, however. More ominously, 20

smallmouth bass and numerous sunfish were netted in the same survey and brook trout are unlikely to survive in the face of that competition. Conditions were otherwise conducive to brook trout with excellent pH (7.3) and ANC  $(122 \,\mu\text{eq/I})$  along with suitable temperature and oxygen readings. The pond is less than 0.5 mile on a trail from the Ensign Pond Road (aka County Route 4).

Trout Pond will be surveyed in the future to determine if mid-summer water temperatures and D.O. levels are conducive to brook trout survival and to assess the feasibility of a pond reclamation. A brook trout stocking policy will be reinstated subsequent to a reclamation.

Management Class: Adirondack Brook Trout

#### Twin Ponds (UH484 and UH485)

Twin Ponds are a pair of similarly sized (6 - 7 acres), connected waters located towards the middle of the unit. Both ponds were reclaimed with rotenone in 1997 in an effort to remove golden shiner and pumpkinseed. The ponds were later stocked with Little Tupper heritage strain brook trout. Brook trout of decent size and numbers were caught in both waters in the most recent survey of 2015, but golden shiner have unfortunately persisted. Both ponds are about 25 feet deep and have comparable water chemistry values suitable for trout based on the 2015 survey. The ponds are approximately one mile from the Ensign Pond Road (aka County Route 4) and can be accessed by an informal foot trail.

The Twin Ponds will continue to be stocked with brook trout and be managed for its brook trout fishery. Trout condition and species composition will be monitored through periodic biological surveys to ascertain if a pond reclamation is warranted in the future. A brook trout stocking policy will be reinstated subsequent to a reclamation.

Management Class: Adirondack Brook Trout

#### **Unnamed Water (UH486B)**

Pond #486B in the Upper Hudson drainage is an approximately one-acre waterbody located immediately north of Munson Pond. It appears to be heavily vegetated and have little open water 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

#### **Unnamed Water (UH494B)**

Pond #494B in the Upper Hudson drainage is a small (less than one acre) pond located northwest of Stump Pond in the northern part of the unit. 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.

#### **Appendix E - Pond Narratives**

Management Class: Unknown

#### **Unnamed Water (UH495A)**

Pond #495A in the Upper Hudson drainage is a small (about 3 acres), shallow waterbody located alongside the Northway (I87) in the northern part of the unit. It is partially private and there is no good public access.

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

Management Class: Unknown

#### **Unnamed Water (UH497B)**

Pond #497B in the Upper Hudson drainage is located near Exit 30 of the Northway (I87) in the northern part of the unit. It is a small (less than one acre) waterbody that appears to have very little open water 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

#### **Unnamed Water (UH5461)**

Pond #5461 in the Upper Hudson drainage is located near the Route 9/ Route 73 junction in the northern part of the unit. It is approximately one acre in size and looks to have more wetland than open water 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

# **Appendix F - Classification and Reclassification**

2018 Approved HPWF Classifications and Reclassifications.

Name	Town	Acres	Wetland Acres	Max. Elevation	Source	Note
Marcy Field	Keene	145.99	14.28	1634	AFP 16- 403	Adjacent to HPWF on East Branch Ausable River
Ash Craft Brook	Moriah	6.34	0.72	1241	Map Correction	Adjacent to HPWF and Northway
Belfry Mountain	Moriah	0.82	0	1851	Map Correction	Belfry Mountain Fire Tower
Creek Road	Crown Point	0.65	0	244	Map Correction	Isolated Parcel on County Route 2
Schroon Falls	Schroon	33.7	0	1014	Map Correction	Adjacent to Northway and Route 9
Mt. Severance Trailhead	Schroon	1.85	0	918	Map Correction	Trailhead between Route 9 and Northway