



Department of
Environmental
Conservation

DEBAR MOUNTAIN COMPLEX

Including:

DEBAR MOUNTAIN WILD FOREST
PROPOSED DEBAR LODGE INTENSIVE USE AREA
MADAWASKA FLOW/QUEBEC BROOK PRIMITIVE AREA
DEER RIVER PRIMITIVE AREA

Draft Unit Management Plan

Draft Generic Environmental Impact Statement

Draft River Area Management Plans

Deer River, East Branch Saint Regis River, and Saint Regis River



NYS DEC, REGION 5, DIVISION OF LANDS AND FORESTS

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Executive Summary



Looking south across Debar Pond

The Debar Mountain Complex (DMC or Unit) is located in the northern portion of the Adirondack Park. The planning unit comprises 88,335 acres of Adirondack Forest Preserve lands located in the towns of Brighton, Duane, Franklin, Santa Clara and Waverly within Franklin County. These lands include the 80,427-acre Debar Mountain Wild Forest (DMWF); The 6,038-acre Madawaska Flow–Quebec Brook Primitive Area; and the 1,870-acre Deer River Primitive Area.

Buck Pond and Meacham Lake Campgrounds are located within the planning area, but they are not subject to this management plan.

The DMC is adjacent to approximately 90,000 acres of conservation easement lands that enhance the protected qualities of the state lands and offer additional recreational opportunities. These lands are comprised of the Kushaqua Tract Conservation Easement (18,989 acres) and the Santa Clara Tract Conservation Easement (72,041 acres).

The DMC is spread over a vast landscape with diverse terrain features and habitat types. These include large wetland complexes, rolling hills, and higher mountains. Various forest types and ecological communities can be found across the unit.

Approximately 30 miles of trails on the unit offer opportunities for hiking, cross country skiing, snowshoeing, horseback riding, mountain biking, and snowmobiling. Popular destinations within the unit include Debar Mountain, Azure Mountain, and Hays Brook.

Three lean-tos and numerous primitive tent sites offer opportunities for camping near ponds and along trails. Opportunities for undeveloped camping, away from established sites, abound across the unit.

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Other popular uses of the unit include hunting, fishing, canoeing, and boating. Access to the unit's water resources is available at Meacham Lake Campground and Buck Pond Campground, as well as on the St. Regis River, Osgood Pond, Jones Pond, Deer River Flow, Mountain Pond, and Lake Kushaqua.

Vehicle access to the DMC is provided primarily via NYS Routes 3, 30, and 458. Important local roads for access include County Route 26 (Old Route 99), Red Tavern Road, Kushaqua-Mud Pond Road, Gabriels-Onchiota Road, Blue Mountain Road, and Oregon Plains Road.

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I. Introduction

A. Unit Overview

Description of Unit

The Debar Mountain Complex (DMC) planning area is comprised of a collection of State Forest Preserve parcels. These Forest Preserve lands are protected as “forever wild” by Article XIV, Section 1 of the New York State Constitution. The Adirondack Park State Land Master Plan (APLSMP) further classifies the lands in the Adirondack Park. In the DMC 80,427 acres are classified as Wild Forest (which is the entirety of Debar Mountain Wild Forest) and 7,908 acres are classified as Primitive (which consist of the Madawaska – Quebec Brook and the Deer River Primitive areas). The Buck Pond and Meacham Lake Campgrounds are also located within the planning area, but they are not subject to this management plan; their management is addressed in separate management plans.



Debar Mountain From Deer River Flow

The DMC contains prominent watercourses classified under the Wild, Scenic, and Recreational Rivers System Act (WSRRS Act). These are the Deer River, East Branch Saint Regis River, and Saint Regis River. In accordance with the WSRRS Act and its implementing regulations, found in Part 666 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR), this Unit Management Plan (UMP) also serves as a River Area Management Plan for the designated rivers where they intersect the DMC. Section II.D of this UMP contains information on the river areas.

The DMC is located between the lowlands of the St Lawrence River Valley and the lakes region of southern Franklin County. It is spread over a vast landscape with diverse terrain features and habitat types. These include large wetland complexes, rolling hills, and higher mountains. Various natural communities can be found throughout this Unit.

History

Early eighteenth-century nomenclature often described the unsettled and uncharted wild lands of the present-day Adirondack region of northern New York as the “Great North

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Woods” or “The Wilderness,” which at the time was an accurate and comprehensive description. Samuel de Champlain was the first European to set foot in the Adirondacks in 1609, however history suggests that the north central Franklin County area was probably largely untouched by Europeans until at least the 1750s. Prior to that time, the area was most likely inhabited by the St. Regis Mohawk Tribe who likely followed the St. Regis River upstream from its mouth on the St. Lawrence River in pursuit of fish and game. What follows is a brief chronology of dates and events relevant to the history of the region surrounding the DMC planning unit.

- 1788- Franklin County is formed by the Organization Act of 1788.
- 1792- Alexander Macomb purchases 821,819 acres of present-day Franklin County.
- 1816- Northwest Bay Road connects to present day McCollums and St Regis Falls.
- 1817- John Debar first visits **Debar Pond** and **Debar Mountain**.
- 1817- Thomas Meacham begins hunting and trapping in the **Meacham Lake** area.
- 1824- Town of Duane founded by James Duane
- 1824- Construction begins on the Port Kent to Hopkinton Turnpike.
- 1829- Town of Merrillsville established.
- 1830- Iron ore found on the southwestern shore of the **Deer River**.
- 1836- Town of Franklin established.
- ca. 1850- John Merrill House built near Merrillsville.
- 1855- Wardner’s Rainbow Inn built near present day Rainbow Lake
- 1859- Paul Smith’s Hotel constructed at Lower St. Regis Lake
- 1869- Rev. William H.H. Murray’s book “Adventures in the Wilderness” is published.
- 1872- Meacham Lake Hotel is built.
- 1875- Hotel Ayers, a.k.a Duane House, is built in the Town of Duane.
- 1876- D.S. Smith’s Spring Cove Hotel built near present day Santa Clara
- 1880- The “Schroeder Castle” constructed at **Debar Pond**.
- 1880- Town of Waverly founded.
- 1883- First railroad in the Adirondacks built by John Hurd at the present-day hamlet of Santa Clara.
- 1885- The New York State Forest Preserve is created by statute.
- 1886- Everton Railroad built from present day St. Regis Falls to the village of Everton
- 1888- Town of Santa Clara Founded.
- 1892- The Adirondack Park is established by statute. Park boundary is delineated on official maps by a blue line.
- 1897- Sisters of Mercy Sanitorium (present day Camp Gabriels) built.
- 1903- Stony Wold Sanitorium built at **Lake Kushaqua**. The property was later acquired by the White Fathers of Africa religious order.
- 1903- Forest fires burn large areas of McCollums, Brandon, Rainbow Lake, Onchiota and the Oregon Plains area.

- 1903- Adirondack-Florida School for Boys established at Rainbow Lake. School closed in 1949.
- 1906- Paul Smiths Electric railroad built providing service from Lake Clear to Paul Smiths Hotel.
- 1908- Forest fires burn large areas around **Kate** and **Debar Mountains**.
- 1910- Brooklyn Cooperage railroad timber products spurs built in the Town of Santa Clara.
- 1910- Santa Clara Lumber Company begins logging operations in the Town of Santa Clara.
- 1912- Fire observation towers erected on **Debar** and **Loon Lake Mountains**.
- 1914- Fire observation tower erected on **Azure Mountain**.
- 1916- The Conservation Department establishes the tent platform permit system
- 1918- Hotel Ayers destroyed by fire.
- 1921- Meacham Lake Hotel destroyed by fire.
- 1924- McCollums Hotel destroyed by fire.
- 1927- The Conservation Department constructs **Barnum Pond** Public Campsite.
- 1928- Boy Scout Camp established at **Osgood Pond**. Moved to present day Camp Bedford location on Clear Pond in 1934.
- 1930- Paul Smiths Hotel destroyed by fire.
- 1933- Civilian Conservation Corps (CCC) Camp #60 established at **Barnum Pond**.
- 1934- Construction of Meacham Lake Campground started by CCC Camp #60.
- 1937- **Meacham Lake Dam** constructed by CCC Camp #60.
- 1937- Paul Smiths College founded.
- 1942- CCC Camp #60 closed.
- 1950- Salvage logging in response to the Great Blowdown of November 1950 is conducted on Forest Preserve lands in the **Meacham Lake** and **Hays Brook Valley** areas.
- 1968- Buck Pond Public Campground construction completed.
- 1968- Governor Nelson Rockefeller creates the Temporary Study Commission on the Future of the Adirondacks.
- 1970- **Debar Mountain** and **Loon Lake Mountain fire towers** decommissioned
- 1971- Meacham Lake Public Campground construction completed.
- 1971- The Adirondack Park Agency (APA) is created by statute.
- 1972- APA's Adirondack Park State Land Master Plan is adopted.
- 1973- APA's Private Land Use and Development Plan is adopted.
- 1978- **Azure Mountain Fire Tower** decommissioned.
- 1985- Centennial of the New York State Forest Preserve.
- 1989- The Adirondack Park Visitor Interpretive Center at Paul Smiths is opened to the public.
- 1999- A Conservation Easement and Land Acquisition Agreement with Champion International Corporation protects over 110,000 acres of working forest timberlands and acquires significant portions of the Main and East Branches of the St. Regis River, the Deer River, Quebec Brook and Madawaska Pond for addition to the Forest Preserve.

I. Introduction

- 2003- Azure Mountain Fire Tower is restored and reopened to the public.
- 2004- International Paper Conservation Easement and Land Acquisition Agreement is largest open space conservation project in New York State history protecting over 250,000 acres of working forest timberlands and acquiring 2,000 acres for addition to the Forest Preserve.
- 2006- International Paper's Adirondack land ownership sold in entirety to the Lyme Forest Fund Limited Partnership.

Location and Access

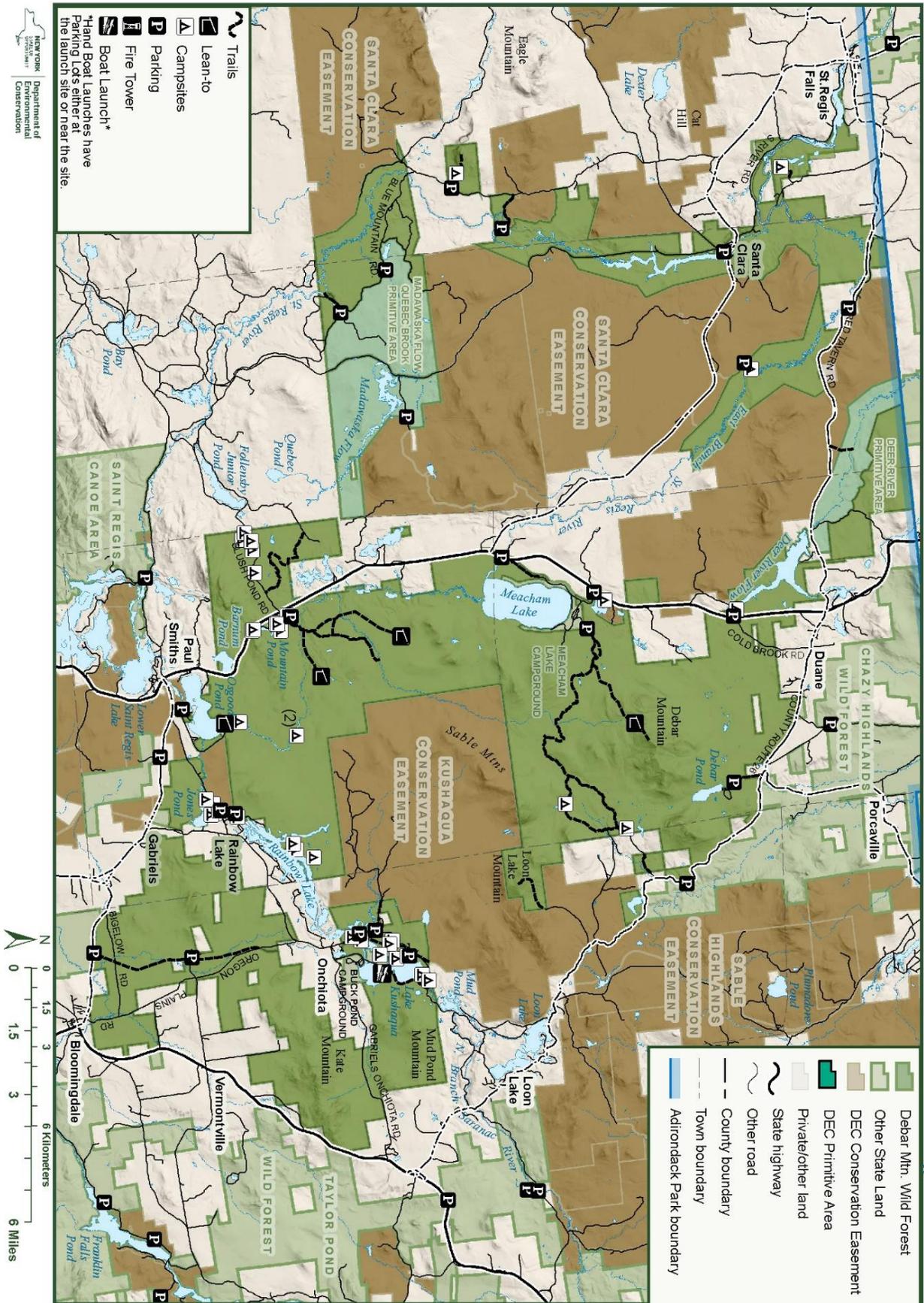
The Debar Mountain Complex is located in the Northern portion of the Adirondack Park in the Towns of Brighton, Duane, Franklin, Santa Clara and Waverly within Franklin County. This Unit is roughly bordered on the north by the Adirondack Park Blue Line; on the east by County Route 26 and State Route 3; on the south by County Route 55 and State Route 86; and on the west by the Franklin and St. Lawrence County line.

This Unit is readily accessible by car, lying approximately 15 miles south of Malone, eight miles north of Saranac Lake and nearby the communities of Bloomingdale, Duane, Gabriels, Loon Lake, Onchiota, Paul Smiths, Saint Regis Falls and Vermontville. Access to this Unit can be gained via State Routes 3, 86 and 458; County Routes 14, 26 and 55; and the Blue Mountain, Gabriels-Onchiota and Oregon Plains Roads.

A number of interior trails provide access to hikers, cross-country skiers, hunters, anglers, snowmobilers, bikers, and horseback riders. Trailheads located on State and private lands and along with formal and informal parking areas provide numerous entry points into the area.



Debar Complex UMP



I. Introduction

The unit contains, or is adjacent to a number of lakes, ponds, rivers and streams. Access to this Unit's water resources in the DMC is available at Meacham Lake and Lake Kushaqua; Deer River Flow; Debar, Jones, Madawaska, Mountain and Osgood Ponds; the Deer, Osgood and Saint Regis Rivers; and Hatch and Hayes Brooks.

B. Planning Process and Timeline

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

Public Meetings

The planning process for the DMC formally began with two public open houses, held in March 2003 at Paul Smith's College and Saint Regis Falls. The Department gave an overview of this Unit and took comments from the public. In February of 2017 two additional public open houses were held in Duane and Vermontville.

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. The UMP, and the management recommendations found within, have also been developed pursuant to and consistent with relevant provisions of the following:

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

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

- Prepare a work plan for each construction or major maintenance project;
- Consult the Adirondack Park Agency on projects as needed, 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 this Unit.
- Monitor impacts to natural resources within this 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 this Unit could be negatively impacted which would result in a decrease in public enjoyment of such resources. Management of this Unit pursuant to a UMP will allow the Department to improve public use and enjoyment of the area, avoid user conflicts, and prevent overuse of the resource.

What the Plan Does Not Do

The proposed management actions identified in this UMP are primarily confined to the lands and waters of this complex. Activities on nearby state lands or private property, including State-owned conservation easements, are beyond the scope of this document and will generally be discussed only as they relate to uses and impacts to the in the complex.

In addition, this UMP cannot 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.

D. An Integrated Series of Related Actions

While DEC is responsible for the individual UMPs for the Debar Mountain Management Complex and the proposed Debar Pond Intensive Use Area, the land reclassification recommendations found within the UMPs would have to be proposed for action separately by the Adirondack Park Agency (APA). Because of the integrated nature of the UMPs and the land reclassification, and because of the potential for significant, adverse impacts to historic resources resulting from these actions, DEC and APA, as co-lead agencies, determined it was most appropriate to move all proposals forward in the form of a single Draft Generic Environmental Impact Statement (DGEIS).

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APA and DEC have prepared this draft generic environmental impact statement (DGEIS) to cover an integrated series of related actions in a given geographic area as contemplated in 6 NYCRR Section 617.10(a), including DEC's proposed draft UMP for the Debar Mountain Complex, a newly created Debar Pond Intensive Use Day Use Area, and amendments to the Adirondack Park State Land Master Plan including reclassification of Wild Forest lands for the creation of a new Intensive Use Area surrounding the Debar Lodge facility and amendments to APSLMP area descriptions. Hearings will be scheduled and noticed on these series of related actions.

II. Natural Resources

A. Geology

The surface geology of the DMC, like that of much of the Adirondack Park, is part of the massive geological structure known as the Canadian Shield. More than one billion years old, the Shield covers most of southeastern Canada, crossing the St. Lawrence River near Alexandria Bay and emerging in the Adirondack region as an uplifted dome. Featuring elevations averaging from 1000 to 2000 feet above sea level, the Adirondack dome was formed by a combination of the erosion of an overlying sedimentary rock layer coupled with the heat and pressure uplift associated with the metamorphosis of gneiss from its parent material, granite. Considered some of the oldest bedrock known in the world today, the uplift of the gneiss continues at the present day with a 3-mm elevational rise per year. Arguably one of the most striking products of uplift of the Adirondack Dome was the rise of more than 6,000 miles of rivers and streams which radiate from the center of the Dome like the spokes of a wheel.

The most recent significant event in the geological history of the DMC planning unit was the glaciation of the region more than 12,000 years ago. The impacts of the progression and recession of the Laurentide Ice Sheet on the DMC landscape are conspicuous and created the topography present today. At its greatest extent, the ice sheet encompassed the area from present day Labrador to Long Island and was over two kilometers thick. As evidenced by the generally southwesterly slope of the current topography, the ice sheet entered the region from the north and northeast, splitting into two ice “streams” in the High Peaks area, the easternmost stream going through the present-day Champlain Valley, the westernmost following what is now the St. Lawrence Valley. The ice sheet eventually receded over the course of several thousand years leaving a landscape which, except for its highest elevations, was dramatically altered by the effects of glacial disturbance and deposition. While initially covered in a sheet of post glacial drift, the effects of erosion have exposed the smooth ridge slopes, rounded summits and deposit-clogged valleys that exemplify the glacier’s impact on the bedrock geology. In addition, the region’s ubiquitous streams and rivers experienced a dramatic deviation in their courses due to the widespread deposition of glacial tills and outwash. Drainage patterns altered by the glacial deposition and excavation led to the creation of the numerous lakes and ponds which are encountered in the planning unit today.

Evidence of glacial wear and deposition can be seen in a number of places throughout the planning unit. Kame moraines, mounds of sand deposited as a result of the

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recession of the ice sheet, were responsible for the creation of Meacham Lake, Rice Lake and Clear Pond. Glacial eskers are common in the Paul Smiths area with several present, including two large examples at Rainbow Lake and along the Osgood River.

B. Soils

Common factors of glaciation, underlying bedrock, topography and long-term regional climate have led to the evolution of five distinct soil associations which are prevalent in the DMC planning unit. Generally speaking, all five associations range from neutral to strongly acidic in nature and support a wide variety of hardwood, softwood and herbaceous vegetation that accompanies an equally diverse distribution of natural successional phases. The mixed assemblage of mineral and organic matter lying below the soil's surface or *solum*, commonly ranges in depth from 16 to 42 inches to bedrock with one association notably excepting at an average bedrock depth of 72 inches. The five associations common to the planning unit include:

- **Adams Series:** These soils are excessively drained and are commonly associated with *fluvial* (weathered materials deposited as a result of stream erosion and transport by glacial meltwaters) and *lacustrine* (sediments are deposited in lakes due to wind and wave action) glacial action. Commonly found on outwash plains, eskers, moraines, lake plains, and deltas, Adams series soils are typically sandy and contain a maximum of 20% rock fragments in the solum. Slopes run a broad spectrum from 0 to 70 percent and the soil permeability is generally rapid with slow to medium runoff. The sandy nature of this association lends itself well to the establishment of pine seedlings and is best characterized within the planning unit in the area surrounding Hayes Brook, Mountain Pond and the Osgood River. Adams series soils are typically very deep with the bedrock often lying over 72 inches beneath the surface layer.
- **Becket Series:** Soils in this association are also very deep and well drained and are characterized by a loamy mantle which overlies dense sandy *till* (unsorted and unstratified mixtures of clay, silt, sand, gravel, and boulders) often found in glaciated uplands or *moraines*. Rock fragments in Becket soils are predominantly gravel (5-30%) which contributes to the well-drained nature of the association. Permeability is generally slow, leading to the potential for high runoff and erosion during periods of heavy precipitation or inundation. Slopes range from as little as 3 to as much as 60 percent, although are dominantly from 3 to 35%. Taxonomically classified as Oxyaquic Haplorthods, Becket series soils are generally saturated in one or more of their horizons within 100 centimeters of the surface, often for 20 or more consecutive days annually. Examples of this soil

association are most easily found along the recently (1999) acquired Deer River Corridor.

- **Naumburg Series:** Commonly found in low sandy plains and terraces, the Naumburg series soils are deep (up to 60 inches depth to bedrock) and poorly drained. Formed in deltaic and fluvial deposits, soils in this series are generally free of rock fragments and typically are rapidly permeable with a low to medium runoff potential. Slopes are generally minimal (0-8%) and the lowlands which are commonly situated on Naumburg series soils support a complimentary vegetational composition such as balsam fir, spruce, hemlock, soft maple, and a wide variety of herbaceous plants which are ideally suited to the humid microclimate that prevails. Examples of this series in the planning unit include the Main Branch of the St. Regis River Corridor.
- **Rawsonville Series:** Formed in loamy glacial till, these soils are generally of moderate depth, well drained and moderately permeable. Commonly found on mountain tops, side slopes, ridges, and hilltops, depth to bedrock often does not exceed 40 inches. Rock fragments from the glacial till parent material are most often gravel, however cobbles and channers are present and the percentage of fragments in the solum can frequently reach 30 percent. Due to their commonly associated locations, slopes on these types of soils can approach the 70 percent mark. Northern hardwood and spruce fir forest types typify landscapes with underlying Rawsonville series soils. Soils of this type can be most readily found in the mountain top and side slope areas of Loon Lake, Debar, and Baldface Mountains.
- **Tunbridge Series:** Well drained and moderately permeable, Tunbridge series soils are common associates of Rawsonville series soils and generally occur in similar types of terrain. As a result of their evolution from loamy glacial tills, 5 to 35 percent of the solum is composed of gravel, cobble, and channer rock fragments. Ranging from nearly level to very steep terrain, these soils commonly support similar overstory and ground cover species as those found in association with Rawsonville soils. Tunbridge soils have only a limited distribution in the planning unit, occurring in a north/south strip running perpendicular to County Route 14 (Red Tavern Road, Town of Duane) near the Deer River, East Branch St. Regis River, and the former community of Everton.

When planning for unit management, erodibility and compaction of soils which support infrastructure and facilities is a critical consideration. The ability of the lands in the DMC to support and withstand use is directly correlated with the extent and types of erosion

II. Natural Resources

and compaction present as well as the composition of the impacted soil and its capacity to resist erosion or compaction. To the greatest degree possible, individual site concerns regarding soil erosion and compaction will be evaluated to determine what actions are necessary to minimize or mitigate negative impacts within the framework of proposed management actions. Of particular concern and interest in the DMC planning unit is the Rainbow Lake Esker which is specifically listed as a Special Management Area in the APSLMP.

C. Topography

Existing Conditions

The DMC occupies the middle ground between the open flat landscape of the St. Lawrence Valley to the north and the lakes region of southern Franklin County. The topography consists of low, rounded mountains and hills interspersed with broad wetlands and glacial outwash plains. These features provide evidence of the past glaciation of the region. Elevation ranges from 3,355 feet at the summit of Loon Lake Mountain to 1,299 feet on Long Pond (Town of Waverly).

Popular topographical features which are frequently accessed by the public in the DMC planning unit include: Debar Mountain (3,305 feet), Loon Lake Mountain, and Azure Mountain (2,518 feet).

D. Water Resources

Watercourses

Water resources are an abundant and important component of the natural ecosystem within the Debar Mountain Complex. They provide a wide range of aquatic environments along with opportunities for public recreation. The waters in this Unit are in the Lake Champlain and St. Lawrence River Basins. Major waters that feed the St. Lawrence



Skiff Pond

River are Deer River and the East and Main Branches of the St. Regis River. The North Branch of the Saranac River flows to Lake Champlain. Public fishing rights have been acquired by the Department on the Main Branch of the St. Regis River (2.72 miles), East Branch of the St. Regis River (2.5 miles) and Hatch Brook (1.04 miles). These

public fishing rights permit the public to access designated private properties along river corridors for the sole purpose of angling during the open fishing season.

The impoundment or damming of several DMC rivers and lakes came with the settlement of the area in the early to mid-1800's and subsequently resulted in the development of viable transportation corridors along with residential and tourism-related communities. Present day examples of impounded waters include Deer River Flow, Madawaska Pond, Rainbow Lake, and Lake Kushaqua. A number of impoundments are also encountered along the St. Regis River's course to the St. Lawrence, some of which were initially developed for the log driving of softwood timber to market, others developed for the purpose of hydroelectric generation.

Wild, Scenic, and Recreational Rivers System

Several river corridors in DMC have been classified under the New York State Wild, Scenic, and Recreational Rivers System. These are: the Main Branch of the St. Regis River, designated as Recreational and Scenic (*as defined Environmental Conservation Law [ECL] §§ 15-2714-2(bb) and 15-2714-3(s)*); the East Branch of the St. Regis designated as Scenic (*ECL § 15-2714-3(r)*); and the Deer River designated as Scenic (*ECL §15-2714-2(h)*). Within the DMC and other state lands, the Act identifies the 0.5-mile zone from each bank of the designated river as the "river area". On private lands, the river area is 0.25 miles from each bank of the designated river. ECL §15-2713 (2)(d); 6 NYCRR § 666 (Department regulations) and 9 NYCRR § 577 (APA regulations) provide for the management of Wild, Scenic, and Recreational Rivers. About 14,092 acres in the DMC are within one of the river areas. Of this area 12,247 acres are classified as Debar Mt. Wild Forest, 1,841 is the Deer River Primitive Area, and three acres is the Madawaska Flow–Quebec Brook Primitive Area.

The Osgood River, running from Osgood Pond at Paul Smiths to Meacham Lake, has been identified as a river currently being studied for inclusion in the Wild, Scenic, and Recreational System (*ECL §15-2715(l)*).

Ponded Waters

There are 72 lakes and ponded waters in this Unit. These vary widely in size from Meacham Lake at 1,203 acres to a 0.9-acre unnamed pond, located south of McCollums Pond in the Town of Brighton. Overall, the ponded waters in this Unit cover 4,569 acres. Meacham Lake is the deepest lake in the Unit with a maximum depth of 100 feet.

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Appendix F lists the ponded waters in this Unit with a brief narrative pertaining to their important features, management, accessibility, size, water chemistry, and fish species composition. Additional information about the ponded waters, including physical, chemical, and biological data, is also provided.

Wetlands

Wetlands are important due to their ability to regulate waterflow and by comprising a critical habitat component for numerous species. Wetlands of various sizes and structure form a mosaic throughout the DMC. All wetlands currently identified in the DMC fall under the protection of the 1975 New York State Freshwater Wetlands Act, (ECL Article 24), which is enforced within the Adirondack Park by the APA. Wetland communities which are one acre or larger in size (including a 100-foot buffer), as well as those which border surface waters, fall under the jurisdiction of the APA. Existing federal regulations, enforced by the US Army Corps of Engineers, have no minimum size or buffer requirements.

As with most other complex and unique ecosystems, wetlands are identified and defined by a variety of terms and descriptions which reach beyond simply “bogs, swamps, and marshes.” Wetland areas are generally described according to the individual characteristics of their surface water levels and depths, lack or presence of vegetation, and the types of vegetation present in vegetated wetland settings. A classification coding system is used to easier express these wetland descriptions in mapping programs. A review of APA mapping information indicates that wetlands cover about 17,415 acres of the planning area. There are 2,576 separate wetland polygons mapped in this Unit. These polygons have a mean size of 6.8 acres, with the largest covering 387 acres. These individual wetland polygons may be adjacent to each other and represent a significant wetlands complex. For example, there is a 1,910-acre wetlands complex along the Osgood River and there is a 1,290-acre wetland complex where Quebec Brook flows into the Saint Regis River. Vegetated wetland areas commonly found in the planning unit conform to the general guidelines and descriptions listed below:

- **Deepwater Wetlands:** Wetland areas that are not ponds or lakes where standing water from riparian flooding or ground water infiltration exceeds six feet in depth. These wetlands are primarily open water and sparsely vegetated with floating or submergent plants such as water lily and pond weed.
- **Emergent Wetlands:** This descriptor encompasses marshes, fens, and wet meadows. Vegetation in these wetland types is often rooted on the “floor” of the wetland area and grows through the season to emerge up through the water’s

surface. All plants present in emergent wetlands are herbaceous and most commonly consist of grasses, rushes, sedges, and more complex plants such as cattails and pickerel weed.

- **Scrub/Shrub Wetlands:** These wetland types are typified by the presence of more complex woody vegetation and include such wetland areas as bogs and swamps. Bogs are most readily identified by the presence of a vegetative “mat” which is most often consist of sphagnum moss, peat, and other organic materials. Swamps exhibit a greater preponderance of large shrubs and trees. Generally speaking, vegetation rarely exceeds 20 feet in height and includes such species as speckled alder, blueberries, leatherleaf, Labrador tea, wild raisin (viburnum), and a sweet gale.
- **Forested Wetlands:** As their name suggests, forested wetlands are predominantly vegetating by tree species that exceed 20 feet in height. The majority of wetlands of this type are referred to as swamps due to the preponderance of woody plants. The most common species encountered in these wetland areas in the Adirondack Park are a red maple, black spruce, balsam fir, northern white cedar, and eastern larch (a.k.a. tamarack). Presence of understory vegetation such as shrubs, ferns, and herbaceous plants is found in forested wetlands with nutrient rich soils.

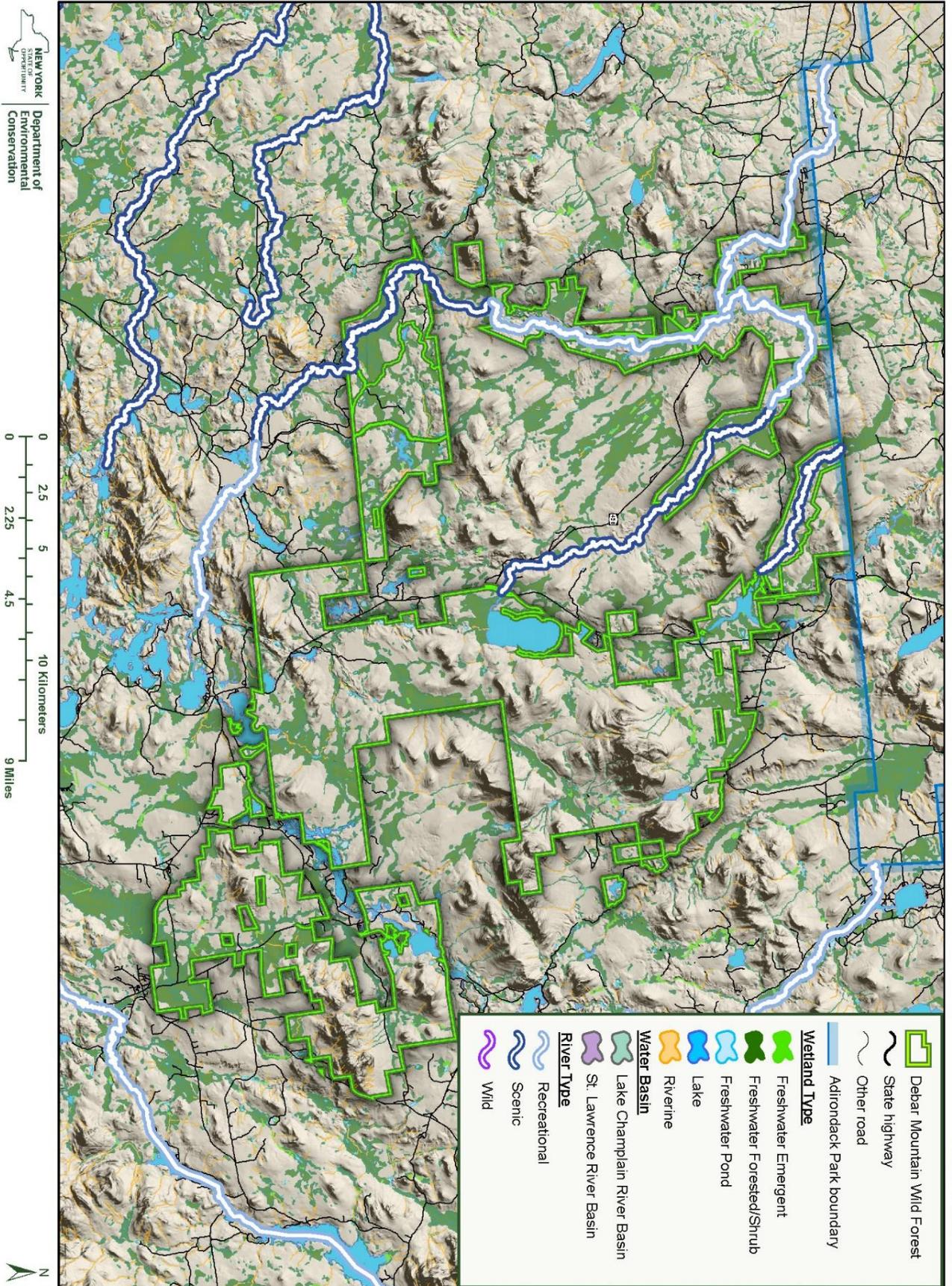
All classified wetlands in the planning unit fall within one of the broad definitions shown above. APA wetland inventory figures for the Adirondack Park show that approximately 1/3 of identified wetlands within the Blue Line were forested, with the remainder supporting less complex vegetative species. The vast majority of non-forested wetlands in this Unit tend to be emergent or scrub/shrub with the most unique and ecologically significant. Perhaps one of the most unique characteristics of these three wetland types is their location. Typically associated with the more northern latitudes of Canada and Maine, the presence of these complexes well south of their home range emphasizes the unique natural history of this Unit and represents an integral contribution to this Unit’s biodiversity.

Aided in their establishment by the rolling topography and the flat, outwash-filled valleys of the region, these wetlands cover areas of up to 3,000 acres and in some cases follow the banks of river corridors for distances up to five miles. The three unique wetland types identified above make substantial contributions to the individual ecosystems that they are a part of and are the result of natural successional phases which incorporated their site, parent material, and hydrological action among a variety of other factors. Brief

II. Natural Resources

descriptions of these three wetland types, along with site specific examples of their occurrence are listed below:

- ***Open River Corridors/Floodplains***: Located along riparian zones where water is channeled by stream action. Stream action in the form of channel migration, flooding, ice action, and beaver activity, keeps the corridor open and generally receptive to a variety of moisture tolerant and moderately tolerant to very shade tolerant vegetational species. Examples of this wetland type in the DMC planning unit include: the Deer River and East Branch St. Regis River Corridors, Hays and Quebec Brooks, and the Osgood and Onion Rivers.
- ***Marginal Sphagnum Bogs or Floating Bogs***: An example of a shoreline which develops as a result of the interaction and interdependency of numerous biological processes. Leatherleaf and sedges intertwine to develop a peat mat which extends outward from the original shoreline. As succession progresses, a variety of vegetation, from plants as simple as sphagnum moss to those as complex as trees, begins to colonize the peat mat. This wetland type is most commonly found adjacent to slow moving streams and in the protected bays of ponds and lakes. Examples of this wetland type in the planning unit include Quebec Brook south of Madawaska Pond and the floating bog in Jones Pond.
- ***Large Open Shrub-Sphagnum Bogs***: Ubiquitous throughout the Adirondack Park, these open wetlands are typified by their proximity to conifer swamps. Basins in these types of wetlands support sedges and low evergreen shrubs, while the relatively higher ground in the wetland complex is colonized by spruce, tamarack, balsam fir, and occasionally white pine. The most significant examples of this wetland type in the planning unit can be found at the Madawaska Wetland Complex and the 1,750-acre black spruce/tamarack swamp commonly referred to as the Osgood River Muskeg.



E. Invasive Species

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

The Department has created a Bureau of Invasive Species and Ecosystem Health to work with various universities, state agencies, and non-profit groups in coordinating a response to invasive species. The Department is a member and will continue to collaborate with other partners, including the Adirondack Park Invasive Plant Program (APIPP or Adirondack PRISM) to support education, inventory, research, and control of invasive species. An inventory and analysis of the current distribution of invasive species on Forest Preserve lands will provide the necessary information on the present extent of invasive exotics and provide the basis for long-term decision making.

In 2010 the Department, APA, and APIPP developed Inter-Agency Guidelines for Implementing Best Management Practices for the Control of Terrestrial and Aquatic Invasive Species on Forest Preserve Lands in the Adirondack Park (http://www.apa.ny.gov/State_Land/Appendix_F.pdf). Significant updates to this agreement have occurred periodically, most recently in 2018. These guidelines provide a template for the process through which comprehensive active terrestrial and aquatic invasive species management will take place on Forest Preserve lands in the Adirondack Park. The Department is responsible for management of terrestrial and aquatic invasive species on Forest Preserve lands while APA has responsibility for providing review of, and advice on APSLMP compliance and permit jurisdiction.

The control methods and Best Management Practices (BMPs) contained in the guidelines restrict the use of herbicides so that adverse impacts to non-target species are avoided and native plant communities are restored. Aquatic invasive species is managed using non-mechanical harvesting techniques (hand-pulling) and temporary benthic matting as described in the guidelines. Use of pesticides for aquatics is not a part of this guidance. The guidelines are meant to be a dynamic document that is periodically revised to reflect new invasive species threats, continuing inventory of the Forest Preserve, and evolving invasive species management techniques approved for use on the Adirondack Forest Preserve.

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

Prior to implementing containment and/or eradication controls, terrestrial invasive infestations occurring within this Unit need to be assessed on a site-by-site basis. The geophysical setting and the presence, or absence, of sensitive native flora within or adjacent to the targeted infestation often predicts the BMP's and limitations of the control methodology. Infestations occurring within specific jurisdictional settings may trigger a permitting process, as do most terrestrial infestations occurring within an aquatic setting. The species itself often dictates whether manual management controls, e.g. hand-pulling or cutting, or the judicious, surgical application of herbicides is warranted in order to best control that specific species in that specific setting. No single BMP guarantees invasive plant containment or eradication. Many infestations require multiple, seasonal control efforts to reduce the density and biomass at that site. Adaptive management protocols suggest that implementation of integrated control methodologies may provide the best overall efficacy at specific infestations.

All management recommendations are based on knowledge of non-native invasive species present and their location, species, abundance and density. A complete inventory is necessary to identify aquatic and terrestrial invasive threats and is a recommendation of this plan. Inventory data could include existing inventories, formal or informal inventories during routine operations, and solicited help from volunteers to actively study and report on invasive species presence, location, and condition.

Many, if not all, invasive species infestations will have multiple transport and distribution vectors. All "easy to contain – low abundance" terrestrial and aquatic invasive plant infestations are immediate targets for containment and/or eradication controls. Minimizing the spread of newly documented and immature infestations before they have the chance to become established is a priority management action.

Facilities and activities may influence invasive species introduction, establishment, and distribution. These facilities and activities are likely to serve as "hosts" for invasive establishment. Early detection and rapid response protocols will be implemented at probable locations of invasive plant introductions, such as parking/trailhead areas.

Protocols to minimize the introduction and transfer of invasive species will be incorporated during routine operations and emergency maintenance activities.

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Restoration of sites where invasive species management activity occurs is critical to maintain or enhance natural ecological function and structure. Restoration will incorporate best available science to determine effective techniques and the use of appropriate native or non-invasive plant species for site restoration.

Educating Department staff, elected officials, and the public is essential to increase awareness about the threat of invasive species and ways to prevent their introduction and transport into or out of this Unit. Invasive species education will be incorporated in staff training and citizen licensing programs for hunting, fishing, and boating; through signage, brochures, and identification materials; and included in information centers, campgrounds, community workshops, and press releases.

Information about the location of invasive species in the DMC is maintained on New York iMapInvasives (<http://www.nyimapinvasives.org/>).

iMapInvasives is New York State's on-line, all-taxa invasive species database and mapping tool. The comprehensive database can be used for:

- Documenting and sharing invasive species observation, survey, assessment and treatment data
- The coordination of early detection and rapid response efforts through email alerts
- Data analysis and summaries in the web interface and GIS

This mapping tool identifies a significant number of sites with invasive species in the DMC. These locations are mostly near public highways. This would be expected because roads and road maintenance facilitate the spread these species and also detection efforts are focused along roadways.

Aquatic Invasive Species

With over 2,300 lakes and ponds, 1,500 miles of rivers, 30,000 miles of brooks and streams, the Adirondack region is particularly vulnerable to the introduction of aquatic invasive species (AIS). Once established, AIS can spread rapidly through connecting waterways or by “hitchhiking” on the propellers, trailers, rudders, motors, etc. of the vessels of recreational boaters and anglers.

New York is actively engaged in a strategic approach to combat the growing problems associated with AIS. These include:

- Complying with and enforcing the provisions of regulations. Examples of regulations designed to reduce the spread of AIS include: any watercraft that is launched or retrieved from State land must be cleaned of visible plant or animal fragments, any watercraft launching or retrieved from State land must be drained, a list of prohibited and regulated species, on certain waters only artificial lures may be used, and only certain species of baitfish are allowed.
- Complying with the legislative requirement to place educational signs at each boat launch which inform boaters to “clean, drain, and dry” waterway vessels.
- Implementing recommendations of the New York Aquatic Invasive Species Management Plan (AISMP). Included among the top 10 priority actions in the AISMP is expanding boat steward programs and ensuring consistency of steward program delivery. Stewards help prevent the spread of AIS through boating activities by delivering AIS spread prevention education and outreach to boaters, conducting courtesy boat and trailer inspections, and showing boaters how to inspect and remove plants and organisms from their boats, trailers, and other equipment.
- Fostering collaboration and coordination among state agencies and partners to minimize the harm AIS cause through the Adirondack Aquatic Invasive Species **Spread Prevention Program** (the Program). The Program is led by DEC and the Natural Heritage Trust, through contracts with APIPP and the Paul Smith’s College Adirondack Watershed Institute (AWI). The Program is designed to deliver education and outreach and voluntary boat inspection at the listed boat access sites and provide decontamination services for boats exiting waters inhabited by small-bodied AIS. Additionally, the program is intended to protect waters particularly vulnerable to AIS by providing education and outreach and voluntary boat inspection at the Department’s boat access sites on those waters having high priority plant AIS and at Department boat access sites on other waters that do not have AIS. High priority AIS are those non-native species that rank “high” or “very high” in New York’s ecological assessments and for which the Department has determined that boats can be important vectors for transport and introduction. The program is consistent with the concepts and recommendations in the Boat Inspection and Decontamination for Aquatic Invasive Species Prevention – Recommendations for the Adirondack Region.

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High priority actions for the Program include:

- Preventing the introduction and spread of high priority AIS into and within the Adirondack region
- Protecting native aquatic species and their habitats
- Protecting water-based recreational resources and economy
- Educating recreational watercraft operators on steps they need to take to prevent the spread of AIS and helping them understand new regulations requiring them to take such precautions at all public waters
- Providing decontamination services at sites where Department determines such services are needed
- Fostering a sense of responsibility in watercraft operators so they take steps to help stop the spread of AIS through their activities
- Protecting New York citizens' investment in publicly owned waters

Another project working to control invasive species in the DMC is the Watershed Stewardship Program run by AWI. This program has made a significant impact on the spread of AIS. For example, in 2018 across the Adirondack Park stewards intercepted 4,617 AIS from the 98,216 boats they inspected (Holmlund, 2019). In the DMC area, stewards have been stationed at Osgood Pond and Buck Pond. The posting of these stewards was funded by the Osgood Pond Association and the Rainbow Lake Association.

Waterbodies in 1 DMC with reports of AIS, based on data at New York iMapInvasives.

Water	Eurasian Water Milfoil	European Frogbit
Deer River Flow	X	
Madawaska Pond		X
Meacham Lake	X	

Forest Insects and Diseases

Once an invasive insect and disease becomes established in an area it can spread over very large landscapes either by natural means or by human activity. One way related to outdoor recreation that people are inadvertently spreading these species is through moving firewood. To slow the spread of insects New York State has placed a restriction which prohibits moving firewood further than 50 miles from its source. Beech Bark Disease, Asian long-horned beetle, hemlock woolly adelgid, emerald ash borer, and

balsam woolly adelgid are just some of the invasive threats to the health of forests in the DMC. Each of these have the potential to practically eliminate one component of the forest, which would then impact wildlife species which utilize that component.

Objectives

- Prevent the introduction of new invasive species into the DMC
- Eliminate occurrences of invasive species in the DMC.

Management Actions

- Take aquatic invasive species prevention actions within the DMC. Actions may be taken at any location where a watercraft can access the water or wherever public recreation may spread AIS. These measures will vary based on location within the following spectrum:
 - Printed materials handed out at the entrance to the watercraft access site
 - Posted signs
 - Information regarding nearby boat decontamination stations
 - Presence of Stewards at the watercraft access site
 - Presence of a decontamination station at the watercraft access site
- Management of invasive species will follow the *Inter-Agency Guidelines for Implementing Best Management Practices for the Control of Terrestrial and Aquatic Invasive Species on Forest Preserve Lands in the Adirondack Park*.
- Continue periodic monitoring and management of identified invasive populations.
- Partner with organizations addressing invasive species in the DMC.
- Train Department staff working within this Unit to identify and document the location of invasive species.
- Work towards a complete comprehensive inventory of the presence and extent of invasive species in this Unit.
- Periodically review staffing, training, and licensure needs to establish capacity to provide invasive species monitoring and response.

F. Vegetation

The DMC occupies a transition zone between the lakes region of southern Franklin County to the south and the St. Lawrence River Valley to the north. This Unit lies within two ecozones; with the higher terrain in the eastern portion of this Unit in the Sable Highlands ecozone, and the remainder of this Unit in the Western Adirondack Foothills ecozone (Edinger, 2002).

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The forests in this Unit include a variety of vegetation associations that correspond to local variations in soil, moisture, temperature, and topography. Past events such as fire, wind, land clearing, and logging have also exerted a strong influence on present day conditions of the forests. Despite past influences, the existing plant communities in this Unit are in generally good condition. Much of this Unit contains intact ecosystems where natural processes are operating freely.



Tamarac Trees in Fall. Dexter Road

Parts of this Unit were logged from the mid-1800s up until the 1990s. Early logging in this Unit was mainly for sawtimber and focused on mature softwoods. The hardwood timber in these areas was left standing and in some cases is still standing today.

Wildfires burned over thousands of acres within this Unit in the early 1900s.

Ecological Communities

Ecological communities encountered within the DMC are numerous and diverse. Terrestrial communities found in the region are predominantly forested uplands with a terrestrial cultural component in specified areas of development, disturbance and prior forest management. Forest type maps for the DMC are currently incomplete but are anticipated to be developed in the future. Communities and forest types identified here are the result of staff observation supplemented by information published in previously completed Unit Management Plans, Society of American Foresters publications and the Natural Heritage Program's "Ecological Communities of New York State."

Northern Hardwood Forest- Arguably the most common forest cover type encountered in the DMC. Prevalent indicator species include sugar maple (*Acer saccharum*), American beech (*Fagus grandifolia*), and yellow birch (*Betula alleghaniensis*). Commonly found on moist, well drained acidic soils along the bases of mountains and in steep gullies or ravines, associates are often a mixture of basswood (*Tilia americana*), white ash (*Fraxinus americana*), and red maple (*Acer rubrum*), with less common components of hemlock (*Tsuga canadensis*) and red spruce (*Picea rubens*). Relatively few shrubs and herbs are encountered in this type, however, small trees and seedlings are common and include striped maple (*Acer pensylvanicum*) and hobblebush (*Viburnum lantanooides*) along with sugar maple and beech which perform well in the conditions created by the site and overstory cover. This cover type is widespread and prevalent across this Unit and is most closely associated with the

Beech-maple mesic forest ecological community. Of particular concern to this forest type is the deleterious effect on the beech component due to persistent infestation by the beech scale, *Cryptococcus fagisuga*. The scale insect attacks the bark of healthy beech trees, effectively rendering them susceptible to the bark canker fungi *Nectria coccinea* var. *faginata*. As a result, numerous large diameter individuals have succumbed to the canker, changing the structure of the forest to one of fewer large individuals and numerous individuals in the seedling/sapling class which have regenerated as “stump sprouts” from dead or removed trees. Excellent examples include forests found in the Debar Mountain and Azure Mountain areas.

Mixed Conifer and Deciduous Forest- This cover type represents a wide range of indicator species and site types. Hardwood associates in mixed forest settings are often mainly composed of deciduous species identified in the northern hardwood forest complimented on a site by site basis by black cherry (*Prunus serotina*), white birch (*Betula papyrifera*), and quaking aspen (*Populus tremuloides*). Softwood species components of mixed forests in the region most often include hemlock, white pine (*Pinus strobus*), red pine (*Pinus resinosa*), red spruce, black spruce (*Picea mariana*), balsam fir (*Abies balsamia*), and white spruce (*Picea glauca*). Health and distribution of softwood species in mixed forests are largely dictated by elevation, soil type and moisture. Examples of mixed forest types found in the DMC are found along the western shoreline of Debar Pond and along the Main and East Branches of the St. Regis River. Ecological communities which best typify mixed forests in the region include:

- **Hemlock-northern hardwood forest:** Typified by moist well-drained sites commonly associated with mid elevation to lowland elevations. Shrub and seedling species include hobblebush, striped maple, and raspberries (*Rubus spp.*). Ground cover species are somewhat limited in extent due to extensive crown closure and include common wood fern (*Dryopteris intermedia*) and purple trillium (*Trillium erectum*).
- **Pine-northern hardwood forest:** Found most commonly on sandy and gravely outwash soils and eskers. Shrub species present include blueberries (*Vaccinium angustifolium* var. *myrtilloides*), sheep laurel (*Kalmia angustifolia*), and wild raisin (*Viburnum cassinoides*). Numerous herb species are commonly encountered in this community and include bracken fern (*Pteridium aquilinum*), wintergreen (*Gaultheria procumbens*), and trailing arbutus (*Epigaea repens*). Mosses are very common in and some cases abundant.

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- **Spruce flats:** Predominantly situated in close proximity to wetland fringes and riparian zones, this community favors sandy, seasonally moist soils. The shrub layer is commonly low in density or sporadically distributed and includes species such as Labrador tea (*Ledum groenlandicum*), sheep laurel, and blueberries. Groundcover is an extensive, dense layer of mosses and herbs such as creeping snowberry (*Gaultheria hispidula*) and bunchberry (*Cornus canadensis*) among several others.
- **Spruce-northern hardwood forest:** This community is most often supported on lower mountain slopes and glacial till soils. Trees occupying the intermediate and suppressed layers of the canopy are often striped maple and mountain maple (*Acer spicatum*), with shrub species including hobblebush, American fly honeysuckle (*Lonicera canadensis*), and Canada yew (*Taxus canadensis*). Groundcover species often include common wood sorrel (*Oxalis acetosella*) and common wood fern among numerous others.
- **Conifer Forest-** Distribution of this forest type is sporadic throughout this Unit and, much like the softwood component of the mixed forest type, is closely defined by elevation, soil type, and hydrological regime. Predominant indicator species of this cover type are balsam fir, red spruce and black spruce, which are occasionally accompanied on lowlands and moist to poorly drained areas by associates such as northern white cedar (*Thuja occidentalis*) and tamarack (*Larix laricina*). Locations which best exhibit conifer forests in the DMC are found north and northeast of Debar Pond, approaching and atop the summit of Debar Mountain and along the St. Regis River corridors. Ecological communities most closely associated with conifer forest types in the DMC include:
 - **Balsam flats:** Found on moist well-drained soils adjacent to wetlands and low ridges. The shrub layer is often intermittent and of a low density, supporting such species as hobblebush, wild raisin, and mountain ash. Groundcover species are most commonly mosses with herbaceous associates such as wood sorrel, bunchberry, creeping snowberry, and wood ferns among several others.
 - **Mountain spruce-fir forest:** This type of terrestrial community is limited to sites at elevations more than 3,000 feet where they establish on organic soils and are somewhat protected from prevailing westerly winds. Occasional and intermittent hardwood associates of this community include mountain paper birch (*Betula cordifolia*) and yellow birch. Intermediate and suppressed canopy species on these locations are most often mountain ash (*Sorbus americana*), mountain

maple, pin cherry (*Prunus pensylvanica*), and striped maple, with the shrub layer mostly composed of seedlings of overstory species. Groundcover species are most commonly mosses complimented by herbaceous associates such as wood sorrel and bunchberry among numerous others. Communities of this type have suffered a pronounced general decline in recent years, a situation which has been contributed to the negative effects of atmospheric deposition (see Section F).

- **Successional Northern Hardwood Forest-** Something of a misnomer, the species composition of this ecological community can be composed of either purely hardwood species or a mixture of hardwoods and coniferous species. Establishment and development of this community depends on the recolonization of sites which have been naturally or culturally disturbed. Predominant indicator species of this forest type include quaking aspen, big tooth aspen, balsam poplar (*Populus balsamifera*), pin cherry, black cherry, red maple, white pine, paper birch, white ash, and gray birch (*Betula populifolia*). Most shrub and ground layer species are more shade tolerant than existing canopy species and are common to both this community and overgrown field communities. An excellent example of this community exists within the DMC at the site of the former Debar Game Refuge, locally referred to as Debar Meadows.
- **Plantation-** A terrestrial cultural community, these forest types are created for the purposes of reforestation, erosion control, wildlife habitat, and landscaping. The most prevalent types of plantations found in the DMC are conifer plantations, primary pine with a small component of spruce. Most plantations present in this Unit were planted during the Great Depression through the efforts of the Civilian Conservation Corps, and are typically composed of white pine, scotch pine (*Pinus sylvestris*), and Norway spruce (*Picea abies*). Speedwell (*Veronica officinalis*) is one of the only known ground cover associates of this community which exhibits a sparse ground layer due to a heavy litter layer composed of needles. Examples of plantations in the DMC area can be most easily located north of Mountain Pond in the Hays Brook area and west of State Route 30 in the Slush Pond area.
- **Boreal Heath Barrens-** An inventory of rare animals, plants and significant communities conducted by the New York Natural Heritage Program (NYNHP) has identified this upland barren community in the Oregon Plains area of the Town of Franklin. The predominant tree species present in this particular community is black spruce (*Picea mariana*). Reschke offers this description of

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the Boreal Heath Barren cover types in the NYNHP publication "Ecological Communities of New York State":

*Boreal heath barrens: a dwarf shrubland or shrub-savanna dominated by heath or heath-like shrubs. Boreal heath barrens occur on nearly level outwash plains of the Adirondacks, in frost pockets lying in valleys. Soils are sandy, dry, and poor in nutrients. Boreal heath barrens are seasonally flooded because the soils have a discontinuous subsurface layer of podzolized soil (an ortstein), which impedes water drainage. The dominant shrubs are blueberries (*Vaccinium myrtilloides*, *V. angustifolium*, *V. vacillans*), black chokeberry (*Aronia melanocarpa*), meadow sweet (*Spiraea latifolia*), and mountain fly honeysuckle (*Lonicera villosa*). Other characteristic plants include spreading ricegrass (*Oryzopsis asperifolia*), small ricegrass (*Oryzopsis pungens*), swamp dewberry (*Rubus hispidus*), Canada goldenrod (*Solidago canadensis*), flat-top goldenrod (*Euthamia graminifolia*), northern tree clubmoss (*Lycopodium dendroideum*), running pine (*Lycopodium digitatum*), lichens (*Cladonia alpestris*, *C. pyxidata*, *Cladina rangiferina*) and mosses (*Pleurozium schreberi*, *Polytrichum commune*, and *Dicranum* spp.). Trees may be scattered through the barrens, or they may be confined to the edges of open shrublands. Characteristic trees are black spruce (*Picea mariana*), white pine (*Pinus strobus*), black cherry (*Prunus serotina*), and tamarack (*Larix laricina*).*

Rank: G3G4 S1

- **Successional blueberry heath:** An inventory of rare animals, plants, and significant communities conducted by the New York Natural Heritage Program (NYNHP) has identified this open upland community in the "Brandon Burn" area which adjoins the Blue Mountain Road in the Town of Santa Clara. Although largely situated on privately owned lands, this ecological community likely affects resources located on nearby Forest Preserve lands. Reschke offers this description of the Boreal Heath Barren cover types in the NYNHP publication "Ecological Communities of New York State"

*Successional blueberry heath: a shrubland dominated by ericaceous shrubs that occurs on sites with acidic soils that have been cleared (for logging, farming, etc.) or otherwise disturbed. Characteristic species include blueberries (*Vaccinium corymbosum*, *V. pallidum*, *V. myrtilloides*, *V. stamineum*), black huckleberry (*Gaylussacia baccata*), wintergreen (*Gaultheria procumbens*), trailing arbutus (*Epigaea repens*), poverty-grass (*Danthonia spicata*), and common hairgrass (*Deschampsia flexuosa*). This community may be relatively short-lived; it*

gradually succeeds to a forest community. More data on this community are needed.

Rank: G4 S4

G. Wildlife and Hunting

Existing Conditions

Mammals

A wide variety of mammal species inhabit the DMC. However, survey data equivalent to the NYS Amphibian and Reptile Atlas Project and Breeding Bird Atlas Project (BBA) are lacking for mammals in this Unit. The Department is in the early stages of a mammal distribution project, but data or results are not yet available.

Large and Medium-sized Mammals

Large and medium-sized mammals known to occur in the northern Adirondacks are also believed to be common inhabitants of the DMC and include white-tailed deer (*Odocoileus virginianus*), moose (*Alces alces*), black bear (*Ursus americanus*), coyote (*Canis latrans*), raccoon (*Procyon lotor*), red fox (*Vulpes vulpes*), gray fox (*Urocyon cinereoargenteus*), bobcat (*Lynx rufus*), fisher (*Pekania pennanti*), American marten (*Martes americana*), river otter (*Lontra canadensis*), American mink (*Neovison vison*), striped skunk (*Mephitis mephitis*), long-tailed weasel (*Mustela frenata*), short-tailed weasel (*Mustela erminea*), beaver (*Castor canadensis*), muskrat (*Ondatra zibethicus*), North American porcupine (*Erethizon dorsatum*), and snowshoe hare (*Lepus americanus*) (Saunders, 1988). Of these species, white-tailed deer, black bear, coyote, raccoon, red fox, gray fox, long-tailed weasel, short-tailed weasel, bobcat, and snowshoe hare can be hunted. Additionally, these species (with the exception of white-tailed deer, black bear, and snowshoe hare) along with fisher, American marten, mink, muskrat, beaver, and river otter can be trapped. Hunting and trapping activities are highly regulated by NYSDEC, and the Department's Bureau of Wildlife collects annual harvest and survey data on many of these species.

Results of recent species distribution models revealed that moderate to highly suitable marten habitat is present throughout most of the DMC, which is located at the northern range limit of this species in New York State. In this area, the most suitable habitat for marten is located in the southwestern corner of the DMC as well as east of Meacham Lake (Jensen & Humphries, 2019). These models suggested that the distribution of martens in the Adirondacks is constrained primarily by fishers (a predator of, and

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competitor with, martens) and not forest stand conditions (for example stand age, composition, and structure).

Important big game species within the area include white-tailed deer and black bear. Generally, white-tailed deer can be found throughout the DMC. 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 bears are essentially solitary animals and tend to be dispersed throughout this Unit. The Adirondack region supports the largest black bear population in New York State (4,000 to 5,000 bears). Hikers and campers in this region are likely to encounter a bear, and negative interactions between black bears and humans, mainly related to bears stealing food from humans, have been a fairly common occurrence in the Adirondack High Peaks for at least twenty years. In 2005 a new regulation was enacted, requiring all overnight campers in the Eastern High Peaks Wilderness Area to use bear-resistant canisters for food, toiletries, and garbage. In other areas of the Adirondacks, the NYSDEC recommends the use of bear resistant canisters as well.

Moose entered the state on a continuous basis in 1980, after having been absent since the 1860s. Currently, the moose population in New York State is estimated to be approximately 500-800. 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.

Located in the “heart” of moose country, the DMC serves as a forested wilderness corridor connecting Santa Clara and Kushaqua Conservation Easements. Active logging on the conservation easements creates young forest which serves as superb food and cover for moose. Additionally, the DMC’s wetlands provide warm season aquatic vegetation for food, and lowland conifer patches provide winter thermal cover and browse. Moose have been observed in the DMC during winter aerial surveys, GPS collared moose have been observed using the DMC year-round, and moose-vehicle collisions are common on Route 30 along the stretch of roadway near Meacham Lake, all of which indicate that moose are present on the DMC and use the property regularly to satisfy their habitat needs and travel between the conservation easements.

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 DMC (Table 1). All listed species are known to occur within the Adirondack Park.

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

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

Birds

The avian community of the DMC 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 BBA project conducted during 1980-1985 (Andrle and Carroll, 1988) and the Breeding Bird Atlas 2000 Project (2000-2005) documented 149 and 153 species, respectively, in atlas blocks within, or partially within the DMC. However, it is important to recognize that atlas blocks overlap and extend beyond the boundaries of the DMC. Therefore, these data do not necessarily reflect what is found on this Unit, but on the atlas blocks. It is probable that some species determined to be present by BBA surveys were found only on private lands adjacent to the state lands. However, the BBA data should provide a good indication of the species found throughout this Unit and adjacent region.

In atlas blocks within, or partially within the DMC, 137 species common to both atlas projects have been documented, representing 92% and 90% of the total species recorded during 1980-1985 and 2000-2005, respectively. The first atlas project documented 12 species not found during BBA 2000-2005, and 16 species were

documented during BBA 2000-2005 that were not found during the first survey effort. Many factors can influence survey results (e.g. weather, survey effort); therefore, these comparisons should be used as a tool for further study and monitoring of bird populations and not as a definitive statement on bird population changes.

Another Breeding Bird Atlas project began in New York State in 2020 and will conclude in 2025. There is currently no data available from the first year of the project.

Birds Associated with Boreal Forest

The DMC contains high elevation (limited primarily to Loon Lake and Debar Mountains) and lowland boreal forest that is significant for a variety of birds. In total, boreal forest comprises approximately 32,668 acres or 37% of this Unit. This acreage includes approximately 31,890 acres of lowland boreal forest, which occurs throughout this Unit in a patchy distribution. This estimate is based on coarse-scale modeling of potential spruce grouse habitat (Halasz et al., 2005). The state endangered spruce grouse prefers lowland boreal forests, where it selects immature or uneven-aged spruce-fir habitats. Results of this modeling indicate that potential spruce grouse habitat is limited primarily west of Route 30 in the Madawaska Pond/St. Regis River area. This area represents the northeast terminus of the largest contiguous patch of high-quality spruce grouse habitat in the Adirondacks, which extends in a southwest to northeast orientation from St. Lawrence County into the DMC area of Franklin County. Smaller, isolated patches of high-quality spruce grouse habitat within this Unit also occur north of Osgood Pond, along Hays Brook, and adjacent to Bigelow Road.

Additionally, there are approximately 778 acres of high elevation boreal forest (equal to or greater than 2,800 feet elevation) in this Unit. Within the DMC, the majority of this high elevation boreal forest is on Loon Lake Mountain (475 acres) and Debar Mountain (292 acres). High elevation spruce-fir forest is especially important as breeding habitat for Bicknell's thrush, a listed species of special concern in New York. Throughout the range of this species, montane forest between 2,900 ft. and 4,700 ft. and dominated by stunted balsam fir and red spruce is the primary breeding habitat (Atwood et al., 1996). This species utilizes fir waves and natural disturbances as well as the densely regenerated edges of ski slopes. The species is most common on the highest ridges of the Adirondacks, preferring young or stunted dense stands of balsam fir up to 9 ft. in height. Here, they lay their eggs above the ground in the dense conifer thickets. Bicknell's thrush is a documented regular breeder on the DMC, as identified through surveys conducted as part of Mountain Birdwatch.

In an effort designed to protect birds associated with high elevation boreal forest and their habitats, New York State designated the Adirondack mountain summits above

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2,800 feet in Essex, Franklin, and Hamilton counties as the Adirondack Subalpine Forest Bird Conservation Area (BCA) in November 2001. The New York State Bird Conservation Area Program was established in September 1997 was designed to safeguard and enhance bird populations and their habitats on selected state lands and waters.

Of 27 bird species associated with boreal forest that occur in New York (Post, 2004) 26 (96%) have been documented in BBA survey blocks within, or partially within, the DMC. During the two BBA projects, 17 species of lowland boreal forest birds, 4 species of high elevation boreal forest birds, and 5 species commonly associated with boreal forest, have been documented in survey blocks within, or partially within this Unit (Table 2). Some notable differences in boreal bird species composition were recorded between the two atlas periods; American three-toed woodpecker and palm warbler were documented in the second atlas project but not the first. Many factors can influence survey results (e.g., weather, survey effort), therefore, these comparisons should be used as a tool for further study and monitoring of bird populations and not as a definitive statement on bird population changes.

Table 2. Bird species associated with boreal forest as recorded by the New York State Breeding Bird Atlas projects (1980-1985 and 2000-2005) occurring in atlas blocks within or partially within the Debar Mountain Complex (DMC).

Common Name	Scientific Name
<i>Lowland Boreal Forest Species</i>	
American three-toed woodpecker	<i>Picoides dorsalis</i>
bay-breasted warbler	<i>Dendroica castanea</i>
black-backed woodpecker	<i>Picoides arcticus</i>
boreal chickadee	<i>Poecile hudsonicus</i>
Cape May warbler	<i>Dendroica tigrina</i>
gray jay	<i>Perisoreus canadensis</i>
Lincoln's sparrow	<i>Melospiza lincolnii</i>
olive-sided flycatcher	<i>Contopus cooperi</i>
palm warbler	<i>Dendroica palmarum</i>
pine siskin	<i>Carduelis pinus</i>
red crossbill	<i>Loxia curvirostra</i>
ruby-crowned kinglet	<i>Regulus calendula</i>

Common Name	Scientific Name
rusty blackbird	<i>Euphagus carolinus</i>
spruce grouse	<i>Falcapennis canadensis</i>
white-throated sparrow	<i>Zonotrichia albicollis</i>
white-winged crossbill	<i>Loxia leucoptera</i>
yellow-bellied flycatcher	<i>Empidonax flaviventris</i>
High Elevation Boreal Forest Species	
Bicknell's thrush	<i>Catharus bicknelli</i>
blackpoll warbler	<i>Dendroica striata</i>
Swainson's thrush	<i>Catharus ustulatus</i>
winter wren	<i>Troglodytes</i>
Species Commonly Associated with Boreal Forest	
Blackburnian warbler	<i>Dendroica fusca</i>
evening grosbeak	<i>Coccothraustes vespertinus</i>
magnolia warbler	<i>Dendroica magnolia</i>
northern parula	<i>Parula americana</i>
Tennessee warbler	<i>Vermivora peregrina</i>

Other Habitat Associations

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

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

Bogs, beaver meadows, shrub swamps, and any areas of natural disturbance provide important habitat for species that require or prefer openings and early successional habitats. Species such as alder and olive-sided flycatchers, American woodcock, Lincoln sparrow, Nashville warbler, chestnut-sided warbler, brown thrasher, blue-winged

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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 continue to be, somewhat limited within the DMC.

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 is maturing and will eventually become old growth forest dominated by large trees.

Songbirds are a diverse group filling different niches in the Adirondacks. The most common species found throughout the deciduous or mixed forest include the ovenbird, red-eyed vireo, yellow-bellied sapsucker, black-capped chickadee, blue jay, downy woodpecker, brown creeper, wood thrush, black-throated blue warbler, pileated woodpecker, and black and white warbler. The golden-crowned kinglet, purple finch, pine siskin, red and white-winged crossbill and black-throated green warbler are additional species found in the coniferous forest and exhibit preference for this habitat. Birds of prey common to the area include the barred owl, great horned owl, eastern screech-owl, northern goshawk, red-tailed hawk, sharp-shinned hawk, and broad-winged hawk.

Game birds include upland species such as wild turkey, ruffed grouse and American woodcock, as well as a variety of waterfowl. Ruffed grouse and American woodcock prefer early successional habitats and their habitat on state lands within the area are limited due to the lack of timber harvesting. Wild turkey are present in low numbers and provide some hunting opportunities. Waterfowl are fairly 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 28 species of reptiles and amphibians in USGS Quadrangles within, or partially within the DMC (Gibbs et al., 2007). It is important to note that quadrangles (the survey sample unit) overlap and extend beyond the land boundary of this Unit.

Therefore, recorded species do not necessarily reflect what was found on this Unit, 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 DMC. These included three species of turtles, six species of snakes, ten species of frogs and toads, and nine species of salamanders (Table 3). These species are classified as protected wildlife and some may be harvested during

open hunting seasons. Of the thirty confirmed species, three were classified as species of special concern and none were classified as endangered or threatened. Of the special concern species, six occurrences of wood turtle, two occurrences of eastern hognose snake, and one occurrence of eastern box turtle, were documented within quadrangles within, or partially within the DMC.

Table 3. Amphibian and reptile species recorded in USGS Quadrangles within, or partially within, the Debar Mountain Complex (DMC) during the New York State Amphibian and Reptile Atlas Project, 1990-1999.

Common Name	Scientific Name
Jefferson salamander ^a	<i>Ambystoma jeffersonianum</i>
spotted salamander	<i>Ambystoma maculatum</i>
red-spotted newt	<i>Notophthalmus v. viridescens</i>
northern red-backed salamander	<i>Plethodon cinereus</i>
northern dusky salamander	<i>Desmognathus fuscus</i>
Allegheny mountain dusky salamander	<i>Desmognathus ochrophaeus</i>
northern spring salamander	<i>Gryinophilus porphyriticus</i>
northern two-lined salamander	<i>Eurycea bislineata</i>
common mudpuppy	<i>Necturus maculosus</i>
eastern American toad	<i>Anaxyrus a. americanus</i>
western chorus frog	<i>Pseudacris triseriata</i>
gray treefrog	<i>Hyla versicolor</i>
northern spring peeper	<i>Pseudacris c. crucifer</i>
American bullfrog	<i>Lithobates catesbeianus</i>
northern green frog	<i>Lithobates clamitans melanota</i>
mink frog	<i>Lithobates septentrionalis</i>
wood frog	<i>Lithobates sylvatica</i>
northern leopard frog	<i>Lithobates pipiens</i>
pickerel frog	<i>Lithobates palustris</i>
common snapping turtle	<i>Chelydra s. serpentina</i>
wood turtle ^a	<i>Glyptemys insculpta</i>
painted turtle	<i>Chrysemys picta</i>
ribbon snake	<i>Thamnophis sauritus</i>
northern brown snake	<i>Storeria d. dekayi</i>
northern redbelly snake	<i>Storeria o. occipitomaculata</i>
common garter snake	<i>Thamnophis sirtalis</i>
smooth green snake	<i>Opheodrys vernalis</i>
eastern milk snake	<i>Lampropeltis t. triangulum</i>
^a State Species of Special Concern	

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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 this Unit:

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

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

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

The following section describes those species that are classified as endangered, threatened, or special concern within the DMC.

Table 4. Endangered, threatened, and special concern species documented in survey blocks within, or partially within, Debar Mountain Complex (DMC). Bird data were collected during the 1980-1985 and 2000-2005 Breeding Bird Atlas projects. Species detected through other surveys are noted.

Birds		Breeding Bird Atlas Project	
Common Name	Scientific Name	1980-1985	2000-2005
Endangered			
peregrine falcon ^a	<i>Falco peregrinus</i>	X	
short-eared owl	<i>Asio flammeus</i>		X
spruce grouse ^a	<i>Falcapennis canadensis</i>	X	X
Threatened			
bald eagle ^a	<i>Haliaeetus leucocephalus</i>		X
northern harrier	<i>Circus cyaneus</i>	X	X
pied-billed grebe	<i>Podilymbus podiceps</i>		X
sedge wren	<i>Cistothorus platensis</i>		X

Birds		Breeding Bird Atlas Project	
Common Name	Scientific Name	1980-1985	2000-2005
Special Concern			
American bittern	<i>Botaurus lentiginosus</i>	X	X
Bicknell's thrush ^b	<i>Catharus bicknelli</i>	X	X
common loon ^c	<i>Gavia immer</i>	X	X
common nighthawk	<i>Chordeiles minor</i>	X	X
Cooper's hawk	<i>Accipiter cooperii</i>	X	X
golden-winged warbler	<i>Vermivore chrysoptera</i>		X
horned lark	<i>Eremophila alpestris</i>	X	
northern goshawk	<i>Accipiter gentilis</i>	X	X
osprey	<i>Pandion haliaetes</i>	X	X
red-shouldered hawk	<i>Buteo lineatus</i>	X	X
sharp-shinned hawk	<i>Accipiter striatus</i>	X	X
vesper sparrow	<i>Pooecetes gramineus</i>	X	X
whip-poor-will	<i>Caprimulhus vociferous</i>		X
Amphibians and Reptiles		Amphibian and Reptile Project	
Common Name	Scientific Name	1990-1999	
Special Concern			
Jefferson salamander	<i>Ambystoma jeffersonianum</i>	X	
wood turtle	<i>Glyptemys insculpta</i>	X	

^aAlso documented in the DMC by NYSDEC wildlife staff during various wildlife surveys since 2005

^bAlso documented in the DMC through annual Mountain Birdwatch surveys conducted by volunteers

^cAlso documented in the DMC through annual loon surveys and census by volunteers and Adirondack Center for Loon Conservation staff

Extirpated and Formerly Extirpated Species

Moose, elk, wolf, eastern cougar, Canada lynx, bald eagle, golden eagle, and peregrine falcon all inhabited the Adirondacks prior to European settlement. All of these species were extirpated from the Adirondacks, mostly as a result of large-scale landscape changes during the nineteenth century. Unregulated harvest also led to the decline of

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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 much more common, and Peregrines are recovering. Both species are now found in portions of the Adirondacks and WLWF. Golden Eagles are generally considered to have always been rare breeders within the state. A total of 83 Canada lynx were released into the 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. 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, although there is genetic evidence to suggest that coyotes found in the Adirondacks may have hybridized with the Eastern wolf (*Canis lycaon*) in 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 other species misidentified as cougars or 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 (Kerwin, 2012; Hawley et al., 2016).

Critical Habitat

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 have a tendency to return to the same region from which they fledged.

Peregrine falcons were documented in the DMC during the 1980-1985 Breeding Bird Atlas project; but not during the 2000-2005 project. Potential nesting sites exist on Azure and Furnace Mountains, but neither have been monitored or found to be active in recent years.

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

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- Falcons are very territorial and will utilize their razor-sharp talons in defense of their domain, including attacks on humans.

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 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 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 NYSDEC (Hurst, 2004). Therefore, planning for the protection of deer wintering areas relative to recreational activities in this 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.

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 free-roaming dogs.

High Elevation Boreal Forest

See section on birds associated with high elevation boreal forest above.

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. Article 11 authorizes NYSDEC to ensure 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.

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Past Management

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

Proposed Wildlife Management Objectives and Actions

While all of the objectives and management actions outlined below are important, a management priority should be placed on increasing our understanding of the occurrence and distribution of several wildlife species and critical habitats within the DMC. This priority is reflected under the list of potential management action projects 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 this Unit'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 NYSDEC 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 our understanding of the occurrence, distribution, and ecology of game and non-game wildlife species and their habitats.

Action Steps

- Continue to monitor and inventory wildlife populations and their habitats, particularly species classified as endangered, threatened, or special concern and game species. Examples of priority wildlife monitoring include spruce grouse surveys where suitable habitat and/or former records exist, peregrine falcon monitoring at Azure & Furnace Mountains, and Bicknell's thrush surveys on Loon Lake and Debar Mountains.
- 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 Distribution Project, Breeding Bird Atlas, New York Natural Heritage Program surveys).
- Reestablish 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.

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Action Step

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

H. Fisheries and Fishing

Existing Conditions

Fisheries inventory data for the DMC indicate the presence of both native and introduced fish communities in the lakes and ponds across this Unit. Many of this Unit's water bodies are managed exclusively as brook trout fisheries and have been reclaimed with rotenone in the past to remove invasive, non-native fish species accidentally or purposely introduced to them. Reclamation and brook trout stocking in the DMC has helped to propagate and sustain an outstanding recreational resource and restore, to the extent possible, the natural aquatic ecosystems that existed in this Unit prior to European settlement. In most cases, this management has been extremely successful and has provided the public with a unique, backcountry brook trout fishing experience found in few other places in the country outside the Adirondacks. In waters lacking the deep-water habitat necessary to support a cold-water fishery or that cannot be reclaimed due to extensive wetlands or the absence of natural or manmade fish barriers, non-native fish species are typically present and, in some cases, encouraged.

Proposed Management

Objectives

- To maintain brook trout populations in this Unit's waters that currently support these fisheries through reclamation and stocking. Reintroduce brook trout to waters where conditions are conducive to trout survival.
- To maintain and enhance this Unit's warmwater fisheries in those waters that will not support a brook trout fishery.
- To continue monitoring water chemistry throughout this Unit for the effects of acidification.
- To ensure that other management proposals and activities do not negatively affect this Unit's fish populations.

Action Steps

- Monitor this Unit's brook trout fisheries periodically for the presence of non-native fish species and reclaim if and when non-native species become established.

When reclamation of any of these ponds is determined to be necessary, the UMP will be amended to include it in the Schedule for Implementation and the pond narrative will be revised to reflect the new survey information.

- Monitor water chemistry periodically across this Unit and apply lime to water bodies when pH falls below 5.0.

I. Climate Change

Climate Change in the Adirondacks

While climate change is a global phenomenon and a result of our collective global actions, the effects of climate change vary by location and can be measured locally and regionally.

The most measurable elements of our rapidly changing climate are rising temperatures and changing precipitation patterns. The New York State ClimAID assessment provides an authoritative source for observed and projected climate change information for our state (and is updated based on the global models produced by the Intergovernmental Panel on Climate Change), while the U.S. National Climate Assessment provides additional information for the Northeastern region. The Forest Service Northern Institute of Applied Climate Science developed two assessments of the specific vulnerabilities facing forest types in our state: the Mid-Atlantic Forest Ecosystem Vulnerability Assessment and Synthesis (<https://www.nrs.fs.fed.us/pubs/57325>), and the New England and Northern New York Forest Ecosystem Vulnerability Assessment and Synthesis (https://www.fs.fed.us/nrs/pubs/gtr/gtr_nrs173.pdf).

In New York, the statewide annual average temperature has risen about 2.4°F since 1970, with winter warming exceeding 4.4°F, which equates to an increase of about 0.25°F per decade since 1900. Annual average temperatures have increased in all regions of the state.

The most comprehensive scientific analysis and modeling of the observed and predicted effects of climate change in the Adirondack Park is provided in *The Responding to Climate Change in New York State Technical Report* (Rosenzweig, et al., 2011) and its subsequent 2014 update (Horton, et al., 2014).

Statewide the average annual temperature is projected to increase by 4.1–6.8 °F by the 2050s, and 5.8–11.9 °F by 2100 (Horton, et al., 2014). The greatest warming is projected to occur in the northern parts of the state by the end of the century, with summers being more intense and winters milder (Horton, et al., 2014)

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The lack of significant precipitation trends highlights the dominant influence of natural variability at decade-to-decade timescales on precipitation, and it suggests that average precipitation changes over the observed historical record cannot be attributed to climate change (Rosenzweig, et al., 2011). However, the statewide average annual precipitation has increased since 1900, with year-to-year, and multiyear, variability becoming more pronounced. New York is getting more precipitation in the winter and less precipitation in the summer (NYS DEC: Office of Climate Change, 2014).

Statewide precipitation is projected to increase by approximately 3–12 percent by the 2050s, and by -1–21 percent by 2100 (Horton, et al., 2014). The greatest increases in precipitation are projected to occur in the northern parts of the state by the end of the century, with much of the increase to occur during the winter months while the summer and early-fall are to have slightly reduced precipitation (Horton, et al., 2014).

The effects of climate change have unequivocally altered snowfall events. Intensive scientific analysis and technical reports on climate change in New York State have shown that models are not yet able to quantitatively project future frozen precipitation (snow, ice, and freezing rain) at local scales due to a high degree of uncertainty (Rosenzweig, et al., 2011; Horton, et al., 2014; Melillo, et al., 2014; IPCC 2014).

Precipitation is much less readily measured or modeled than air temperature. However, there is consensus that climate change has and will continue to decrease annual snowfall and depth in New York and the country (Rosenzweig, et al., 2011; Horton, et al., 2014; Melillo, et al., 2014; IPCC 2014).

The Role of the Adirondack Park in Adapting to and Mitigating Climate Change

In 2019, New York passed the Climate Leadership and Community Preservation Act. A key element of the Act is to achieve net zero greenhouse gas emissions in New York State by 2050. Forests are a critical resource for reducing carbon emissions through sequestering (removing from the atmosphere) and storing carbon. Forests are the only natural, large-scale, and continuous means (on land) for removing CO₂ from the atmosphere. Forests also have the greatest potential for storing that carbon long term as the sequestered carbon stays locked up in the plants. This means that forests are vital to achieving the State's Climate Act goals.

Importantly, the value of carbon sequestration and storage is additive - it is a benefit that forests and forest products naturally provide, in addition to all other social, health, environmental, and economic benefits. This means the total value of healthy forests is

much higher. It also means the same strategies that preserve healthy forests are also strategies for maintaining carbon sequestration and storage.

As of 2020, New York contains 18.9 million acres of forestland, more than any other state in the Northeast. Nearly 3 million acres of these forests are “forever wild” Forest Preserve lands, making up approximately 50% of the Adirondack and Catskill Parks. Both carbon sequestration and storage occur on the vast tracts of the Forest Preserve and other forested lands of the two parks.

Since forests are critical tools for adapting to climate change, mitigating its effects, and achieving New York’s Climate Act goals, the Department will continue to play a role in maintaining and/or expanding forest cover in the Adirondack Park through public land ownership and supporting responsible management of other private forestlands in the Park.

Forests provide a cumulative value to local and global communities alike, helping them stay resilient and adapt to changes in climate:

- Forests stabilize the surrounding air temperatures and alleviate extreme heat and desiccation by providing shade and moisture from evapotranspiration.
- Forests are buffers for communities because they absorb stormwater and reduce flooding. Forested watersheds slow surface runoff and increase the infiltration of water into the soil. The result is less flooding, cleaner water downstream, and greater groundwater reserves (Ernst, Caryn, 2004).
- Forests are the first line of defense when protecting water quality. By the time rain and snowmelt seep through forest soil into groundwater or nearby surface water, the precipitation is cleaned and purified.
- Forests are buffers for communities because they create windbreaks against damaging gusts.
- Forests provide coastline and shoreline flood and erosion resilience. They anchor soil and absorb water; this protects threatened communities. Forests and their soils act like huge sponges, soaking up enormous amounts of precipitation. If the sea level rises 0.33 to 0.63 m between 2080 and 2100, as it is projected to increase under the RCP 6.0 scenario, there will be approximately 1,886,000 people living under the high-tide lines in New York, based on 2010 census data.
- Loss of forested cover undermines the land’s capacity to absorb and hold water; increases pollutant runoff from paved surfaces, rooftops, treated lawns, agricultural lands, etc.; and disrupts the natural hydrology of water flows, volumes, rates, retention, and storage.

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While the climate trends and projections for the Adirondack region paint a clear picture of a changing climate, they do not require the Department to significantly modify the nature of recreational opportunities and facilities it provides on Forest Preserve lands. Natural resource preservation has and will continue to be of utmost importance, and recreational uses should be encouraged as long as they can occur in harmony with existing and projected site conditions, including seasonal fluctuations.

Although long-term use projections are challenging, we can expect that the popularity of cooler, northern tourist and recreation destinations such as the Adirondacks will increase due to warming temperatures at lower elevations and southern latitudes.

If anything, the combined likelihoods of growing use and higher rainfall events underscores the importance of developing recreational infrastructure that can withstand extreme weather conditions, particularly rainfall, in combination with heavy public use. Trails, bridges, roads, and parking areas (to name a few) should be designed in a manner that reduces annual maintenance that arises from high use and and/or high rainfall events. Design standards for these types of facilities have existed for some time and should become the standard when the Department constructs or upgrades facilities. Where facilities cannot be built and maintained to these standards in certain locations, alternative locations will be sought or the need for recreational uses in these locations will be reconsidered.

Threats to New York's Forests and Climate Act Goals

As forests face stresses from climate change, the latter also brings additional threats and challenges for forest management and conservation. Changes in climate and extreme weather events are expected to amplify all other stressors on forests. They are also expected to affect infrastructure on forestlands such roads, bridges, and culverts, and will require an adaptive approach.

Land conservation planning is tasked to include more emphasis on climate adaptation strategies related to carbon mitigation, refugia for at-risk species and habitats, landscape connectivity for migration pathways, and water supply protection.

- Extreme heat and droughts will limit available water for photosynthesis, which will restrict carbon sequestration and reduce plant productivity. These conditions also increase the threat of wildfires, which release a significant amount of carbon.
- Frequent heavy rain events will saturate roots and prevent efficient photosynthesis, and also increase windthrow, limiting carbon sequestration.

- By 2100, a warming climate is projected to have increased the growing season by one month, which may increase the total amount of carbon sequestered. Yet, earlier budburst puts trees at greater risk of damage from spring frosts.
- An earlier budburst misaligns flowering with the phenology of spring pollinators. This may stunt regeneration and forest productivity of certain tree species.
- Changes in climatic conditions are projected to shift species ranges and alter forest composition:
 - Many northern and boreal tree species will face increasing stress from climate change. Boreal species of cold climates and high elevations (i.e., balsam fir, red spruce, and black spruce) are at greatest risk for decline, as they are projected to lose suitable habitat over the next century. Ecosystem models agree that northern and boreal tree species may be less able to take advantage of longer growing seasons and warmer temperatures than warm-adapted, temperate forest species.
 - Populations in isolated and fragmented landscapes will have limited ability to migrate in response to a changing climate.
 - Common New York forest species, including American beech, eastern hemlock, white pine, and yellow birch, are expected to experience reduced habitat and growing potential. On the other hand, species with southern ranges, such as red maple, northern red oak, black cherry, and American basswood, may expand their suitable range northward.
- New York's forests are facing accelerated threats from invasive insects and plants. Warmer temperatures and milder winters allow for faster spread of forest pests. Specifically, forests of low species diversity are at greatest risk of disturbance. The effects to our forests are similar to the impact of western wildfires: these agents can potentially destroy millions of acres of trees and even eliminate certain species from our ecosystems (for example American chestnut, American elm, etc.). As a result, invasives can drastically reduce the carbon sequestration ability of our forests and can undermine our forests' potential as part of the climate change solution.
- Temperatures have risen on average 0.25°F per decade over the past century and are expected to rise across New York by up to 10.1°F by 2080, with the greatest warming in the northern regions of the state. This warming includes an increase in the number of extreme hot days (days at or above 90°F) and a decrease in the number of cold days (days at or below 32°F).
- New York is expected to experience winter precipitation more as rain than snow. On average, winter temperatures have risen more than 4.4°F since 1970.2 In some areas of the state, the number of snow-covered days has already

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decreased as much as 20 days. A lack of snow cover exposes soil and roots to freezing temperatures.

- Annual average precipitation in New York is projected to increase by up to 15 percent by the 2080s, with the greatest increases in the northern part of the state. The increased precipitation will not be evenly distributed over the course of the year; much of it is likely to occur during the winter months, while slightly reduced precipitation is possible for late summer and early fall. The recent trend of increased heavy downpours and less light precipitation is expected to continue.
- Conditions affecting tree regeneration and recruitment will change. Seedlings are more vulnerable than mature trees to changes in temperature, moisture, and other seedbed and early growth requirements; they are also expected to be more responsive to favorable conditions.
- Rising temperatures and altered precipitation patterns can change soil temperature regimes. This change can undermine the resilience of our forest species, both trees and understory plants. Shorter, warmer winters may not provide timely or sufficient cold periods for trees to become frost hardened, and frequent thaw-freeze cycles during winter may affect dormancy and essential spring nutrient-uptake cycles. High temperatures and a potential lack of precipitation in the growing season may increase drought stress and the potential for non-native, drought tolerant species to establish and outcompete native ones.
- In many parts of New York, forest regeneration continues to worsen, leaving forests without young trees to continue the forest life cycle.
- Excessive forest clearing and land use changes (development, etc.) can fragment forest patches and reduce patch size. Such forest fragmentation is possibly the largest threat to the integrity of large matrix forests, such as the Adirondack and Catskill Park Preserves. As forests are fragmented and/or disappear, so do the climate adaptation and climate change mitigation benefits they provide. Fragmentation threatens forest biodiversity, i.e. native species richness and composition, as it restricts the movement of plants and animals through the forest, often resulting in the loss of species that require larger blocks of habitat. Unimpeded movement of animals allows them to move to suitable habitats, which is an important adaptation strategy to climate change. Diminished native diversity undermines the forest's resilience in the face of other stressors, such as our changing climate, pressures from invasives and diseases, lack of regeneration, etc.

Maintaining a Healthy Forest in the DMC

This UMP's strategies aim to stimulate decisions and actions that maintain and/or expand forest cover, and safeguard the irreplaceable value of forests as climate change mitigators by:

- preventing loss of forests in this unit due to unsustainable recreation;
- fostering rapid response to invasive species and other forest pests;
- protecting all forest layers for robust forest regeneration;
- fostering the forest's resiliency in this unit by protecting the biodiversity of native plants and animals.

Impact of This Plan on Carbon Emissions

New York State agencies are committed to ensuring all programs consider the future physical risks from climate change in order to protect New Yorkers and our environment. Pursuant to the 2019 Climate Leadership and Community Protection Act, New York State has committed to eliminating greenhouse gas emissions in the state and to ultimately achieve net zero emissions. The Act extends and enhances a number of New York's successful clean energy initiatives to accelerate the development of wind and solar power, increase energy efficiency, and facilitate the growth of energy storage technology.

In accordance with Section 7 of the Climate Leadership and Community Protection Act, the management actions proposed in this UMP have taken climate change, greenhouse gas emissions, and the 2019 Climate Leadership and Community Protection Act into consideration in the following ways:

- The Act requires a Statewide reduction in greenhouse gas emissions of 40% by 2030 and 85% by 2050. To that end, the extremely limited effect of this plan on local and regional transportation patterns, in the context of the whole state, constitutes minimal greenhouse gas emissions when compared to the transportation systems of larger population hubs in the State.
- The use of motor vehicles and motorized equipment will be required to construct and maintain facilities in the DMC. This will result in small scale greenhouse gas emissions until the State transitions to the use of zero emission equipment and vehicles.
- The development and maintenance of recreation facilities will require clearing vegetation. This would result in a reduction in the carbon sequestration. The area to be devoted to recreational facilities is small compared with the overall area of the DMC. The recreational facilities in the DMC will provide important benefits to society that justify this slight reduction in carbon sequestration.

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Given the above considerations, the State does not expect overall greenhouse gas emissions to change due to the implementation of this plan. With respect to climate change, and in careful consideration of the 2019 Climate Leadership and Community Protection Act, the State concludes that any potential negative impacts associated with the management actions identified in this UMP are not substantial enough to warrant mitigation or a change to those management actions.

III. Recreational Resources and Human Uses

A. Carrying Capacity

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

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

Recreational use of the DMC provides many benefits to visitors; however, this use may impact water bodies. Information on the cumulative impacts to water bodies in the DMC is lacking. An assessment of waterbodies that integrates recreation and ecology is proposed in this UMP.

The term "carrying capacity" in public lands management, where public recreation is the leading use, means the amount of use that any single facility or the entire complex can handle without degrading the resource to an unacceptable level or the perceived experience of the user. Given the many variables associated with measuring carrying capacity, it can be a challenging concept to both understand and measure. While it can be helpful to establish upper-level thresholds for use, there is not an exact science on how to consistently set these thresholds across all variables. Essentially, this is because the relationship between the amount of use and the resultant amount of impact is not linear (Krumpe and Stokes, 1993). For many types of activities, for instance, most of the impact occurs at low levels of use. In the case of trail erosion, once soil starts to wash

III. Recreational Resources and Human Uses

away, additional foot travel does not cause the impact upon the trail to increase proportionately.

It has been discovered that visitor behavior, site resistance/resiliency, type of use, timing of use, etc. may actually be more important in determining the amount of impact than the amount of use, although the total amount of use is certainly still a factor (Hammitt and Cole, 1987). This makes the manager's job much more involved than simply counting, redirecting, and restricting the number of visitors in an area. Influencing visitor behavior can require a well-planned, multi-faceted educational program. Determining site resistance/resiliency requires research. Shaping the types of use impacting an area can call not only for education and research and development of facilities, but also the formulation and enforcement of a set of regulations which some users are likely to regard as objectionable.

Nevertheless, the shortcomings of a simple carrying capacity approach have become so apparent that the basic question has changed from the old one, "How many is too many?" to the new, more realistic one; "How much change is acceptable?" The Department embraces this change in approach while recognizing the tasks it calls for in developing the best foundation for management actions. Professionally-informed judgments must be made such that carrying capacity is given definition in terms of resource and social conditions that are deemed acceptable; these conditions must be compared with the real, on-the-ground conditions; certain projections must be made; management policies and actions must be drafted and enacted; all with an aim toward maintaining or restoring the conditions desired.

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

This call for a shift in the manager's central focus, away from trying to determine how many visitors an area can accommodate, to trying to determine what changes are occurring in the area and whether they are acceptable.

Management and Planning Methods

Management of the DMC uses a combination of three generally accepted planning and monitoring methods: (1) the goal-achievement process; (2) the Limits of Acceptable Change (LAC) model employed by the U.S. Forest Service; and (3) the Visitor Experience and Resource Protection (VERP) model employed by the National Park

Service. Given the distinctly different, yet important purposes of these methods (particularly between the first method and the second two), there are clear benefits offered by employing a blend of these approaches here.

Goal-Achievement Process

The goal-achievement process provides a framework for proposed management by means of the careful, stepwise development of key objectives and actions that serve to prescribe the wilderness conditions (goals) outlined by APSLMP guidelines. The Department is mandated by law to devise and employ practices that will attain these goals.

Limits of Acceptable Change (LAC) and Visitor Experience and Resources Protection (VERP) Models

These methods both employ carrying capacity concepts, not as prescriptions of the total number of people who can visit an area, but as prescriptions of the desired resource and social conditions that should be maintained to minimum standards regardless of use.

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

Even well-conceived and executed efforts can prove ineffective, but when this is the case, management responses must be adjusted. Monitoring of resource and social conditions is absolutely critical. Both the LAC and VERP models rely on monitoring to provide systematic and periodic feedback to managers concerning specific conditions.

The Department and the APA are working together to develop a guidance framework for monitoring wildlands in the Adirondack Park which will assess the effects of management actions and public use with respect to physical, biological, and social conditions. The guidance for wildlands monitoring will be developed to implement LAC and/or VERP and to integrate these into the decision-making process. Given the

III. Recreational Resources and Human Uses

numerous variables impacting the management of a large wildland complex, the Department acknowledges this process will evolve over time and utilize appropriate resources that are emerging across public land management agencies.

This UMP identifies desired conditions for the DMC and proposes methods and indicators for monitoring and measuring impacts to those conditions. In certain instances, implementation of the UMP will be conditional and/or phased according to the results of visitor use monitoring. Additional visitor use management strategies and actions to achieve desired conditions outlined in the final guidance for wildlands monitoring will inform future management of DMC. Any final guidance would become an appendix to the APA/DEC Memorandum of Understanding and applied to this and future UMPs

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

- the identification of acceptable conditions as defined by measurable indicators;
- an analysis of the relationship between existing conditions and those desired;
- determinations of the necessary management actions needed to achieve desired conditions; and
- a monitoring program to see if objectives are being met.

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

- condition of vegetation in camping areas and riparian areas near lakes and streams;
- extent of soil erosion on trails and at campsites;
- noncompliant visitor behavior;
- noise on trails and in adjacent campsites;
- conflicts between different user groups;
- diversity and distribution of plant and animal species; and
- water quality.

Management of the DMC will use a phased approach for the development of facilities following guidance for wildlands monitoring. The guidance for wildlands monitoring will be developed to implement LAC and/or VERP and to integrate these into the decision-making process. Given the numerous variables impacting the management of a large wildland complex, the Department acknowledges this process will evolve over time and utilize appropriate resources that are emerging across public land management

agencies. The U.S. Forest Service *White Mountain National Forest Land and Resource Management Plan (2005), Appendix E: Wilderness Management Plan* is an impressive model that helped form the Department's planning process. As the guidance for wildlands monitoring is developed, the Department will utilize aspects of the recently developed Visitor Use Management Framework (developed by the Interagency Visitor Use Management Council, which is made up of the federal public land agencies).

Management Concepts

This Unit Management Plan proposes the development of wildland recreational facilities in the Debar Mountain Complex. In addition to official documents, which inform the UMP process, the planning team applied principles and strategies that are currently considered norms in the field of wildland recreation management.

The following six management concepts are essential in wildland management:

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

The Department will adhere to these six concepts and apply them in the DMC to successfully build and manage recreation facilities that do not significantly negatively impact the natural resources or users' experience.

Phased Approach to Implementation

Many management actions proposed in this UMP are conditional and will follow a phased approach. Decisions to implement successive phases will be informed by monitoring and comparisons between defined desired conditions and existing conditions. If thresholds for natural resources conditions or visitor experience conditions are exceeded, implementation of subsequent actions may not occur and other actions

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to address conditions may be employed. Utilizing a phased approach for developing recreational infrastructure tied to monitoring visitor use-related impacts will help ensure that the wild character of the area and user experience is kept intact.

The intent of this approach is to provide a variety of access to the DMC, to create new purpose-built recreational facilities, and ensure newly constructed resources can withstand existing use before constructing additional facilities. Sustainable purpose-built facilities are a key factor in this process. Once the condition of facilities is measured and evaluated, the next steps can be determined in accordance with the phases set forth below.

The schedule of implementation at the end of this UMP was developed based upon a phased approach. Once constructed, each facility will be photo-documented to show its original condition, then periodically photo-documented to illustrate changes over time. These photos coupled with use data collected from register sheets and other means will be evaluated to illustrate the recreational carrying capacity of specific facilities. From there, the data collected on these individual facilities will be evaluated at a larger scale that considers the entire network of facilities and access points regardless of land classification.

The phased approach and schedule of implementation integrates and considers the complex nature of the area, which will allow for a more balanced and systematic approach to address the carrying capacity of the area. The evaluation of facilities will guide the phases of this plan. There are various environmental criteria that can activate the phases of the plan. These may be site-specific or at larger scales and can include issues such as campsite sprawl, vegetation damage, and trail erosion. Social criteria will also be considered in the progression of the phases. Regardless of the criteria, the main objective is to appropriately provide sustainable and desirable facilities without exceeding the carrying capacity of the land on which they are located.

Recreation Research Findings and Management Implications

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

Recreation impacts are related to visitor use levels in a curvilinear fashion. For example, a study of wilderness campsites in Minnesota found that only 12 nights of campsite use

per year caused substantial impact. However, further increases in use caused little additional change for most forms of impact (Marion, 2016). Considering the popularity of camping in the DMC, many campsites show evidence of substantial impact. However, it is also likely that continued use will have little additional adverse impact on existing campsites.

The adoption of indicators and standards for measuring impacts helps create a consistent and reliable methodology in monitoring impacts. Indicators are tools used to assess the resource or social conditions of a given area and are not always a direct measure of the actual conditions of a facility. Standards are thresholds to determine if and what management action will be taken. It is accepted and assumed that sustainable and purpose-built facilities will experience minimal further impacts when subjected to moderate amounts of use. These assumptions need to be re-assessed over time. If the facilities are maintaining their intended condition then they can either be maintained as is, or the land manager can proceed to the next phase of the plan. If the condition of the facility is failing and the assumptions are not being met, then corrective adjustments need to be made, which could involve anything from hardening and re-routes, to taking a step back to a previous phase of the plan.

Regular and consistent monitoring is critical for this framework to be successful. Without the regular measurements of the indicators and comparison to the established standards it is not possible to understand the degree to which the Department is able to maintain the integrity of the wild character.

Land Resources

Generally, the most heavily-used areas will usually show the most effects from use. However, there are several factors which can mitigate heavy use or amplify the effects of lighter use. One factor is the conditions at the time that the use occurs. For example, a few people walking a trail when the trail is wet and soft will cause more damage than a large number of people using the same trail when it is dry. Another factor to consider is the well-informed behavior of the users. A larger well-informed group can use a site without causing damage to the site, while a smaller group or even an individual can, through willful neglect or ignorance, leave an area permanently altered. A third factor to consider is the design and location of the improvement that is being used. A properly designed and located facility will allow for heavier use without having a negative impact on the resource. Poor design or location of a facility can lead to quick deterioration of the same resource.

Areas of the DMC are clearly being negatively affected by the levels of use or types of use they receive. Examples are at Azure Mountain, Bigelow Road, Jones Pond, Lake

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Kushaqua, Long Pond, Merrill Road, Mountain Pond, Rainbow Narrows, and Slush Pond. The main problems resulting from use of the DMC are erosion, mud, soil compaction, injury to vegetation, litter, improper human waste disposal, and removal of dead wood. It is fairly obvious why most of these impacts are considered to be problems; however, some people may not understand why removal of dead wood is considered to be a problem. It is seen as a problem by land managers because dead wood provides important habitat for a variety of wildlife, slows erosion, and allows nutrients to be recycled back into the soil. In heavily used areas, dead wood is collected and burned at a faster rate than it is created, resulting in an ever-widening area of damage from people gathering wood. Secondary effects of wood gathering include damage to living vegetation and removal of standing dead trees, both of which are illegal.

Many land resource problems tend to expand with time if they are not addressed. An example is that muddy sections of trails will widen as people, trying to stay dry, walk around the wet areas. Another example is that on poorly designed, excessively steep trails people will go around or stay on the edge of the eroded area. This will result in vegetation loss, thereby exposing more soil to erosion. For this reason, it is important to take action when a problem becomes known.

Illegal motor vehicle use in the DMC is a problem, and this has caused some impacts. On the DMC there are many miles of old logging roads, these are especially prominent feature on the lands that were acquired as part of the Northern Flow Rivers project. These old roads are particularly vulnerable to illegal motor vehicle use. The main problem has been from motor vehicles entering from adjacent private property, ungated private rights-of-way, or town roads. Enforcement action and improvement of barriers are usually effective at curtailing the problems for a time, but illegal ATV use is difficult to stop because they can by-pass most barriers. Impacts in the DMC caused by ATV's include mud holes, ruts, and increased erosion.

The most noticeable recreation impacts (such as trail erosion, trash, and tree injuries) receive most of the management focus, however, recreation also results in impacts to biological communities that are not as noticeable (Larson, et al, 2016). These impacts should still be considered when making management decisions, especially because the impacts to biological communities are not limited to the physical spot where the recreation use occurs but extend over a greater distance. While major portions of the DMC receive significant recreation use, there are other areas that see little to no use. Areas that receive significant use are generally near the ponds and trails. Little-used areas may have herd paths that pass through them, but generally lack developed facilities. The greater the distance from areas of heavy recreation use, roads, and developed private property, the wilder character the area will have and there will be less

impacts to wildlife. In the DMC more than 10,000 acres lack recreation facilities and are a significant distance (more than 0.25 mile) from private property or a road. Some of the most remote areas of the DMC are located in the contiguous tract of land the runs from Osgood Pond north to County Route 26 in the Town of Duane.

Objectives

- Establish and implement a regular and reoccurring monitoring program to help track impacts on this Unit over time.
- Use the latest best management practices (BMPs) available in the siting and construction of all facilities
- Provide consistent messaging, coordinated with partners, to help educate users in proper use of the DMC.
- Commit to implementing a wildlands monitoring-based phased approach through this UMP. Quality data derived through this process will help inform the Department in making the decisions to ensure protection of the resource and user experience.

Action Steps

- Develop an annual report including the status of the Wildland Monitoring implementation progress, usage trends and identify issues impacting this Unit.
- Collect and tally trail register information on an annual basis.
- Monitor facilities including parking areas, tent sites, high-use trails, roads, water access sites, and rock/ice climbing areas on a periodic basis for comparison over time. These monitoring efforts will involve data collection through photo documentation, visual observations, use number data, etc. Preference will be given to indicators that will help guide management decisions.
 - Data that may be collected (specific indicators will be identified in the wildlands monitoring guidance framework)
 - Erosion and compaction;
 - Occurrences of litter and human waste;
 - Expansion of use beyond the designed area;
 - Visual and audio sampling during peak and off-peak times;
 - Need for enforcement actions, etc.
- Use a phased approach when constructing new facilities, where possible. This allows the Department to evaluate and ensure the physical, biological, and social carrying capacities are not being exceeded and ensure there is a public desire for additional facilities before they are constructed. If monitoring efforts show the carrying capacity limits are being exceeded then management adjustments will

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be made, and the next phases of the plan will not be considered until corrective measures are successfully completed. If necessary, management actions could be rolled back to a previous phase.

- Site facilities in locations that will be sustainable in the long-term, keep overall maintenance to a minimum, and enhance the user experience.
- Develop a visitor survey to monitor user experience. Using various methodologies, develop a survey that addresses user satisfaction, acceptance of crowding, perceived management conditions, and other factors to gauge user experience. This survey should be completed on a 3-5-year cycle across this Unit.
- Close, relocate, or restrict use of unit facilities, as appropriate, to reduce negative impacts to resources caused by recreational use, where impacts have exceeded LAC thresholds.
- Provide educational materials the public can find through on-site signage and on the Department's website before their visit.
- Emphasize information and education as the primary means to reduce impacts.
- Provide outreach through on-the-ground interactions with Department representatives including Assistant Forest Rangers, SCA Natural Resource Stewards, and volunteers.

Water Resources

The APSLMP recognizes the importance of waterbodies to the Adirondack Park and that similar to land resources, these waters have a carrying capacity. The APSLMP recommends that a comprehensive study of Adirondack lakes and ponds should be conducted by the Department to determine each waterbody's capacity to withstand various uses. The Department and APA are working together to develop a guidance framework for monitoring wildlands in the Adirondack Park which will assess the effects of management actions and public use with respect to the physical, biological, and social conditions. This wildland monitoring guidance framework will likely be based on and selecting indicators that will comprehensively monitor the ecological and social impacts of use on the water bodies and surrounding riparian lands to assess the carrying capacity.

The DMC contains 72 lakes and ponds, which cover 4,569 acres. There are also numerous streams and rivers which flow through the area. The waters provide direct recreational opportunities, scenic value, and habitat for fish and wildlife. This represents a significant component of the area's recreational opportunities. Some of these water resources are impacted by recreational use. Motor boating, paddling, swimming, and fishing are among the water-based recreational activities occurring in the DMC. In

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addition to impacts from direct use of water resources, impacts also result from the use that occurs on the adjacent land, such as, motor vehicle access, camping, and hiking.

There are several ways that water quality can be negatively impacted. Introduction of nutrients, sediment, and invasive species; damage to riparian vegetation; and disturbances to fisheries and wildlife are impacts on water bodies resulting from recreational use. In addition to the environmental impacts, there are also impacts to the recreational experience caused by use on and adjacent to the water bodies. Deer River Flow, Jones Pond, Lake Kushaqua, Meacham Lake, Mountain Pond, and Slush Pond have the greatest potential for impacts from recreation activities.

Monitoring in the DMC will examine water-related use and development. The Department will identify indicators, monitor the indicators, and evaluate against standards to determine whether the capacity of individual waterbodies is exceeded. Indicators will address ecological impacts, social impacts, recreation use, and adjacent development.

Information within this UMP that will be useful in the assessment of cumulative impacts includes: trail register information, physical feature data of waterbodies (e.g. max depth), results of chemical and biological surveys, individual pond descriptions, inventory and description of facilities, and inventory of aquatic invasive species.

Several organizations are involved with studying Adirondack waterbodies. The following is a list of some of the organizations collecting data and a brief description of the information gathered:

Adirondack Watershed Institute of Paul Smith's College (AWI)– Oversees several programs related to water quality. The Stewardship program has the mission of preventing the introduction of new aquatic invasive species. The Adirondack Lake Assessment Program is a collaboration between AWI, Protect the Adirondacks!, and hundreds of volunteers to develop a long-term water quality database. AWI also works with other organizations to conduct detailed water quality studies.

Adirondack Lake Survey Corporation (ALSC) – ALSC, a collaboration between NYSDEC and The New York State Energy Research and Development Authority (NYSERDA), with the mission to monitor changes to natural ecosystems of the Adirondack Mountain ecological zone with a focus on water quality, atmospheric deposition, fish surveys, and other biological and chemical studies for the benefit of regulatory agencies and the general public. Its mission is accomplished by working with New York State, federal agencies, other agencies and the general public through an exchange of objective information. ALSC gathers biological and chemical information as part of monitoring water quality across the Adirondack Park.

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Adirondack Park Invasive Plant Program – APIPP is a partnership program founded in 2008 by The Nature Conservancy, New York State Department of Environmental Conservation, New York State Department of Transportation and New York State Adirondack Park Agency. APIPP’s role is to serve as a clearinghouse of information, a coordinator of action, and a communicator of needs for invasive species issues affecting the Adirondack region. APIPP monitors for invasive aquatic plant species in waters in the Adirondack Park.

Management Actions

- Establish desired conditions to be used to determine if carrying capacity has been exceeded.
 - Desired conditions for water bodies may be ones that demonstrate the integrity of the freshwater ecosystem and appropriate recreational quality.
- Develop and implement a comprehensive monitoring program. Monitoring use of water bodies will help measure and determine impacts that will inform carrying capacity and long-term planning. Final specifics will be detailed in the guidance for carrying capacity of Adirondack lakes and ponds.
 - Monitoring could include photo point locations, water analysis, and visitor surveys.
- Due to the known impacts and amount of use, the shoreline and waters of Mountain Pond, Jones Pond, Meacham Lake, and Lake Kushaqua will be prioritized in future wildland monitoring of this unit.
- Madawaska Pond and Debar Pond will be priorities for monitoring to ensure that proposed facilities and future recreation use do not degrade the water quality.

B. Parking

Existing Conditions

Currently there are twenty designated parking areas located adjacent to developed facilities and improvements in this Unit. The two major types of improvements currently served by designated parking areas are trailheads and fishing and waterway access sites. All designated parking areas in this Unit are constructed of sand or gravel and have minimal, if any, signage or appurtenances.

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Parking Inventory

Location	Vehicle Capacity*
Azure Mountain	9
Boy Scout Clear Pond	10
County Route 55	3
Debar Mountain Trailhead	12
Debar Pond	10
Deer River Flow	11
East Branch St. Regis River- Vanderwalker Road	3
Four Mile Road	3
Hays Brook Assembly Area	12
Hope Pond	4
Jones Pond	3
Kushaqua	5
Kushaqua Narrows	2
Indian Rock	3
Madawaska Flow	6
Osgood Pond	7
Meacham Lake Outlet	6
Quebec Brook	6
Rainbow Lake Canoe Carry	4
Santa Clara Flow	15
Trim Road Canoe Launch	4

**approximate*

Proposed Management

Management Considerations

Sufficient access is necessary for public use and enjoyment of the lands, waters and related resources within the Debar Mountain Complex.

Access must accommodate safe vehicle passage and parking.

Winter Access – Only a limited number of access roads and parking areas are plowed in the winter. In general, this is not a problem because demand for access tends to be lower in the winter. However, some facilities receive just as much, or even more, use in the winter. The lack of plowing has created issues for those attempting to visit those areas. Expanded resources to maintain access roads and parking areas for winter recreation are necessary.

Desired Conditions for Parking Areas

Properly designed and managed parking areas will maintain their firm and stable surface with minimal maintenance and allow unencumbered parking for the designed number of vehicles. This not only maximizes environmental protection, but also user safety, function, and enjoyment. Appurtenances to parking areas, including privies, structures for trailhead registration and information, and gates should also be maintained in a clean and functional working condition. The variables to be monitored in parking area will be the presence of a firm and stable surface accessible by the public, trash, invasive species, parking outside the designated area, traffic congestion, and human waste. Photo points will be a useful tool to help illustrate potential changes over time.

Objective

- To provide the public access to Debar Mountain Complex lands, waters and recreational facilities.

Action Steps

- Desired conditions for parking areas will include a firm and stable surface, parking is only occurring within the designed footprint, maintained privies, free of litter and human waste, free from invasive species, and does not detract from the user experience.
- Provide appropriate signage and trailhead facilities at parking areas. These would include privies, trail registers, and kiosks.
- Buck Pond – Lake Kushaqua Area
 - Kushaqua Rail Trail (north end)

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- Provide parking for 5 cars with 2 ADA accessible parking spaces at northern end of the Kushaqua Rail Trail.
- Interpretive/Rainbow Narrows Connector Trail
 - Establish a five-car parking area for the Nature Trail and Rainbow Narrows Connector Trail on the Buck Pond Access Road before the campground toll booth.
- Rainbow Narrows Water Access
 - Establish a ten-car parking area at Rainbow Narrows to serve boaters (car top), campers, and swimmers.
- Hays Brook
 - The Hays Brook Assembly (parking) Area is not of sufficient size or design to accommodate the parking of commonly used horse trailers and their tow vehicles. The parking will be redesigned and enlarged to accommodate these vehicles. The capacity of the parking area will remain 12 vehicles.
 - Improve parking area for winter access to the Hays Brook trail system by establishing a parking area on Route 30 that can be plowed by New York State Department of Transportation (NYSDOT).
 - Improve the parking area and the trailhead for Kettle Trail on Slush Pond Road. This parking will be designed to hold ten vehicles.
- Kate Mountain
 - Provide parking with trailhead for five cars on Sinkhole Road.
 - Provide parking with trailhead for five cars at end of Tyler Road.
- Construct a four-vehicle parking area off the eastern shoulder of State Route 30 across from the existing Barnum Pond fishing and waterway access site. Coordinate with NYSDOT as necessary.
- Build a five-car parking area on State Route 30 to provide access for a canoe carry to Osgood River.
- Build a five-car parking area on County Route 26 for the trail to Baldface Mountain.
- Construct an eight-vehicle fishing access parking area immediately west of the entrance road across from existing designated campsite #1 at Jones Pond. Install a register box adjacent to the parking area.
- Construct a four-vehicle parking area for users accessing Long Pond. Install a register box adjacent to the parking area.
- Construct an eight-vehicle parking area at Debar Meadows. Preclude motor vehicle access beyond the designated parking area and existing motor vehicle-accessible campsite. Install a gate at the parking area.
- Build a four-car parking area at Coal Hill Road.

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- Build a four-car parking area on Red Tavern Road to facilitate access to the East Branch Saint Regis River.
- Create two parking areas at Mountain Pond. One will be a four-vehicle parking at the southern end of the pond. The other will be a three-car parking area on the western side of the pond.
- Create a four-vehicle parking area near Slush Pond.
- Create a four-vehicle parking near the intersection of Four Mile Road and Blue Mountain Road.

C. Roads

Existing Conditions

Motor vehicle use, except for snowmobiling, is not a program offered by the Department. Instead, use of motor vehicles by the public is authorized only on designated roads to provide access for recreation such as: hunting, fishing, boating, and camping. Guidance in the APSLMP applies to roads and motor vehicle use in primitive or wild forest areas. Key parts of this guidance state that in wild forest areas there will be “*no material increase*” of road mileage and that public motor vehicle use will not be encouraged.

Pursuant to 6 NYCRR §196.1(b)(3), public motor vehicle use in the Forest Preserve is only authorized on roads that are specifically designated by the Department for motorized use. Currently there are 11.1 miles of Department roads open to public motor vehicle use on the DMC. Driveways accessing parking areas, campsites, or other facilities are not included in the mileage total. Roads in the planning unit vary widely in their dimensions, construction materials, levels of use, and regularity of routine maintenance. Roads on parcels acquired more recently are generally in better condition than those on unit lands purchased a considerable time ago.

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DEC roads on State land open to public motor vehicle use.

Road name	Land Classification	Distance (miles)
Benz Pond Road	Wild Forest	2.2
Buck Pond Access	Wild Forest	0.8
Coal Hill Road	Wild Forest	0.1
Coal Hill Road	Primitive	0.5
Debar Meadows Road	Wild Forest	0.9
Debar Mountain Road	Wild Forest	0.2
Debar Pond Road	Wild Forest	0.5
Four Mile Road	Wild Forest	1.2
Jones Pond Road	Wild Forest	0.3
Long Pond Road	Wild Forest	0.4
Meacham Lake Access	Wild Forest	0.7
New York Central (Rail) Road	Wild Forest	1.4
North Branch Road	Wild Forest	0.6
Pinnacle Road	Wild Forest	0.8
Vanderwalker Road	Wild Forest	0.5
Total	Wild Forest: Primitive:	10.6 0.5

Rights of Way/Easements

There are a number of easements and deeded rights of way providing access to, or crossing over, Forest Preserve lands in the DMC. Easements and rights-of-way (ROW) are either deeded in a land acquisition process or agreed upon by two or more parties through mutual negotiation. In several instances, easements and ROW's are shared between the State and one or more other property owners. In situations where a property owner's access across Forest Preserve lands is not sufficiently recorded, staff from DEC's Bureau of Real Property and Office of General Council assess any available evidence relevant to the situation in an effort to permanently resolve the issue.

Northern Flow River Corridors Project ROWs

Deed terms for rights-of-way may include stipulations for the use and/or maintenance of the ROW. An example of this was in the 1999 Northern Flow River Corridors Project. In this situation, the rights-of-way are divided into two types referred to as "Reciprocal Easements" and "Permanent Easements".

Reciprocal Easements apply to roads where the boundary between state-owned Forest Preserve lands and privately-owned conservation easement lands is essentially the centerline of the road between the two properties. Three such roads exist in association with DMC lands. Under the terms of the reciprocal easements, Heartwood Forest Fund-

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III, the private landowner, is able to maintain the road ROW on its own property up to a width of 50 feet perpendicular to the road's centerline. In addition, DEC may also maintain the ROW up to the same width on the HFF-III property. The same applies for the DEC side of the road centerline boundary; both property owners have the right to conduct road maintenance operations for up to 50 feet in width perpendicular to the road centerline on the Forest Preserve property. Reciprocal easements may be open to public-operated motorized vehicles upon the mutual agreement of the two ownership parties subject to specific terms of the conservation easement agreement.

Permanent Easements exist on several roads that travel through Forest Preserve parcels where the lands on, underneath and adjoining the road are owned in fee by the State. Four such instances exist within the DMC management complex. Like the reciprocal easements, private rights to maintain the road ROW extend for 50 feet in width perpendicularly on either side of the road centerline. These ROW's more specifically address the needs of the private grantee and their lessees to travel through Forest Preserve lands in pursuit of reserved rights that are guaranteed to them by the conservation easement agreement. Permanent Easement roads may be opened to public-operated motorized vehicles at the sole discretion of the Department. Both reciprocal and permanent easements are dictated by specific terms which state in part that:

".....easements shall be for ingress and egress and to advance the forestry, recreational and administrative purposes set forth in the conservation easement.....Each party at its sole expense may maintain, repair, correct, replace, upgrade or otherwise improve those roads, trails or bridges over which it has the right of use subject to this provision"

The following is a listing of significant easements and deeded ROW in the DMC. This list does not include ROWs that provide access to a single residence.

Benz Pond Road ROW

The Benz Pond Road easement is 100 feet wide and begins on the Blue Mountain Road just north of Benz Pond. The Forest Preserve section of the road is 2.24 miles long and travels through the Madawaska Flow-Quebec Brook Primitive Area to the common boundary with the adjoining conservation easement lands.

Debar Meadows Access Road

Provides DEC and the public with access to Debar Meadows and Skiff Pond from County Route 26. In addition, two adjoining private landowners have a right to access their properties using this ROW. The ROW is 50 feet wide and travels across Forest Preserve and privately-owned lands. Approximately 1.3 miles of the ROW travels across privately owned lands.

Debar Pond Road Deeded ROW

Provides DEC and the public with access to Debar Pond and the Debar Lodge complex from County Route 26. The right of way is 20 feet wide and travels for 0.3 miles across private property until it reaches State land. The road continues on State land as a DEC road.

Coal Hill Road ROW

This 50-foot-wide easement travels north from the Red Tavern Road, along the former Coal Hill Road. This crosses lands classified as wild forest also well as the Deer River Primitive Area. There is also a deeded right for the easement owner to build a connector road between the Coal Hill Road and Old Woods Road.

Four Mile Road ROW

A 2.98-mile-long, 100-foot-wide easement that forms a loop road to the east of the Blue Mountain Road. Lands generally situated to the east of the road's centerline are Forest Preserve, those lands generally situated to the west of the centerline are conservation easement lands.

Indian Rock ROW

This 100-foot wide easement across Forest Preserve lands begins in the east on the Blue Mountain Road and proceeds southwest terminating at the Main Branch of the St. Regis River.

Madawaska Pond-North ROW

This easement travels across Forest Preserve lands parallel to the northern shoreline of Madawaska Pond from the conservation easement/fee land boundary on the east to the Spring Cove Fish and Game Club Property on the west. The permanent easement is 100 feet wide.

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Madawaska Pond-South ROW

A 100-foot-wide easement across Forest Preserve lands which begins in the west on the Blue Mountain Road, crosses the Spring Cove Fish & Game Club property at a point locally known as “Conversation Corners” and then proceeds east terminating approximately 0.3 miles west of Hidden Pond.

Madawaska Road

This 5.6-mile-long road is entirely on the Santa Clara Tract Conservation Easement. It provides public, private, and administrative access to Madawaska Pond.

McKavanaugh Pond Club- Tractor Road Deeded ROW and Lonkey Road

The Santa Clara Tract Forest Preserve lands and McKavanaugh Pond Club property were at one time in the common ownership of the St. Regis Paper Company. The lands owned by St. Regis Paper were eventually purchased by Champion International Corporation in the decades prior to the Northern Flow River Corridors Project in 1999. Pursuant to the terms specified in the deed of record between the McKavanaugh Pond Club and St. Regis Paper (Liber 496, Page 499 as recorded at the Franklin County Clerk’s Office), the club retained reserved rights of ingress and egress for any purpose over a right of way locally known as the “Tractor Road”. The land over which the Tractor Road crosses was acquired in fee simple title by New York State in 1999 and was subsequently added to the Adirondack Forest Preserve. This acquisition does not extinguish the rights to the Tractor Road held by the McKavanaugh Pond Club. The Tractor Road begins on the Blue Mountain Road. The right of way travels 0.53 miles east across the northern most portion of the Madawaska Flow-Quebec Brook Primitive Area before reaching the McKavanaugh Pond Club boundary.

Another forest road located about 0.4 miles northwest of the Tractor Road’s intersection with the Blue Mountain Road, commonly referred to as the Lonkey Road, has been used by McKavanaugh Pond Club to access their adjoining property in the past. McKavanaugh erected a gate at the Lonkey Road’s intersection with the Blue Mountain Road at an unknown time, most likely when the property where the gate was erected was owned by either St. Regis Paper or Champion International. Deed research conducted by DEC’s Bureau of Real Property shows that McKavanaugh Pond Club does not possess deeded rights to use the Lonkey Road which is now owned in fee title by the State of New York. In consideration of this fact, the existing gate owned and erected by McKavanaugh on the Lonkey Road needs to be removed.

National Grid Corporation Utility Line Easement and ROW

This right-of-way and easement are held by National Grid Corporation a successor in interest to Niagara Mohawk Power Corporation the company that negotiated and held the original easement and right-of-way deed. The right-of-way and easement travels over the former Adirondack Branch of the New York Central Railroad and was purchased from the White Fathers of Africa by Niagara Mohawk Power Corporation in January 1966. Under the terms specified in the transaction, Niagara Mohawk and their successors and assigns in interest reserved the rights to:

“build, rebuild, relocate, operate, repair, maintain and, at its pleasure, remove electric lines, including such poles, towers, cross-arms, wires, transformers, cables, underground conduit, counterpoise wires or cables, guys, stubs, anchors, brace poles, ways and such other appurtenant or supporting apparatus or structures as said Company may now or shall from time to time deem necessary, and to transmit and distribute electricity, including telephone transmission, upon, over, under, through, across and beyond a parcel of land which the Grantor (White Fathers of Africa) owns.....”.

The State of New York acquired fee title ownership of the White Fathers of Africa property in 1975. The easement and right-of-way on Forest Preserve lands is 2.19 miles long and 100 feet wide.

Osgood Pond Fishing and Waterway Access Site

When this parcel was acquired by the State from Paul Smiths College, a deed restriction on the State’s title provided for perpetual use of the boat launch site for the launching of motor boats by private landowners with deeded rights in the adjoining Northview and Clearview subdivisions.

Osgood Pond- Interior Parcel

This parcel is a privately owned camp lot on the southeastern shoreline of Osgood Pond. It has a reserved right of way to access their property over adjoining Forest Preserve lands. The ROW is 25 feet wide and was conveyed by Paul Smiths College prior to the sale of their property to the State in 1991.

Pinnacle Road

This road leaves State Route 458 and provides access to a hiking trail on the Santa Clara Tract Conservation Easement. The first 0.7 miles of the road are entirely on easement lands. The next 0.8 miles of the road are the boundary between wild forest and easement lands.

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Ross Line Road ROW

This 100-foot wide, private ROW starts on private property off of the Blue Mountain Road, before it enters State and conservation easement lands. The road terminates 2.92 miles southwest of the Blue Mountain Road. Lands generally situated to the east of the road's centerline are Forest Preserve, lands generally situated to the west are conservation easement lands.

Trim Road Canoe Launch Access

This access route passes through a 66-foot-wide strip of State land that is adjoined by private lands on both sides for 0.5 miles before reaching a larger Forest Preserve parcel. The route continues another 0.4 miles to the East Branch Saint Regis River. This provides access to a canoe launch and a parking area. Due to boundary line discrepancies, the route has grown-in to the point that it only provides foot access.

Vanderwalker Road

This road provides access to a hand launch on the Saint Regis River. The road leaves State Route 458, crosses the Santa Clara Tract Conservation Easement for 0.4 miles, and then becomes the boundary between wild forest and easement lands for the remaining 0.5 miles to a parking area.

Abandoned Roads

Two abandoned town roads, the Eddy Road and the Walker Road (a.k.a. "The Walkerville Road") cross through Forest Preserve lands in the northernmost part of the planning unit. Both roads were formerly maintained and open to public use under the management and administration of the Town of Santa Clara. Anecdotal evidence obtained through Department contractors that conducted property surveys of Forest Preserve lands adjacent to these former town roads indicates that the town abandoned the maintenance of these roads as public ways in 1924. In June of 1976, the Town of Santa Clara conveyed all of their interest in the roads and their respective rights-of-way in fee simple ownership to St. Regis Paper Company, the preceding fee title owner to Champion International Corporation and the State of New York. The 1976 conveyance to the St. Regis Paper Company effectively extinguished the public's rights to use the Eddy and Walker Roads in the Town of Santa Clara.

Motorized and non-motorized use of the Eddy and Walker Roads has been of variable type and frequency since the 1976 transaction. The majority of use up to, and including, the mid-1990s was attributed to hunting and recreation camp members who were leasees of either St. Regis Paper or Champion International. The Walker Road was gated at its intersection with the Red Tavern Road at an unknown time subsequent to its

acquisition by St Regis Paper. Since 1999 the section of the Walker Road south of the Deer River has been used as a canoe carry trail to allow for public access to the river and the state-owned lands of the Deer River Primitive Area.

The Eddy Road, accessed from the Red Tavern Road via the town owned and maintained Everton Road, has never been barricaded. As public ATV riding began to gain popularity in the mid to late 1990s, the former Eddy Road likely saw increased use by ATV riders who traversed it as an ATV trail from its intersection with the Everton Road north into the Town of Brandon. According to the accounts of the local Forest Ranger, present day public ATV use of the road has experienced a steady increase in frequency over the past two years and seems to indicate a long-established period of unrestricted use. Anecdotal evidence obtained from law enforcement personnel indicates that St Regis Paper, Champion International and other adjoining private landowners did not actively pursue or prosecute public ATV riders or were indifferent to, unaware of, or chose to ignore, public ATV use of their property. In consideration of the State's fee title ownership of the former right-of-way, the road's abandonment and the provisions of the APSLMP, public ATV use on the former Eddy Road as it crosses the Forest Preserve lands should no longer be permitted. Due to its long-standing unrestricted use by public ATVs, a program of information dissemination, public education and enforcement is recommended to ensure compliance and resource protection.

Another type of abandoned road in the DMC are old logging roads. The most obvious of these roads were on the lands acquired as part of the Northern Flow River Corridors Project. There is a significant system of abandoned roads on these lands, including some which intersect with private rights-of-way. There appears to be some unauthorized vehicle usage of these old roads. Over time these roads will be reclaimed by nature. This could present a problem if road material is being eroded away, which is a particular concern where culverts fail.

Administrative Roads

Administrative roads are roads used by Department personnel where necessary to reach, maintain or construct permitted structures and improvements, for appropriate law enforcement and for general supervision of public use and research. Department personnel using these roads must comply with Commissioner Policy CP-17, *"Recordkeeping and Reporting of Administrative Use of Motor Vehicles and Aircraft in the Forest Preserve."* Administrative roads may also be designated for public use in accordance with existing law and policy at the discretion of the Department. There are administrative rights to most of the private ROWs and roads listed previously. Any road

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that the Department closes to public motor vehicle use may become an administrative road. The following are specifically listed as administrative roads.

DMC administrative roads

Name	Length (miles)
D & H Administrative Road (includes two segments. One between Country Route 55 and Oregon Plains Road. The other north of Buck Pond Campground)	5.4
Debar Lodge Administrative Road	0.3
Hays Brook Administrative Road	2.7
Madawaska Dam Administrative Road (in the Madawaska Flow-Quebec Brook Primitive Area)	1.0
Old Meacham Lake Road	0.8
Sheep Meadow Administrative Road	2.3

Proposed Management

Objective:

- Improve road conditions to primary access points and parking lots for use by the public, while reducing negative impacts to the resource from motor vehicle use of roads.

Desired Conditions for Forest Preserve Roads

The roads of this Unit serve as public access to recreational facilities and administrative and emergency access to the lands the Department manages. Roads that are kept open for use will be maintained to a sustainable standard, which protects environmental quality by resisting erosion and rutting and will also allow for safe, unimpeded access by users. It is understood that normal wear and tear will occur, but these roads will be kept to a firm and stable standard that resists wear from natural and man-made actions. It is also important when maintaining these roads to do so in a manner that blends the road to its natural surroundings to the extent reasonably possible. The wild experience can be preserved as much as possible through being minimally invasive and blending work activities to maximize the public's enjoyment along their route. Like other recreational facilities, roads will be monitored as part of the guidance for wildlands monitoring

discussed throughout this UMP. Road monitoring indicators will be evaluated include degree of erosion, rutting, deteriorated drainage devices such as ditches and culverts, and occurrences of invasive species. The objective will be to maintain relatively undisturbed road surfaces that have properly working drainage devices which allow for safe and enjoyable travel. Photo points will be a useful tool to help illustrate potential changes over time.

Action Steps

- Desired conditions for roads will be ones that are firm, stable and well drained with minimal erosion, free of invasive species, have minimal expansion from the designed footprint of the built facility, minimally impacted roadside vegetation, free of litter, does not facilitate illegal motor vehicle operation off the designated road, and provides an enjoyable user experience.
- Evaluate publicly accessible motor vehicle roads within this Unit on an annual basis.
- Develop a report outlining extent of road footprints, standards for maintenance and best management practices to be incorporated in specific road maintenance actions.
- Roads in the primitive areas will be blocked, except for where deeded rights to use the road are granted to another party.
- Place barriers to deter illegal motor vehicle where needed.
- Where practical, remove abandoned road infrastructure, particularly culverts.
- Move the gate on the Coal Hill Road closer to Red Tavern Road. The gate will be placed to provide room for a four-car parking area off Red Tavern Road. This action will reduce public motor vehicle road mileage in wild forest area by 0.1 miles and in primitive area by more than 0.4 miles.
- Erect barriers at locations on Forest Preserve lands adjoining roads and ROWs where necessary to manage and control use.
- Work with local governments to address issues related to town roads that dead end within the DWC.
- Contact National Grid Corporation and request that they remove “No Trespassing” posters from utility line rights-of-way and easements where the property is owned in fee by the State. Advise National Grid that recreation use agreements and the filing of criminal or civil complaints pertaining to the public’s use of state-owned lands that the company does not own in fee are unlawful and must be discontinued.

D. Bridges

Existing Conditions

Bridges are in this Unit range from wooden footbridges which cross through a wetlands complex to steel highway bridges that have been decommissioned by their respective governing authority. Many currently receive regular annual usage by foot or motorized vehicle traffic. One bridge is a steel highway bridge which spans the Deer River in the Deer River Primitive Area at the terminus of a foot trail, which anecdotal evidence suggests receives little usage. The Deer River bridge, approached from either side by an abandoned town road known locally as the Walker Road, was constructed around 1900 and is viewed by local residents and hunting camp lessees as an important piece of local history. The bridge has received no structural maintenance or rehabilitation since the abandonment of the Walker Road by the Town of Santa Clara in 1924.

Proposed Management

Objective

- Construct and maintain safe bridges that will protect the water resources they cross and support the designated uses of the trails that cross them.

Action Steps

- Conduct annual inspections of all unit bridges using a combination of Department staff and volunteers. These reports will document current problems and enable the area manager to develop a prioritized maintenance schedule. All bridges that are deemed no longer safe will be addressed as soon as possible.
- Remove from the site, reuse, or dispose of properly, any unused material from new bridge construction and bridge maintenance or removal.
- Bridges will be designed, built, and maintained based on the loads they would need to support.
- Replace the existing multiple use trail bridge (*UTM coordinates 18T 561306; 4935745*) on the Debar Meadows to Meacham Lake multiple use trail. Design the replacement bridge to safely support use by snowmobiles, groomers and horses. Construction planning for the bridge's replacement will consider all applicable regulations, laws and guidance document guidelines.
- Reestablish the bridge over Hays Brook at the end of the Hays Brook Administrative Road. This bridge would be designed for non-motorized uses.
- The bridge spanning the Deer River on the old Walker Road will be removed if a reasonable method can be utilized and resources allow.

- Determine the feasibility of the construction of a snowmobile bridge crossing adjacent to the current highway bridge where State Route 30 crosses over the headwaters of the East Branch of the St. Regis River as it exits Meacham Lake. Work cooperatively and file technical service requests with the NYSDOT and DEC Bureau of Design and Construction to compose possible designs. Consult with OPRHP to determine the availability of snowmobile trail funds to be applied toward the completion of the project. Contingent upon an affirmation of the feasibility of the proposed project, devise an implementation strategy.

E. Camping

Existing Conditions

Camping is a popular recreational activity in the DMC. The camping opportunities in the DMC include roadside primitive tent sites, backcountry sites, lean-tos, and opportunities for undeveloped at-large camping. There are 52 primitive tent sites and five lean-tos in this Unit. Twenty-four of the sites are roadside primitive tent sites. The level and distribution of overnight usage within the DMC appears to be most affected by campsite location and the difficulty of access to the site. Many of the easily accessed sites are occupied for most of the camping season, while the sites with difficult access receive little use.

In 2019 the DEC and APA adopted *Management Guidance: Siting, Construction and Maintenance of Primitive Tent Sites in Wilderness, Primitive, Canoe and Wild Forest Areas on Forest Preserve Lands in the Adirondack Park (APA and DEC, 2019)*. This document provides updated guidance on how primitive tent sites will be managed. The implementation of this guidance may result in changes to many of the sites in the DMC.

Roadside Primitive Tent Sites

Roadside primitive tent sites are defined as those primitive tent sites that are within 250 feet of a road. These sites receive most of the camping use in the DMC.

The Kushaqua-Mud Pond Road area includes seven roadside primitive tent sites. These sites provide camping at



Mountain Pond Site #2

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highly desirable waterfront locations. Mountain Pond Road offers six roadside campsites. At Jones Pond five of the seven primitive tent sites are roadside sites. Along Slush Pond Road there are six designated sites, which receive less use than other roadside camping areas. Two additional roadside primitive tent sites are at Clear Pond and Long Pond. Both these sites have factors which make them less attractive than other unit facilities.

Backcountry Camping

Backcountry camping sites in the DMC are accessed by foot, watercraft, mountain bike, snowmobile, or horseback. Much like roadside camping, use of backcountry campsites in this Unit is highly variable. The most popular sites are next to a waterbody. Some of the sites along waterways are used as part of extended trips.

After the State completed the Northern Flow Rivers acquisition, primitive tent sites were built along the Saint Regis River and the East Branch Saint Regis River. For several reasons most of these sites have not received much use.

Backcountry camping in this Unit also occurs at undesignated locations, and there are several organized groups which regularly take part in this type of camping.

Group Overnight Use

Large groups camping in the backcountry are associated with summer residential camps, college outdoor recreation programs, and youth rehabilitation programs. Supervised youth groups utilizing backcountry camping locations most commonly seek this type of recreational experience as an avenue to facilitate personal growth, education and therapy, focusing primarily on promoting a combination of self-sufficiency and teamwork.

Large groups (over eight people) using overnight facilities in this Unit are generally limited to structured outdoor experience programs geared toward adolescents and college age students. Some of those programs place particular focus on low impact camping at backcountry locations. Field inspection by DEC staff has determined that use of unit facilities by groups of this type appears to have a low negative impact on the adjoining resources, however, the establishment of designated group camping facilities, particularly in the Debar Meadows, Debar Mountain, Skiff Pond and Winnebago Pond areas would serve to better manage and define the impact areas.

Lean-tos

Lean-tos have been part of the Adirondack backcountry camping experience for over 100 years. They were built for visitor convivence and to provide shelter during inclement weather. Prior to the development of lightweight tents and gear, campers were more dependent upon lean-tos.

Today, lean-tos continue to be a desired recreational destination because they provide a unique camping experience often at a scenic location. Camping at some lean-tos



Lean-to at Grass Pond

tend to be more popular in the fall and winter. There are five lean-tos in the DMC. The lean-tos are at Debar Mountain, Grass Pond, the Osgood River, and two at Sheep Meadows. The Debar Mountain and Osgood River lean-tos need repairs.

The fact that lean-tos require a significant amount of resources to build, present a challenge to transport, and need regular maintenance, means that there are a limited number of new lean-tos that can be built in the DMC.

Impacts of Overnight Use

Generally, camping locations are the most heavily impacted locations in the DMC. This is due to the cumulative use they receive and the nature of that use.

Heavily used camping locations typically experience a variety of deleterious impacts including trampling and removal of adjacent vegetation, aesthetic and physical impacts associated with fire, and the erosion and/or compaction of soil. Length of stay at a location and visitor behavior are major factors related to site degradation. Proper construction of primitive tent sites is important in limiting impacts. Just a few nights of use can have the potential to drastically impact a site which is not hardened or naturally resilient to impacts.

The physical, biological, and social impacts of the use of backcountry camping facilities in the DMC are dramatically less than those observed on motor vehicle accessible campsites. This situation is largely attributed to the type and behavior of the user. Backcountry usage, particularly that involving groups from youth residential facilities, often follow Leave No Trace Principles. Users at backcountry locations are forced to travel light and seem to be less concerned about a higher level of comfort than they are

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about the experiential nature of their recreation which is of a more remote or rugged nature. While “campsite sprawl” that accompanies backcountry usage by large groups is a problem, the current levels of overnight use in the backcountry areas of this Unit appears to have a negligible negative impact on the physical, social, and biological resources of the backcountry.

Campers utilizing roadside locations seem to be more interested in a social and restful experience with an associated higher level of comfort. Ease of access to roadside sites means that the camping setup may be quite elaborate, with some using camper trailers and motor homes along with canopies, screen houses, and tents. This situation tends to lead to a significant “sprawl” of impacts. Many users of roadside tent sites show a high degree of respect and responsibility when camping; however, the ease of access at these locations does have the propensity to attract irresponsible and unethical short-term usage, such as, drinking parties. These activities result in major impacts to roadside campsites and degrade the experience of other users.

The most heavily impacted primitive tent sites in the DMC are at the Kushaquaa- Mud Pond Road area, Jones Pond, Mountain Pond, and Slush Pond Road. Many of these sites show degradation, which includes some combination of soil erosion, soil compaction, loss of vegetation, injuries to trees, establishment of extra fire rings, littering, user conflicts, improper disposal of human waste, and vandalism. Despite these impacts, roadside camping at these sites is a desired recreational activity and a valuable attribute of the DMC. Roadside camping is utilized by a dedicated constituency that place a high value on this recreational opportunity. Development and implementation of a management strategy for these facilities will serve to mitigate the identified impacts while permitting this type of overnight use to continue.

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Summary of Designated Camping Locations

Location	Number of primitive tent sites	Number that are roadside sites	Number of lean-tos
Azure Mountain	1	0	0
Clear Pond	1	1	0
Debar Meadows	1	0	0
Debar Mountain	0	0	1
Deer River Flow	1	0	0
East Branch St. Regis River	5	0	0
Grass Pond	0	0	1
Jones Pond	7	5	0
Kushaqua- Mud Pond Rd. (White Fathers)	9	7	0
Loon Pond	1	0	0
Long Pond	1	1	0
Main Branch St. Regis River	8	0	0
Mountain Pond	7	6	0
Osgood River	2	0	1
Rainbow Lake	3	0	0
Sheep Meadows	0	0	2
Skiff Pond	1	0	0
Slush Pond	6	6	0
Total	54	25	5

Proposed Management

Objectives

- Build and maintain quality primitive tent sites and lean-tos with associated infrastructure (fire rings, privies, cleared level areas for tents, and occasionally picnic tables).
- Reduce or mitigate adverse impacts from camping.
- Bring camping into compliance with the APSLMP and other guidelines.

Desired Conditions for Tent Sites and Lean-tos

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

Action Steps

- Desired conditions for tent sites will be sites that have minimal expansion from the designed footprint of the built facility, do not negatively impact adjacent vegetation, show minimal signs of compaction, are free of occurrences of human waste or litter, comply the standards in *Management Guidance: Siting, Construction and Maintenance of Primitive Tent Sites in Wilderness, Primitive, Canoe and Wild Forest Areas on Forest Preserve Lands in the Adirondack Park*, and provide an enjoyable user experience.
- Bring primitive tent sites into compliance with *Management Guidance: Siting, Construction and Maintenance of Primitive Tent Sites in Wilderness, Primitive, Canoe and Wild Forest Areas on Forest Preserve Lands in the Adirondack Park* which was adopted in 2019. This will result in changes to primitive tent sites in the DMC, particularly for roadside sites. Under this UMP, single-lane parking areas, as allowed and defined by the guidance, will be built where feasible at roadside primitive tent sites. Where it is not practical to build a single-lane parking area at a primitive tent site, a parking area near or adjacent to a road will be provided as allowed in the guidance.

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- The actions laid out in this section present the maximum number of sites which may be built. The primitive tent sites will be built as quality camping sites and at locations where users will want to camp. This will be done incrementally to ensure that more sites are not built than needed. It is possible that the number built may not reach the maximum.
- Kushaqua Mud Pond Road Area:
 - Kushaqua North Beach: block vehicle access about 300 feet from the camping area and create a two-vehicle parking area at that location.
 - White Fathers Church: block the access driveway approximately 150 feet southeast of its intersection with the Kushaqua Mud Pond Road and build a two-vehicle parking area at that location.
 - Rainbow Narrows: design and construct improvements to minimize bank erosion, build a parking area for day-use separate from the campsite area.
 - Hope Pond: close the primitive tent site on north shore of Hope Pond. Improve the site on the east shore
- Jones Pond
 - Close the access road at site # 2. Build a four-vehicle parking area at that location.
 - Close sites # 1, 3, and 4.
 - Build a water accessed, primitive tent site along the south shore of the pond.
 - When all these changes are implemented there will be a total of five primitive tent sites along Jones Pond.
- Mountain Pond
 - Close site #1 and create a four-vehicle parking area at the site.
 - Build a water accessed, primitive tent site on the eastern shoreline of the pond.
 - Close sites #3 and 5.
- Slush Pond Road
 - Close site #3 to gain compliance with the guidelines of the APSLMP. Build a four-vehicle parking area at that location.
 - Close site # 6.
 - Build two new roadside primitive tent sites.
- East Branch Saint Regis River and Saint Regis River
 - Reestablish up to 13 quality primitive tent sites along these river corridors. These will be built a few at a time in phases based on monitoring determining that there is demand for additional sites.
- Debar Pond
 - Build two lean-tos and one primitive tent site.

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- Build a primitive tent site along the proposed trail between Debar Meadows and Debar Pond.
- Define a two-vehicle parking area for the primitive tent site located on the western shoreline of Clear Pond in the Town of Duane.
- Build a primitive tent site south of the intersection of Bigelow Road and the D&H rail bed in the Town of Franklin.
- Build a primitive tent site off Merrill Road in the Town of Franklin.
- Build six primitive tent sites in the Madawaska/Quebec Brook Primitive Area at Madawaska Pond, Quebec Brook, Onion River, and Grass Pond. Two lean-tos may be built in this area.
- Build a primitive tent site on southwestern shoreline of Benz Pond.
- Build three roadside primitive tent sites along Benz Pond Road.
- Build one new primitive tent site along Deer River Flow.
- Build two primitive tent sites off Four Mile Road in the area of Duck Pond.
- Build two primitive tent sites along Osgood Pond.
- Build two primitive tent sites along the Osgood River to Meacham Lake.
- Relocate the existing primitive tent site at Long Pond to a new boat accessible location off the northwestern shoreline of the pond.
- Relocate the existing primitive tent site at Skiff Pond to a location approximately 600 feet southeast of its present location.
- Designate three primitive tent site groupings to be primarily accessed from the Debar Meadows to Meacham Lake Campground multiple use trail. Site groupings will be designed to accommodate camping group sizes up to 20 persons.
 - Winnebago Pond Area: north of Winnebago Pond and east of the multiple use trail.
 - Hays Brook Tributary: west of Hays Brook tributary and north of the multiple use trail approximately 1 mile southeast of Winnebago Pond.
 - Skiff Pond Area: approximately 0.12 miles southeast of the existing campsite.
- Evaluate existing lean-tos in this Unit on an annual basis. Conduct maintenance, repairs and rehabilitation as necessary in conformance with APSLMP guidelines and best management practices.
- New lean-tos may be installed at Madawaska Pond, Hays Brook, Debar Pond, and Skiff Pond.
- The Debar Mountain Lean-to will be removed. A primitive tent site will be established at that location as a replacement.
- The Osgood River lean-to will be relocated and rebuilt at a APSLMP compliant location.

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- Monitor the condition of physical and biological resources at campsites on a biannual basis.
- Evaluate the level of screening at all roadside primitive tent sites. Plant native tree and shrub species at locations where screening between parking and camping areas and the adjacent road is inadequate.
- Restoration work, including erosion control, soil improvement, establishing vegetation, and discouraging use, will be done at closed camping areas, access roads, and trails to bring the sites to a natural condition. Portions of sites may be left open for day-use.

Summary of Camping Changes

Type	Current number	To be closed	To be built	Change
Primitive Tent Site	54	9	26	+15
Lean-to	5	1	6	+5

F. Paddling/Hand Boat Launches

Existing Conditions

As identified in the APSLMP, fishing and waterway access sites provide public parking and access to individual water bodies and lake chains “for fishing or other water access with attendant parking facilities which does not contain a ramp for or otherwise permit the launching of trailered boats. These sites are designed and intended for the launching of small “car top” craft that do not require launching from a trailer. Currently, there are seven fishing and waterway access sites in the DMC. These are Clear Pond, Deer River Flow, Jones Pond, Rainbow Narrows, Meacham Lake Outlet, Osgood Pond, and Santa Clara Flow. Although not intended for the launching of trailered boats, some fishing and waterway access sites in this Unit are being used by trailered boats. It would be acceptable under the APSLMP to allow users to unload and reload trailered boats at the water’s edge, so long as the trailer is not submerged for launching. When it was acquired by the State, the Santa Clara Flow access site already included a launch ramp. Most of fishing and waterway access sites are not well defined or properly hardened

Besides the fishing and waterway access sites, there are watercraft launching sites a greater distance from a parking area. These sites are reached by a trail and are traditionally referred to as “canoe carries.” There are seven developed canoe carry access points in this Unit. These are Debar Pond, East Branch Saint Regis River off NY

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Route 458, Four Mile Road to the Saint Regis River, Indian Rock to the Saint Regis River, Madawaska Flow, Rainbow Lake from Clark Wardner Road, and East Branch Saint Regis from Trim Road.

Several rivers and water bodies in the DMC lack formal access sites. This may lead to unmanaged recreational impacts as user-developed paths form to access the pond or stream. When there are locations where the public accesses waterways on a regular and informal basis, it could show a demonstrated need for the development of formal fishing and waterway access site. In the DMC, Benz Pond, Mountain Pond, and Slush Pond are three locations that demonstrate characteristic. People are accessing Mountain Pond through one of the primitive tent sites and at two other locations. At Benz Pond and Slush Pond there are visible impacts from the informal access.

A unique situation exists at the Osgood Pond fishing and waterway access site. This site provides public access to Osgood Pond and the Osgood River, but is also subject to deeded private rights for boat launching. This requires compliance with the APSLMP while ensuring that the private rights are respected.

Boat launch sites are facilities that managed for the launching of trailered boats. These are permitted on water bodies and lake chains larger than 1,000 acres where the DEC identifies a need. Under the APSLMP guidelines, boat launch sites, due to their developed character, fall within the Intensive Use classification. Boat launch sites adjacent to this unit include Meacham Lake and Lake Kushaqua, each located within the boundaries of two classified intensive use areas. A new boat launch was opened in the Meacham Lake Campground in 2017.

Proposed Management

Objectives

- To conform to APSLMP guidelines regarding Fishing and Waterway Access Sites
- To promote hand launch access
- To reduce risk of introduction of aquatic invasive species

Desired Conditions for Fishing and Water Access Sites

These sites should be stable, erosion free areas that exhibit minimal wear over time and are free of invasive species, human waste and litter. The tread should remain well developed with minimal expansion. This should also blend well with the natural surroundings to enhance user experience. Like other facilities, the variables for hand carry launches will include monitoring efforts to look for the presence of eroded areas, trash and human waste. Photo points will be a useful tool to help illustrate potential

changes over time.

Action Steps

- Desired conditions for a fishing and water access sites will be one that is free of erosion, occurrences of invasive species, human waste and litter; has minimal expansion from the designed footprint of the built facility and provides an enjoyable user experience.
- Develop a formal fishing and waterway access site at Benz Pond. Construct a four-vehicle parking area off Blue Mountain Road at the existing pull-off and path to pond. Harden an access path and build a boardwalk to the pond. The access path and boardwalk are needed to mitigate the impacts to wetlands from the current informal access. The parking will be more than 150 feet from the pond. Motors are already prohibited on Benz Pond, because it is located in a Primitive Area. Construction is likely to involve jurisdictional wetlands and may be require Article 24 permits.
- Define and harden the fishing and waterway access site on Deer River Flow at Cold Brook Road. Construct launch area to conform with ADA standards. Construction is likely to impact jurisdictional wetlands and may require additional permits. Devise and implement measures to prevent motor vehicle access beyond the established parking area boundaries; coordinate with NYSDOT, as necessary
- Develop a canoe launch to provide access to Deer River from Coal Hill Road. Construct a four-vehicle parking area. Construct an access path from the parking area. The access path will follow Coal Hill Road for about 600 feet and it will require building about 200 feet of new trail to the river. Since this access is in a primitive area, motorboats are prohibited. Construction is likely to impact jurisdictional wetlands and may require Article 24 permits.
- Provide public access to Madawaska Flow from the parking area. Mark a canoe carry trail which travels south and west through State lands to the water's edge on the eastern shoreline of Madawaska Pond. The carry will be about 0.4 miles long. Motorboats are not allowed on Madawaska Pond, or any other waterbody in the primitive area.
- Define and harden the existing informal fishing and waterway access site at Slush Pond. Install barriers to preclude motor vehicle and trailered boat access from the road shoulder to the water's edge. Leave a gap in the barrier to allow the dragging of canoes and small boats to the water's edge. Construct a boardwalk to the water's edge to mitigate the impacts that current access is causing to the nearby soils and vegetation. Slush Pond covers about 19 acres and is roughly 1,100 feet long by 800 feet wide. Given the size of the pond, gas

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motor will be prohibited, by regulation. Construction is likely to impact jurisdictional wetlands and may be require Article 24 permits.

- Develop a formal fishing and waterway access site providing access to Mountain Pond. Close campsite #1. Define and construct a four-vehicle ADA accessible parking area at that location. Designate and harden an ADA-accessible access path to the water's edge. Perform soil stabilization work as necessary at the launching point.
- The access to Rainbow Narrows off the Mud Pond Road will be improved and will be better delineated.
- The access to Hope Pone off the New York Central Road will be improved and will be better delineated to control erosion and reduce the impacted area.
- Develop canoe carry access to the East Branch Saint Regis River from Red Tavern Road. The trail will follow an old logging road. The access will be via a site of a hunting club prior to State ownership.
- Develop canoe access to the Osgood River from a new parking area off State Route 30 north of the Hays Brook Trailhead.
- Develop a canoe carry to the Osgood River from the Hays Brook Trailhead. The carry trail will be about 0.5 miles long.
- Improve existing fishing and waterway access sites so that they meet the desired conditions of being a quality recreation facility.
- Install a barrier at fishing and waterway access sites so that users can approach the water's edge with small watercraft transported on car tops or small trailers but will prevent total submersion of trailers for the purpose of launching watercraft. The barrier must not hinder access to persons with disabilities. Site specific design may be required to ensure the functionality of the barrier. The barrier may be installed at fishing and waterway access sites where trailed launching of boats is an issue, including these locations:
 - Barnum Pond
 - Deer River Flow
 - Jones Pond
 - Rainbow Narrows
 - Santa Clara Flow
- The fishing and waterway access site at Santa Clara Flow will be brought into compliance with the APSLMP by removing the boat ramp.
- Design and construct a barrier for the Osgood Pond fishing and waterway access site. The barrier will restrict public trailered boat access to comply with the guidelines of the APSLMP while still ensuring that the deeded rights of specified private landowners are preserved.

G. Trail Usage

Cross-Country Ski Use

The DMC is a very popular destination for cross-country skiing. The area usually receives significant snowfall and there are many old roads which are conducive for cross-country skiing. The trails and roads in the area near Mountain Pond are believed to receive the most winter use in this Unit.

The UMP proposes additions to the trail networks which should improve the cross-country ski experience in this Unit.

Desired Conditions for Cross-Country Ski Trails:

Desirable conditions are typically easily achievable for cross-country ski trails, if the weather cooperates. With adequate snowpack, conditions rarely become deteriorated, which shifts the typical tread concerns like erosion to other concerns like corridor expanding through a loss of vegetation. Desirable cross-country ski trails maintain safe lines of sight and corridors that are free from vegetative obstructions. The monitoring program will assess, in the non-winter months, corridor expansion through vegetation loss, and erosion. Photo points will be developed along routes to continually monitor impacts and to ensure corridor expansion through vegetation loss is not occurring.

Equestrian Use

There are 14.2 miles of horse-riding routes in the DMC. Most of this mileage, about 9.9 miles, is located on administrative roads. Equestrian use in this Unit has a history of being a popular recreational pursuit, but current use levels are low, especially when compared to other recreational activities in the DMC. The Sheep Meadow Administrative Road is the most popular destination for equestrian use in this Unit. To facilitate equestrian use there is a horse barn and two lean-tos located at the Sheep Meadow.

Given the low equestrian use levels in the area, this UMP proposes only minor additions to equestrian riding opportunities. These additions are two trails, totaling 2.8 miles. These trails will connect the Sheep Meadow, Hays Brook, and the Grass Pond trails to create loop riding options.

Desired Conditions for Equestrian Facilities

There are several trails proposed to be open to equestrian use. Properly designed and constructed equestrian trails will maintain their firm and stable surface for their intended

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

Hiking Use

With a mix of trails to mountain summits and woods roads, the DMC offers a variety of hiking opportunities. Most of the trail mileage in this Unit is on former woods roads. The three trails to mountain summits are each associated with a fire tower. The most popular hiking trail in the DMC is Azure Mountain.

The UMP proposes to address the impacts to the current trails, add new trails that will go to summit views, and create connections to form long-distance trail opportunities.

Desired Conditions for Hiking Trails

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

Bicycle Use

Bicycling, including mountain biking, is a popular recreational activity in the Adirondacks. There are a diverse range of experiences that bikers are seeking. Some prefer single-track trails, while others like to ride on old woods roads, and some enjoy a combination of the two. The bicycles people ride may be specialized to perform better on a particular type of trail. In the DMC the routes open to mountain biking do not currently reflect the diversity of mountain biking interests. Of the 32.2 miles of roads and trails open to bicycles, 27.3 miles are on public roads, administrative roads, former woods roads, or former railroad beds (now administrative roads). None of the trails were purposely built to accommodate mountain bikes.

This UMP proposes significant additions to bicycle riding opportunities, including purpose-built trails. All new singletrack trails will follow the *Siting, Construction and Maintenance of Singletrack Bicycle Trails on Forest Preserve Lands in the Adirondack and Catskill Parks Management Guidance* (APA & DEC, 2018). There will be 34 new trails or trail segments built for bicycles. These trails total about 39.9 miles long. These new trails will create loop-trail options from some current trails, establish new trail systems, and create more diverse trail riding options.

Desired Conditions for Bicycle Trails

There are several proposed trails that will either be open to or purpose built for mountain biking. Properly designed and constructed bicycle trails will maintain their firm and stable surface for their intended use, with minimal maintenance. A sustainable trail ensures environmental protection, user safety, function and enjoyment. Building a well-designed, sustainable trail that blends well with its natural surroundings enhances the user's experience and decreases user conflict. Like other facilities, the indicators for mountain bike trails will include data on the presence of eroded areas, the expansion of the tread through vegetation loss, trash and human waste, and illegal operation off designated trails. Photo points will be a useful tool to help illustrate potential changes over time.

Snowmobile Use

There are 26.4 miles of snowmobile routes in the Debar Mountain Wild Forest, 14.4 miles on administrative roads, 7.7 miles on Class 2 (community connector) trails, and 4.3 miles on Class 1 trails. Most of the snowmobile use occurs on the community connectors and administrative roads which are old railroad beds. These form community connections that are vital to the functionality of the larger snowmobile network.

In addition to the snowmobiling in the DMWF, there are 2.3 miles of snowmobile routes on private rights-of-way that pass through the Madawaska Pond – Quebec Brook Primitive Area. These routes are a required component for the connectivity of the larger snowmobile network, including a connection between Franklin and St. Lawrence Counties.

The UMP proposes a modest, but important addition to the snowmobile trail system. There will be 2.9 miles of new snowmobile trail added. This includes 0.2 miles on Class 1 snowmobile trail and 2.7 miles of Class 2 (community connector) trail. The new Class 2 (community connector) trail will improve safety for snowmobilers, because the current connection includes riding on Franklin County Route 26. The trail will travel from the

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adjacent Kushaqua Conservation Easement to the Meacham Lake Snowmobile trail and will be part of the connection between Saranac Lake and Parishville.

The UMP also proposes to close the Hays Brook trail system to snowmobile use. This will include closing the Hays Brook Administrative Road, Sheep Meadow Administrative Road, the Kettle Trail, and the Grass Pond Trail to snowmobile use. These trails receive very little use by snowmobiles, in part because they are a single, isolated, 9.3-mile system that does not connect to other riding opportunities. These trails will remain open for nonmotorized public recreation. Closing these will reduce snowmobile mileage in the DMWF by 9.3 miles, 4.4 miles on trails and 4.9 miles on administrative roads.

Desired Conditions for Snowmobile Trails

Snowmobile trails have the benefit of snow cover to reduce some impacts on trails. With adequate snow typical tread concerns, like erosion, are mitigated. However, snowmobile use could result in significant impacts, such as noise and engine exhaust, to the wildland character, such as noise and engine exhaust, well away from the trail. Desirable snowmobile trails exhibit safe lines of site and corridors that are free from vegetative obstructions. Corridors free from obstruction not only provide for safe user conditions, but also increase user enjoyment. Although snowmobiling occurs on snowpack and does not typically impact the frozen soil below, it is important to monitor these trails like many other facilities. Photo points will be developed along routes to continually monitor impacts and to ensure that erosion, corridor expansion through vegetation loss, impacts to areas off the corridor, and illegal operation off trails are not occurring.

Proposed Management

Objectives

- To provide diverse, sustainable, recreational trail experiences including:
- Trails of varying distances - short day trips to multi-day circuits and traverses.
- Trails that will support varying uses - foot trails, ski trails, bicycle trails, snowmobile trails and hardened accessible trails.
- Trails that lead to diverse destinations - scenic primitive campsites and lean-tos, backcountry ponds and lakes, open rocky summits, and surrounding community centers.

Action Steps

- Desired trail conditions are ones that have minimal expansion from the designed footprint of the built facility, do not negatively impact trailside vegetation, exhibit

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minimal erosion, are free of occurrences of human waste and litter, absence of illegal operation off trails, and provide an enjoyable user experience.

- Designate, sign, and mark a canoe carry from the existing Madawaska Flow parking area through State owned land to the eastern shoreline of Madawaska Pond.
- Create a foot trail to the Deer River from the proposed parking area near the intersection of Coal Hill Road and Red Tavern Road.
- Build a sustainable hiking trail to Baldface Mountain from Franklin Country Route 26 and the Debar Lodge Day Use Area.
- Rehabilitate existing water-bars, culverts, and bridges on trails. Install new drainage control structures as need dictates.
- Trails that are expected to be used mainly by bicycles will be built to standards associated with singletrack trails. Trails that see significant hiking use and those trails intended for beginner bikers will be built wider.

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Summary of facilities used as trails

Name	One-way Distance (miles)	Trail Classification*
Azure Mountain	.9	V
D & H Rail Bed	4.1	AR
Debar Meadows to Meacham Lake Campground	7.2	IV /SM-2
Debar Mountain	2.4	IV
Debar Pond Trail	0.3	AR
Deer River Canoe Carry	0.3	IV
East Branch Canoe Carry	0.2	IV
Four Mile Rd. Canoe Carry	0.2	IV
Grass Pond Trail	1.4	VII / SM-1
Hays Brook Horse Trail	0.7	VII
Hays Brook Administrative Road	2.7	AR
Indian Rock Canoe Carry	0.7	IV
Kettle Trail	3.0	VII / SM-1
Kushaqua Rail Bed	1.3	AR
Loon Lake Mountain	1.1	IV
Rainbow Lake Canoe Carry	0.3	IV
Sheep Meadow Administrative Road	2.2	AR
Skiff Pond Loop	2.4	IV
TOTAL MILEAGE	31.4	

Classes: AR= administrative road, IV= secondary trail, V= primary trail, VII= horse trail, SM-1= secondary snowmobile trail, SM-1= community connector snowmobile trail.

Current Use Icon Legend



Hiking



Snowmobiling



X-country Skiing



Bicycling



Snowshoeing



With Accessible Features



Equestrian

Existing Facilities Used as Trails

Azure Mountain Trail

Length: 0.9 miles

Class: V

Recommended Uses:

Prohibited Uses:



This trail climbs 944 feet in elevation to the summit of Azure Mountain. The summit provides views of the mountains, forests and waters to the south. This trail does not meet standards for a sustainable trail. The trail is eroded, braided, and has an overall grade of about 20 percent.

Action: Reroute the trail and incorporate proper trail design into the new route. This will result in nearly doubling the length of the trail.

D&H Rail Bed

Length: 4.1 miles

Class: AR

Recommended Uses:

Prohibited Uses:



A level path between Bloomingdale-Gabriels Road (County Route 55) and Oregon Plains Road. The trail passes over or beside wetlands, brooks and ponds while passing through a variety of boreal habitats. The trail is popular with birders, casual bikers, dog walkers, and others who want an easy walk in the woods. This trail is a portion of Snowmobile Corridor Route C-7B.

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Debar Meadows to Meacham Lake Trail

Length: 7.2 miles

Class: IV / SM-2

Recommended Uses:



Prohibited Uses:



This trail runs between the western trailhead in the Meacham Lake Campground and the eastern trailhead on the Debar Meadows Road near the old Debar Game Management Farm. The trail ascends only 200 feet in elevation from the campground trailhead to the highest point near the center of the trail, then descends 170 feet to a point a short distance before the eastern trailhead, then ascends 70 feet to the trailhead. The Debar Mountain Trail shares the first 1.1 miles of this trail. Hikers using the western trailhead are required to pay a day-use fee when the campground is open. This trail is a portion of Snowmobile Corridor Route C-8.

Debar Mountain Trail

Length: 2.4 miles

Class: IV

Recommended Uses:



Prohibited Uses:



The trail ascends 1,725 feet in elevation from the trailhead within Meacham Lake Campground to the summit of the mountain. The trail ascends only 170 feet in the first 1.9 miles and ascends 755 feet in the next 1.3 miles. The last portion of the trail is steep, climbing 800 feet in the 0.5 mile to the summit, which equates to an average grade of 30 percent. A lean-to is located along the trail just before the last steep section to the summit. Views at the top are limited by the trees growing on the summit but include the High Peaks to the south. When the campground is open, hikers are required to pay a day-use fee. There are erosion problems along the steep section of the trail that will need to be addressed. This section of trail may be rerouted.

Debar Pond Trail

Length: 0.3 miles

Class: AR

Recommended Uses:

Prohibited Uses:



This trail follows the road to Debar Pond Lodge. A parking area is provided where the road is gated to prevent public motor vehicle access. The trail used to cross a wetland and the pond outlet prior to the State assuming responsibility for the lodge. That portion of the trail has been abandoned.

Deer River Canoe Carry

Length: 0.3 miles

Class: IV

Recommended Uses:

Prohibited Uses:



This trail follows an abandoned town road to Deer River from Red Tavern Road. The trail starts on conservation easement lands before entering the Deer River Primitive Area. Maintained for the purpose of river access, the trail ends at a bridge over the Deer River, however the abandoned town road continues to the north.

East Branch Canoe Carry

Length: 0.2 miles

Class: IV

Recommended Uses:

Prohibited Uses:



This trail provides access the East Branch Saint Regis River. The road access to the parking area is over the Vanderwalker Road, a conservation easement road off State Route 458.

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Four Mile Road Canoe Carry

Length: 0.2 miles

Class: IV

Recommended Uses:



Prohibited Uses:



This trail is used to reach on oxbow of the Saint Regis River. The trail starts just past a parking area and gate at the end of the Four Mile Road.

Grass Pond Trail

Length: 1.4 miles

Class: VII /SM-1

Recommended Uses:



Prohibited Uses:

Runs from the Hays Brook Trail to the shores of Grass Pond. The trail leaves the Hays Brook Trail 0.5 mile from the trailhead. The trail has two sections of descent followed by an ascent along the way; the second includes an ascent of approximately 100 feet. A lean-to is located near the end of the trail with a view of the pond.

Action: The use of snowmobiles will be prohibited on this trail.

Hays Brook Horse Trail

Length: 0.7 mile

Class: VII

Recommended Uses:



Prohibited Uses:



Leaves the Hays Brook Trail 0.9 mile from the trailhead and runs to the Sheep Meadow Trail, providing for a 3.4-mile loop hike.

Hays Brook Truck Trail

Length: 2.7 miles

Class: AR

Recommended Uses:

Prohibited Uses:



This roadway was built by the Civilian Conservation Corps. While the difference in elevation between the trailhead and the trail's end is less than 10 feet, there is one ascent of 100 feet and two descents of 35 feet on the way to the brook that will be ascents on the way out.

Action: The use of snowmobiles will be prohibited on this trail

Indian Rock Canoe Carry

Length: 0.6 miles

Class: IV

Recommended Uses:

Prohibited Uses:



This trail is on a former logging road. It is used to access the Saint Regis River.

Kettle Trail

Length: 3.0 mile

Class: VII / SM-1

Recommended Uses:

Prohibited Uses:



The Kettle Trail leaves Slush Pond Road approximately 1.0 mile from State Route 30 and extends 3.2 miles to McCollum Road. The trail climbs and descends along gentle slopes.

Action: The use of snowmobiles will be prohibited on this trail.

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Kushaquua Rail Trail

Length: 1.3 miles

Class: AR

Recommended Uses:

Prohibited Uses:



Runs between Buck Pond Campground and Kushaquua-Mud Pond Road. The rail bed is a continuation of the D&H rail bed. It is located along the shore of Lake Kushaquua and provides views of the lake, Loon Lake Mountain and the privately-owned fire tower on Meenhaga Mountain. The trail is popular with walkers, hikers, and bikers, especially among those camping at the campground. This trail is a portion of Snowmobile Corridor Route C-7B.

Loon Lake Mountain Trail

Length: 1.1 miles

Class: IV

Recommended Uses:

Prohibited Uses:



The trail ascends 1,600 feet from the trailhead to the summit of the mountain and the fire tower. The trail starts on conservation easement lands. There are significant problems with the construction and layout of the upper portion of this trail.

Action: Reroute the upper portion of this trail.

Rainbow Lake Canoe Carry

Length: 0.3 miles

Class: IV

Recommended Uses:

Prohibited Uses:



This trail runs from Clark Wardner Road to Rainbow Lake. The trail is used as direct access to the lake from the parking lot and it is also part of the canoe carry that runs between Rainbow Lake and Jones Pond.

Sheep Meadow Trail

Length: 2.2 miles

Class: AR

Recommended Uses:

Prohibited Uses:



This trail leaves the Hays Brook Trail 1.4 miles from the trailhead and runs to a former sheep meadow. While there is only a 15-foot increase in elevation from the start of the trail to its end, the trail does have some ascents and descents including a 35-foot descent to Hays Brook followed by a 40-foot ascent. The trail ascends 40 feet in 0.4 mile and then descends 20 feet in the last 0.2 mile of the trail.

Action: The use of snowmobiles will be prohibited on this trail

Skiff Pond Trail

Length: 2.4 miles

Class: IV

Recommended Uses:

Prohibited Uses:



This trail runs from the eastern end of the Debar Meadows to Meacham Lake Trail and reconnects with this trail approximately 2.3 miles west of the trailhead. The trail descends and ascends three times, all less than 100 feet in elevation, before descending to the Debar Trail. The trail passes Skiff Pond and a primitive tent site along its shore.

New Trails

Buck Pond-Lake Kushaqua Trail System

Recommended Uses:

Prohibited Uses:



- Potential for 5 miles of new trails
 - Approximately 3 miles of trails for skiing, hiking, and bicycling.

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- A 0.5-mile hiking trail to Little Haystack Mountain.
- Improve the condition of the Kushaqua Rail Trail to provide a 1.3-mile long ADA accessible trail along Lake Kushaqua.

Debar Pond Trail System

Recommended Uses:



Prohibited Uses:



- Potential for 9-mile trail system.
 - Approximately 7 miles of trails for skiing, hiking, and mountain biking.
 - A 3-mile-long loop trail around Debar Pond.
 - A 2-mile-long Hiking Trail to Baldface Mountain.
 - A 2.5-mile hiking trail to Debar Mountain.

Duck Pond Trail

Recommended Uses:



Prohibited Uses:



- Build about 5 miles of loop trails on old logging roads.

East Branch Access Trail

Recommended Uses:



Prohibited Uses:



- Open 0.3-mile-long trail from Red Tavern Road to East Branch Saint Regis River.

Grass Pond Trail (Town of Santa Clara)

Recommended Uses:



Prohibited Uses:



- Build 0.8 miles trail from Benz Pond Road to Grass Pond, where a primitive tent site is proposed to be built.

Hays Brook Trail System

Recommended Uses:



Prohibited Uses:



- Build 3 miles of new trails that will connect dead-end trails to create loop trails.

Kate Mountain Trail System

Recommended Uses:



Prohibited Uses:



- Build up to 9-mile trail system accessing the summits of Kate Mountain and nearby unnamed peak (“Peak 758” on USGS Topo quad) Work cooperatively with the Town of Franklin, interested volunteers, and other partner organizations to develop trailhead and parking facilities along Sink Hole Road and Tyler Road and Kate Mountain Park.
 - Approximately 6 miles of trails for skiing, hiking, and mountain biking.
 - Hiking only trails will go to the summit of Kate Mountain.

Kettle Trail Extensions

Recommended Uses:



Prohibited Uses:



- Build a new 1.3-mile-long trail to create a loop from the current trail back to Slush Pond Road.
- Build a 0.3-mile-long spur trail to a scenic pond.

Long Pond Trail

Recommended Uses:



Prohibited Uses:



- Build about 2-mile-long loop trail.

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Meacham Lake Trail System

Recommended Uses:



Prohibited Uses:



- Build about 3 miles of loop trails for skiing, hiking, and mountain biking.

Osgood River Access

Recommended Uses:



Prohibited Uses:



- Build about 0.5-mile long trail to access the Osgood River from the Hays Brook Trailhead.

Quebec Brook Trail

Recommended Uses:



Prohibited Uses:



- Open the 2.5-mile-long abandoned railroad bed to public use.

Trail Connections

The following trail proposals will connect the trail systems in the DMC to provide potential for long-distance recreation and integrate local communities into the recreational opportunities.

Connector Trail from Paul Smiths College to Hays Brook Trail System

Recommended Uses:



Prohibited Uses:



- Build about 2 miles of new trail to connect existing trail systems.

**Connector Trail from Hays Brook Trail System to Kushaqua Tract
Conservation Easement Lands**

Recommended Uses:



Prohibited Uses:



- Build 4.5 miles of new trail to form a connecting route.
- In conjunction with the other proposed connectors, would provide 25-mile loop trail.

**Connector Trail from Hays Brook Trail System to Meacham Lake
Campground**

Recommended Uses:



Prohibited Uses:



- Build about 5 miles of new trail.

Connect Kushaqua Tract with Debar Meadows/Meacham Lake Trail

Recommended Uses:



Prohibited Uses:

- Provides connectivity from Meacham Lake Campground to Buck Pond Campground/Kushaqua area.
- Will improve a snowmobile connection for central Franklin County by providing an alternative to riding on County Route 26.

Connector Trail from Debar Meadows to Debar Pond

Recommended Uses:



Prohibited Uses:



- Build about 1.5 miles of new trail.

H. Rock and Ice Climbing

Existing Conditions

Cliffs at Azure Mountain are the most popular destination for climbers in the DMC. Generally, these locations receive less use than other climbing destinations in the Adirondacks. The Azure Mountain cliffs are reached by a herd path that branches off the Azure Mountain Trail. The condition of the path indicates that it does not receive a high level of use. There are a few other locations in the DMC that offer rock climbing opportunities, but the remoteness of these results in them being seldom climbed.

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. Fixed anchors have been used by climbers as a method of protection where use of traditional removable protection (camming devices, chocks and nuts) is not possible. The placement of bolts, or other fixed anchors, which involve drilling or defacement of the rock is a violation of Department regulations (6 NYCRR §190.8(g) -- "No person shall deface, remove, destroy, or otherwise injure in any manner whatsoever any . . . rock, fossil or mineral . . . excepting under permit from the Commissioner of Environmental Conservation and the Assistant Commissioner for State Museum and State Science Service . . ."). The APSLMP does not discuss the appropriateness of fixed anchors in the Adirondack Forest Preserve.

Recreational use of cliffs has the potential to negatively impact plants and animals or their habitat. The location of these species and habitat will require special management actions to avoid such impacts. In recent years a pair of peregrine falcons (*Falco peregrinus*) have nested on the cliffs of Azure. Thus far, rock climbing routes on Azure Mountain have not needed to be closed to protect the falcons during nesting, but future decisions will be made based on the latest information.

Proposed Management

Objectives

- to improve access to quality rock climbing opportunities
- to protect the cliff habitat and closely associated plant and animal species
- to avoid or minimize any potential resource damage due to use or overuse of the area

Desired Conditions for Climbing Sites

Climbing offers a slightly different set of indicators of desirable conditions. The access routes are like hiking trails in that they will maintain their firm and stable surface for their intended use, with minimal maintenance. A sustainable trail ensures environmental protection, user safety, function and enjoyment. The top and bottom of climbing routes are often located on steep slopes of various types that can be prone to erosion.

Desirable conditions for sites are a firm and stable area to prepare for an ascent, a face that accepts removable anchors, and a top that is either firm and stable or that cannot easily be topped-out or access for the use of slings. Somewhat like other facilities, the indicators for climbing will include data on access trails for the presence of eroded areas, the expansion of the tread through vegetation loss, and the occurrence of trash and human waste. Indicators to consider for the sites are firm and stable soils at the bottom and top of climbing routes, vegetation loss through both erosion and the use of slings to trees and the occurrence of fixed anchors. Photo points will be a useful tool to help illustrate potential changes over time

Action Steps

- Desired conditions at climbing sites are sites that have minimal impacts to the top and bottom of cliffs and access routes, are free of occurrences of human waste or litter, do not have any expansion of fixed anchors, and provide an enjoyable user experience.
- Stabilize soil at the top and base of climbing routes (using native materials) where erosion is identified as a problem
- Trails - Assess the condition of trails and paths used to reach climbing areas. Designate these trails as Class III primitive foot trails, sign, and monitor them. If needed harden or re-route sections of trail that is causing damage to natural resources.
- Fixed Bolts – As identified in other management plans, the Department will convene a focus group, including Department and Agency staff, members of the climbing community, environmental organizations and other interested parties to develop a park-wide policy on the management of fixed anchors on Forest Preserve lands.

I. Fire Towers

In response to the catastrophic Adirondack wildfires of the early 1900's, the Conservation Commission revised their approach to early detection and fire protection beginning around 1909. The original mountain-top Observation Stations were initially constructed of logs and more resembled elevated platforms than actual towers. Forest

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Fire Observers were hired by the Department or its predecessor agencies for the duration of the “fire season” and were required to reside at their duty station in the accommodations provided. The observer’s primary responsibilities included monitoring for and establishing the location of fires as well as communicating this information to firefighting crews and providing logistical communications support to firefighting operations. In addition, Fire Observation Station observers often provided members of the recreating public with information and conservation education, acting as ambassadors of the Department even though these functions were not considered part of their official duties. Increased technological development led in 1916 to the discontinuation of the log viewing platforms in favor of steel fire towers, which afforded a better vantage point and standardized interchangeable parts for ease of construction and maintenance.

Azure Mountain Fire Tower

According to the 1914 Annual Report of the New York State Conservation Commission, the original observation station on Azure Mountain was constructed during the summer of 1914. A fire observer was assigned to the station on October 1st of that year and was responsible for the reporting of the first wildfire from that location later that same fall. Installation of the Azure Mountain Observation Station was particularly important due to the location’s commanding view of several hundred thousand of acres of forests which had been heavily logged and were still covered with ubiquitous logging slash, which constituted a substantial potential fuel source in an area with extensive railroad development.



Azure Mountain Fire Tower

With the statewide installation of steel fire towers being the cornerstone of the Conservation Department’s new forest protection and fire management strategy, the summer of 1918 saw the initiation of efforts by the recently created Forest Ranger Force to install a standard steel tower on the summit of Azure Mountain. Pack animals were utilized to transport the sections of the 35-foot Aermotor galvanized steel tower the majority of the climb to the base of the cliffs on the southern side of the mountain. From the base of the cliffs, construction materials were then moved to the summit using block and tackle. Original telephone communications at

the Azure Mountain location were limited to the observer's residence which was located at the base of the mountain. This situation necessitated the observer running down the mountain to his cabin to report fires as they occurred. By the early 1930's the telephone line was run from the base of the mountain to the tower itself providing more efficient communications and thereby a quicker response time.

The Department staffed the Azure Mountain Fire Tower through the fall of 1978 when the expense of maintaining the tower and observer was eclipsed by less costly and more efficient fire management strategies which incorporated the use of light aircraft and technologically advanced radio communications. Following its 2001 designation as a National Historic Landmark, two groups emerged expressing an interest in the restoration of the tower for the potential aesthetic, cultural and historical benefits it offered the public. In September 2003, as a result of the joint cooperation of the Azure Mountain Friends, Adirondack Architectural Heritage, Student Conservation Association/AmeriCorps, and DEC, the restoration of the tower was completed and was subsequently opened to the public. The Azure Mountain Friends (AMF) group is currently engaged in a Volunteer Stewardship Agreement with DEC. Under the terms of this agreement, AMF conducts trail and fire tower maintenance, conducts a summit vegetation loss remediation program, and provides stewards who provide interpretive and educational services to members of the recreating public. The cooperative stewardship of this resource has been very successful to date and is hoped to continue into the future.

Loon Lake Mountain Fire Tower

Prior to the erection of a log tower and observer's cabin on the Loon Lake Mountain in 1911, the Loon Lake area, including the mountain itself, was besieged by fire on all sides during the summers of 1903, 1905 and 1906.

In 1917, Forest Ranger Albert Tebeau, a native of the nearby hamlet of Owl's Head, supervised the installation of the 35-foot Aermotor steel tower on the mountain's summit. Strong winds blew the tower over during the winter of 1927-28. Conservation Department Crews replaced the structure on its footings the following spring. The original observer's cabin, which had been located next to the tower since 1911, was replaced by a modern structure during the fire season of 1928. The new observer's cabin was located approximately two miles downslope from the tower and was accessed on foot by "bushwhacking" up the mountain. Development of a foot trail to the tower from the observer's parking area was completed by the Civilian Conservation Corps (CCC) during the summer of 1934. Staffing of the tower was continuous through the fall of 1970 when it was closed.

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Resurgence of interest in preserving and restoring fire observation towers began in the early 1990s and lasts through to the present day. The Loon Lake Fire Tower is situated on a parcel of Forest Preserve that is surrounded on three sides by privately owned timberlands, which include the access trail and former observer's cabin. This private ownership constituted a barrier to public access. The 2004 Conservation Easement agreement with International Paper Corporation, the fee title owner at that time, allowed the re-opening of the foot trail and sparked renewed interest in restoring the tower for public use.



Loon Lake Mountain Fire Tower

The combined efforts of several fire tower enthusiasts culminated in the March 2006 listing of the tower on the New York State Register of Historic Places, a critical first step in having the tower listed on the National Register of Historic Places. The formation stages of a “friends’ group,” looking to volunteer their time and resources to assist in rehabilitating the foot trail and restoring the tower to open it to public use, is currently ongoing. As with Azure Mountain, the cooperative long-term stewardship of this important natural and historical resource has the best chance for success through the implementation of a Volunteer Stewardship Agreement with interested volunteers.

There is some question as to the ownership of the former observer's cabin, which remains intact on the private lands that are now owned by the Lyme Forest.

Debar Mountain Fire Tower

A fire observer was stationed on the summit starting in 1912. A 35-foot tall Aermotor LS 40 fire tower was built in 1918, and it was staffed by a fire observer until 1970. This fire tower was removed in the late 1970's or early 1980's. There has been local interest in re-establishing a fire tower on Debar Mountain. This request was considered, but it cannot be acted upon, because doing so would violate Department policy for the management of mountain summits.

Proposed Management

Objective

- To maintain these historic fire tower structures and continue to provide the public safe access to them.

Action Steps

- The Department will continue to work closely with the Azure Mountain Friends volunteer group to repair and maintain the trail, tower, and summit on Azure Mountain as well as to engage in educating the public about the history of the fire tower.
- Preserve and restore the Loon Lake Mountain Fire Tower and reopen the structure to public use for educational and interpretive purposes. Should a friends group be formed, the Department is receptive to establishing a partnership agreement to facilitate preservation and management activities.

J. Access for People with Disabilities

Existing Conditions

The Federal Americans with Disabilities Act of 1990 (“ADA”) along with the Architectural Barriers Act of 1968 (ABA) and the Rehabilitation Act of 1973, has important implications for the management of all public lands, including the DMC. An explanation of the ADA and its influence on management actions is provided in Appendix A.

In 1997, The Department adopted policy CP-3, Motor Vehicle Access to State Lands under Jurisdiction of the Department of Environmental Conservation for People with Disabilities, which establishes guidelines for issuing temporary revocable permits allowing qualified people with disabilities to use motor vehicles to gain access to designated routes on certain state lands. There are no existing CP-3 routes in the DMC.

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 a 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.

Proposed Management

Objective

- To provide a diverse array of outdoor recreation opportunities for people with disabilities.
- Enhance existing facilities and create new facilities to provide high quality accessible opportunities for people with disabilities.
- Note: 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 DMC facilities with accessibility in mind, understanding that while technical feasibility, site constraints and the fundamental nature of access to remote sites may necessitate modifications from the ADA and ABA accessibility standards, the intent is to maximize the degree of accessibility for the widest range of abilities.
- Develop a priority list of DMC facilities for which to perform the UTAP analysis. UTAP information gathered will be made available at associated trailheads/parking areas, and online.
- Debar Pond Area:
 - Develop an accessible trail to a proposed accessible lean-to on the northeast shore of the pond. This trail will be about 0.3 miles long. This trail will be for non-motorized uses.
 - Improve the old carriage roads to accessible standards. These will be for non-motorized uses.
 - Provide accessible facilities and accessible routes at the Debar Lodge Day Use Area.
- D&H Rail Bed: upgrade the road where it leaves the Buck Pond Campground to accessible standards.
- Upgrade primitive tent sites throughout the DMC to accessible standards. A sufficient number of sites will be improved to comply with legal requirements.

K. Dams

Existing Conditions

Water stored behind a dam represents potential energy which can create a hazard to life and property located downstream of a dam. In order for a dam to safely fulfill its intended function, it must be constructed, operated and maintained properly. The risks associated with the storage of water must be minimized at all times. The height of a dam, its maximum impoundment capacity, the physical characteristics of the dam site and the location of downstream facilities should be assessed to determine the



Madawaska Dam

appropriate hazard classification. Owners of all dams in New York are required to: operate and maintain the dam and all appurtenant structures in a safe condition; and maintain in good order all available records regarding the dam and provide those records to any new owner. There are additional owners' responsibilities based on the hazards a dam may pose.

New York State rates dams using a downstream hazard classification system. The classification levels are listed in order of increasingly adverse consequences in the event of a dam failure. These classification levels build on each other, with the higher levels adding to the consequences of the lower levels. These downstream hazard classifications are defined in 6 NYCRR Subpart 673.5(b).

<https://www.dec.ny.gov/lands/4991.html>

(1) Class "A" or "Low Hazard" dam: A dam failure is unlikely to result in damage to anything more than isolated or unoccupied buildings, undeveloped lands, minor roads such as town or county roads; is unlikely to result in the interruption of important utilities, including water supply, sewage treatment, fuel, power, cable or telephone infrastructure; and/or is otherwise unlikely to pose the threat of personal injury, substantial economic loss or substantial environmental damage.

(2) Class "B" or "Intermediate Hazard" dam: A dam failure may result in damage to isolated homes, main highways, and minor railroads; may result in the interruption of important utilities, including water supply, sewage treatment, fuel, power, cable or telephone infrastructure; and/or is otherwise likely to pose the threat of personal injury and/or substantial economic loss or substantial environmental damage. Loss of human life is not expected.

III. Recreational Resources and Human Uses

(3) Class "C" or "High Hazard" dam: A dam failure may result in widespread or serious damage to home(s); damage to main highways, industrial or commercial buildings, railroads, and/or important utilities, including water supply, sewage treatment, fuel, power, cable or telephone infrastructure; or substantial environmental damage; such that the loss of human life or widespread substantial economic loss is likely.

A fourth classification is provided in 6 NYCRR Subpart 673.5(b) to track the files of structures that were never built or are no longer dams:

(4) Class "D" or "Negligible or No Hazard" dam: A dam that has been breached or removed, or has failed or otherwise no longer materially impounds waters, or a dam that was planned but never constructed. Class "D" dams are considered to be defunct dams posing negligible or no hazard. The department may retain pertinent records regarding such dams.

Six dams are owned by DEC within the DMC. These are at Debar Pond, the Deer River Flow, East Branch Saint Regis River, Madawaska Pond, Santa Clara Flow, and Skiff Pond. The Deer River Flow Dam and the Meacham Dam on the East Branch St. Regis River are of masonry construction and do not need major repair work. condition. The Skiff Pond and Debar Pond dams are minor structures. Dams owned by DEC on Forest Preserve lands in this Unit are periodically inspected by Dam Safety staff from the Division of Water's Bureau of Flood Protection.

Debar Pond Dam (Class A)

This grass-covered, earthen dam is about 175 feet long and four feet high. There is some evidence of erosion of the dam's surface. It is drained by culverts with risers serving as the spillway, with a total spillway width of about 14 feet. Parts of the risers are chipped away or are leaking. The dam impounds a maximum of 154 acre-feet of water, with a normal storage being 38 acre-feet. The maximum discharge is 200 cubic feet of water per second. The dam is used as a trail crossing.

Deer River Flow Dam (Class A)

This is a concrete and masonry dam. It has a length of 300 feet and a height of ten feet. The spillway on this dam is 33 feet long. The dam has a normal and maximum storage of 1,344 acre-feet of water. This dam was originally built in 1904 and underwent major rehabilitation work in 1998. This dam is owned by the DEC, but it is bordered by private lands.

Madawaska Dam (Class A)

This is a 125-foot long earthen dam with a log crib and 24-foot-long timber-planked spillway on the northern shore of Madawaska Pond. This dam impounds a maximum of

644 acre-feet of water and a normal storage of 368 acre-feet of water. It became the property of DEC following the acquisition of the surrounding lands during the 1999 Champion Land Acquisition. cursory evaluation of the Madawaska structure by DEC regional staff seems to indicate a gradual long-term structural failure that has left the dam in very poor condition. Due to the dam's presence on Forest Preserve lands classified as Primitive under the guidelines of the APSLMP, replacement of the structure following its failure would require DEC staff to provide sufficient justification for the reconstruction action to be approved by APA staff. Failure of the Madawaska Dam would result in an alteration in the navigability, aesthetics, and character of the surrounding area as well as the changes to the adjoining wetlands complex.

Meacham Dam (Class A)

This dam was built in 1929. It is 100 feet long and five feet high. The dam is made of concrete. The spillway is 100 feet long. The dam has a normal and maximum storage of 43,308 acre-feet. This dam is located just upriver from New York Route 30.

Santa Clara Flow Dam (Not Rated)

The Santa Clara Flow Dam partially impounds about 238 acres of the Main Branch of the St. Regis River near the hamlet of Santa Clara. The existing structure, along with the land on which it is situated, was acquired for the Forest Preserve in the 1999 Champion Land Acquisition. According to the accounts of local residents, the original dam at this location was a typical log cribbed "flush dam" with a timber planked spillway that was common during the historical period when timber products were transported to staging areas and markets using log drives at high water periods on Adirondack rivers. Despite these accounts, extensive research into the history of the dam has found no known written documentation or photographs detailing the date of its construction, type of construction or the person responsible for its construction.

The exact time when commercial timber products extraction began in the Santa Clara area is unknown, however, existing historical information indicates the St. Regis River was a public highway open to log driving as early as 1810 (*Chilson, 2006.*). With what information there is available, it seems logical to infer that any dam at the present location was constructed at or around 1844 when Louis Humphrey erected the first sawmill at "Humphrey's Landing" where the present-day hamlet of Santa Clara now stands. Use of the St. Regis River south of Santa Clara for log driving purposes was probably largely ended by 1886 when John Hurd's Northern Adirondack Railroad reached Brandon from Santa Clara. It seems unlikely that the dam, as it existed at that point, would be maintained by the Santa Clara Lumber Company, or its successors in title, due to the transportation boon that the railroad presented to the local timber products industry. The 1923 USGS topographic map of the Santa Clara area indicates

III. Recreational Resources and Human Uses

that a dam existed where the current dam is situated today. The Biological Survey of the St. Lawrence River Watershed (State of New York Conservation Department, 1931) noted that the dam at Santa Clara had been abandoned and removed prior to the survey, however, no specific date was published in that report. Recorded property deeds, filed when New York State acquired the land which encompassed the dam location in 1999, do not reference the structure nor do they specifically detail rights to maintain or rehabilitate such a structure.

Presently, large cobbles and boulders sit at the 72-foot river span where evidence shows the historic dam was located. Local residents' accounts indicate that those cobbles and boulders were placed as fill at the dam at some point on or around June 1966 when the Department of Transportation constructed State Route 458 to replace State Route 72. Given those accounts, any structure still intact which existed before that time would likely have been damaged, destroyed and/or obscured from view by the extensive rock fill. As a result of the progressive weakening in the cobble/boulder structure, accompanied by the loss of an upstream boom which, once gone, allowed river ice to contact the structure, a 25 to 30-foot breach in the current day structure occurred in 1990. Consequently, the upstream navigability of the Main Branch from Santa Clara was altered to its present condition.

Comments received during the public participation process in the development of this plan, along with input from county and municipal government officials, indicate a desire to return the impoundment to the water level conditions which existed before 1990 in hope of improving recreation access and use by persons using motorized boats. Current usage patterns on the impoundment center around public access using small, shallow-draft motorized boats and paddle craft. DEC staff observations and register box entries indicate that some larger motorized boats like "bass boats" do occasionally use the impoundment, however, use by watercraft of this type represents a small percentage of the overall public use.

New construction of a dam at the site of the Santa Clara Flow Dam, or the rehabilitation or reconstruction of any structure that currently exists at that location, would only be permitted following a costs versus benefits analysis and if such an action was deemed to be compliant with the APSLMP, the Wild, Scenic and Recreational Rivers Act, and all other applicable policy, laws, and regulations. When considering the planning and eventual implementation of an action that would raise the water level above that which currently exists, prime consideration would need to be given to concerns about the likely impacts on natural resources as well as the effect of such an action on private landowners whose property adjoins the existing impoundment.

Skiff Pond Dam (Class A)

This is 210-foot long and 20-foot high earthen dam was built in 1965. It impounds Hatch Brook. This dam has a maximum storage of 16 acre-feet and a normal storage of 15 acre-feet. The spillway is a drop into a culvert pipe. The spillway has a total width of 40 feet.

Proposed Management

Objective

- Address the maintenance, retention, rehabilitation and reconstruction of impoundment structures on Forest Preserve lands in a manner which affords a comprehensive analysis of the various environmental, economic and social impacts relative to those actions.

Action Steps

- Conduct inspections of dams in the planning unit on a regularly scheduled basis and ensure that management of these structures is compliant with the Department's Dam Safety Standards.
- Debar Pond Dam: This dam will be maintained and repaired as needed. This dam will be improved to allow a pedestrian trail to cross it.
- Deer River Flow Dam: This dam will be maintained and repaired as necessary.
- Meacham Lake Dam: This dam will be maintained and repaired as necessary.
- Skiff Pond Dam: This dam will be maintained and repaired until an evaluation can be conducted to compare the benefits, costs, and impacts for the removal versus the retention of this dam.
- Madawaska Dam: Analyze resource assessment information, policy and document guidance and public comments to choose and implement a preferred alternative from those listed below.
 - Alternative "A"- No actions. Allow the dam to deteriorate to the point of failure and allow the impoundment and stream to return to their natural state. Allowing this alternative to occur poses no danger to human life and would return Madawaska Flow and Quebec Brook to the "river-like" condition that existed prior to impoundment. Catastrophic failure of the dam would likely cause extensive damage to a gravel road stream crossing that currently exists immediately downstream of the spillway. The gravel road is a deeded right-of-way subject to the rights of at least two interests and repair or replacement of the stream crossing, if damaged, would likely occur. The failure of the dam would likely have a detrimental effect on downstream water quality through increased siltation and turbidity; increased, persistent bank erosion is also anticipated. Habitat

III. Recreational Resources and Human Uses

loss in wetland and riparian areas would likely be extensive with fish and small invertebrates being the most impacted species. The Madawaska Pond area supports the habitat for some rare and endangered species; habitat loss has the potential to affect food sources, breeding success and shelter requirements for these species. Visual and aesthetic impacts would also be likely and recreational use and navigability would be severely limited when compared to their current state. Simply doing nothing to address this issue without further expert evaluation of the situation is not an acceptable alternative because doing so would ignore the Department's core mission and administrative responsibility.

- Alternative "B"- Have the dam evaluated by certified engineers to determine whether the dam meets current safety standards, and if not, what deficiencies exist. In the event that the dam doesn't meet safety standards, the engineers report will specify what repairs or upgrades are necessary to bring the dam into compliance. Following the evaluation, the engineers report will be forwarded to staff in the Division of Water. Bureau of Program Services and Flood Protection. Using the information in the report, a cost-benefit analysis will be completed which will lead to determining a detailed, preferred alternative regarding action on the dam. Cost-benefit analysis will consider the positive and negative environmental, social and economic impacts of all presented alternatives. The preferred alternative may include, but not be limited to, the following:
 - Breaching of the dam and drawdown of the impoundment to allow for more thorough investigation and assessment of the dam.
 - Rehabilitation of the existing structure in order to upgrade it to current standards.
 - Modification of the existing structure in order to upgrade it to current standards.
 - Replacement "in kind" of the existing structure with a new dam that conforms to current safety standards.
 - Remove the existing structure and do not replace it, thereby returning the impounded area to its natural state.
 - Do nothing.
- Alternative "C" - Remove the dam to return the impoundment and stream to return to their natural state. A controlled removal should result in fewer impacts than a failure of the dam would likely cause. This would result in extensive changes to habitat types in wetland and riparian areas, with fish and small invertebrates being the most impacted species. The Madawaska Pond area supports the habitat for some rare and endangered species; habitat change has the potential to affect food sources, breeding success, and shelter requirements for these species. Visual and aesthetic impacts would also be likely and recreational use and

navigability would be severely limited when compared to their current state.

- Santa Clara Flow Dam: Have the dam evaluated by certified engineers. Following the evaluation, develop a report which summarizes the following information:
 - current condition of the structure and its conformance or non-conformance with modern standards of safety and construction as well as any appropriate legal or regulatory considerations.
 - what work would be necessary to reconstruct or rehabilitate the existing structure(s) to modern standards in order to return impoundment water levels to those documented in 1990 as well as an estimate of the expense of such work.
 - what work would be necessary to maintain what remains of the current structure to modern standards in order to maintain the impoundment that currently exists as well as an estimate of the expense of such work.
 - Develop, through joint consultation and the examination of available modeling information, an assessment of the potential positive and negative environmental, societal and economic impacts associated with the loss, retention or expansion of the current Santa Clara Flow Dam structure.
 - Address the final disposition of the Santa Clara Flow Dam. Analyze resource assessment information, policy and document guidance and public comments to choose and implement a preferred alternative from those listed below.
 - Alternative “A”- No action. Decide, based on the information obtained from the engineer report and consultation, to allow the existing structure to continue to degrade until such time as the river channel at that location returns to its original pre-impoundment condition. Doing so will return the impoundment area upstream into a natural free-flowing river.
 - Alternative “B” - Maintain the currently existing impoundment in its present state by stabilizing and maintaining what remains of the dam in its present state. Doing so will maintain existing recreation uses and habitat conditions. The viability of this alternative depends heavily on cost-benefit analysis generated using information provided by the engineering report and interdivisional consultation.
 - Alternative “C” - Rehabilitate and/or reconstruct existing dam structure(s) at the current location. Doing so will alter navigability and affect riparian habitats; the extent and impacts of the alteration will be identified during the interdivisional resource assessment consultation. The viability of this alternative depends heavily on

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cost-benefit analysis generated using information provided by the engineering report and interdivisional consultation.

- Alternative “D” – Remove the remaining portions of the dam that are impounding water to return the river to a more natural condition. Doing so will alter navigability and affect riparian habitats; the extent and impacts of the alteration will be identified during the interdivisional resource assessment consultation.

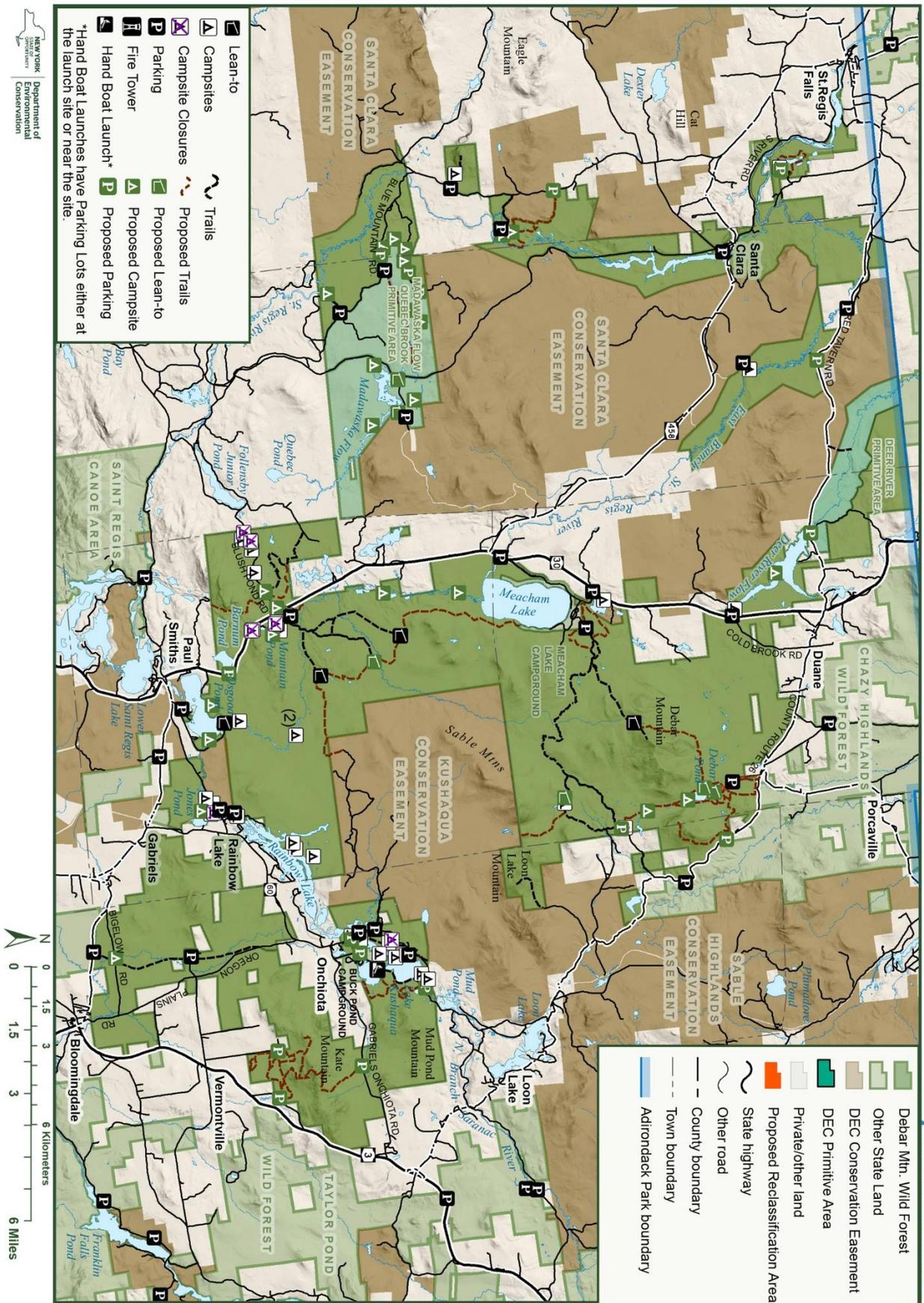
L. Reclassification Proposals

Some of the proposals in this UMP are based upon the premise that certain areas will be reclassified to intensive use. An intensive use designation is required to allow for the proposed development of a Day Use Area at the site of the Debar Lodge. Although classification or reclassification of forest preserve lands is an Adirondack Park Agency action, a brief description and rationale for the proposed reclassification follows:

Wild forest to intensive use (41 acres) - This proposal is for the creation an intensive use area to serve as: a hub for recreation access to adjacent lands, a connection to the history of the site, and a recreation destination for the community. The intent is to strike a balance by honoring the history of the site and retaining the natural character of the site while replacing the buildings with a picnic area which will incorporate elements of the main lodge. A draft UMP for this intensive use area can be found in Appendix H.

III. Recreational Resources and Human Uses

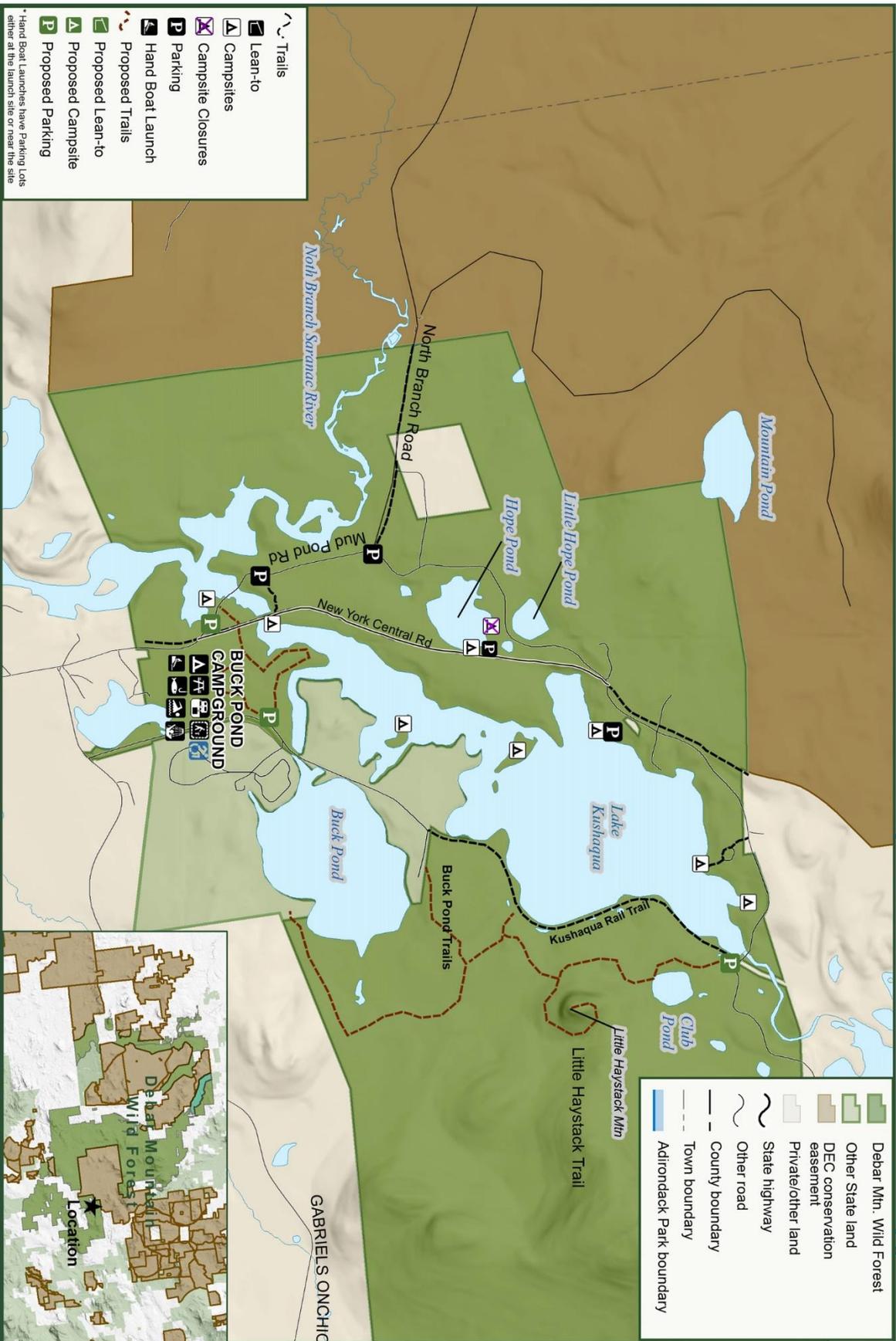
Debar Mountain Complex UMP



III. Recreational Resources and Human Uses

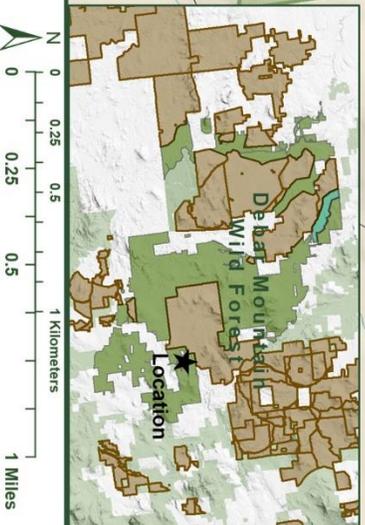
Debar Mountain Complex UMP

Proposed Facilities-Buck Pond Campground



- Trails
 - Lean-to
 - Campsites
 - Campsite Closures
 - Parking
 - Hand Boat Launch
 - Proposed Trails
 - Proposed Lean-to
 - Proposed Campsite
 - Proposed Parking
- * Hand Boat Launches have Parking Lots either at the launch site or near the site

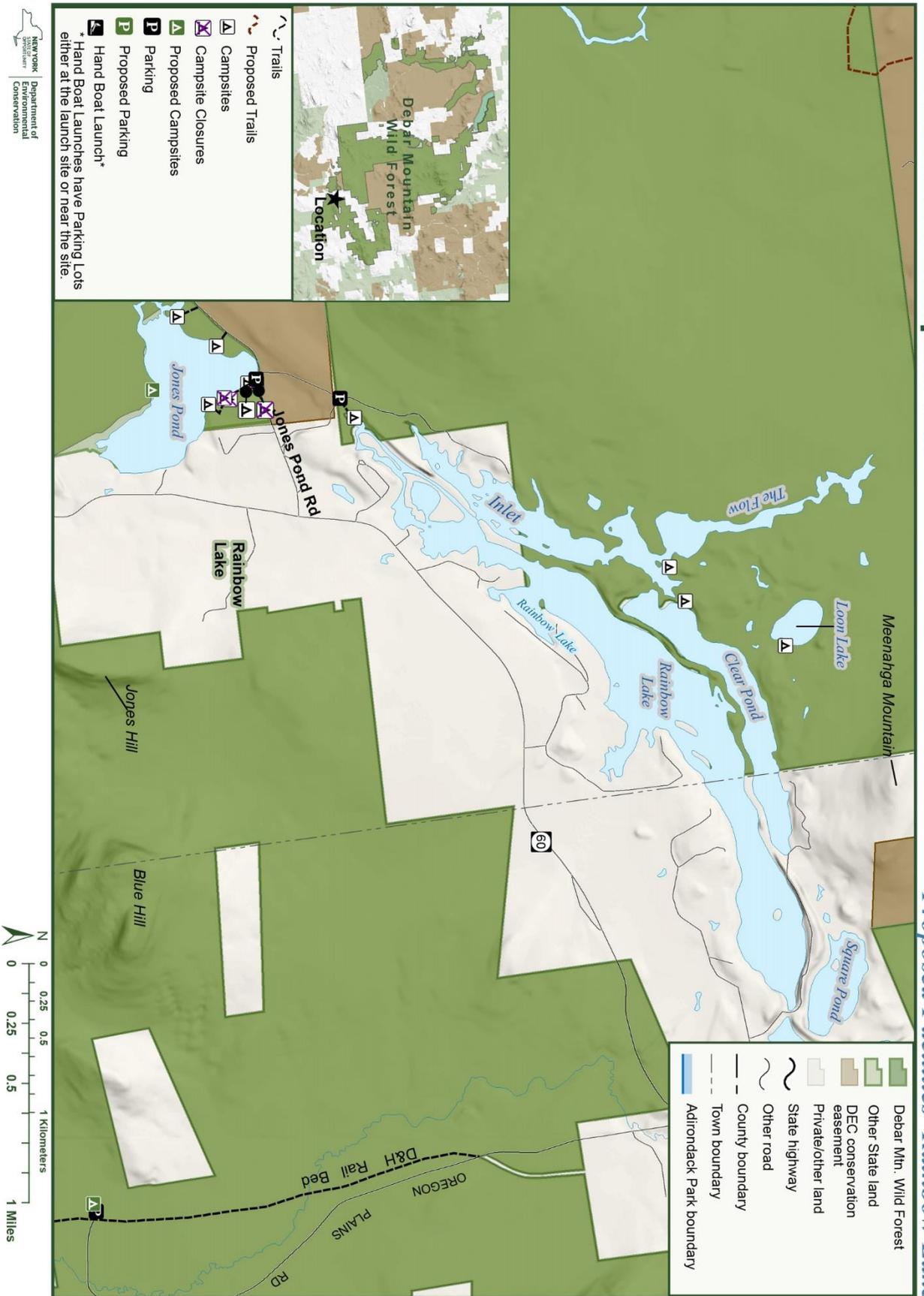
- Debar Mtn. Wild Forest
- Other State land
- DEC conservation easement
- Private/other land
- State highway
- Other road
- County boundary
- Town boundary
- Adirondack Park boundary



III. Recreational Resources and Human Uses

Debar Mountain Complex UMP

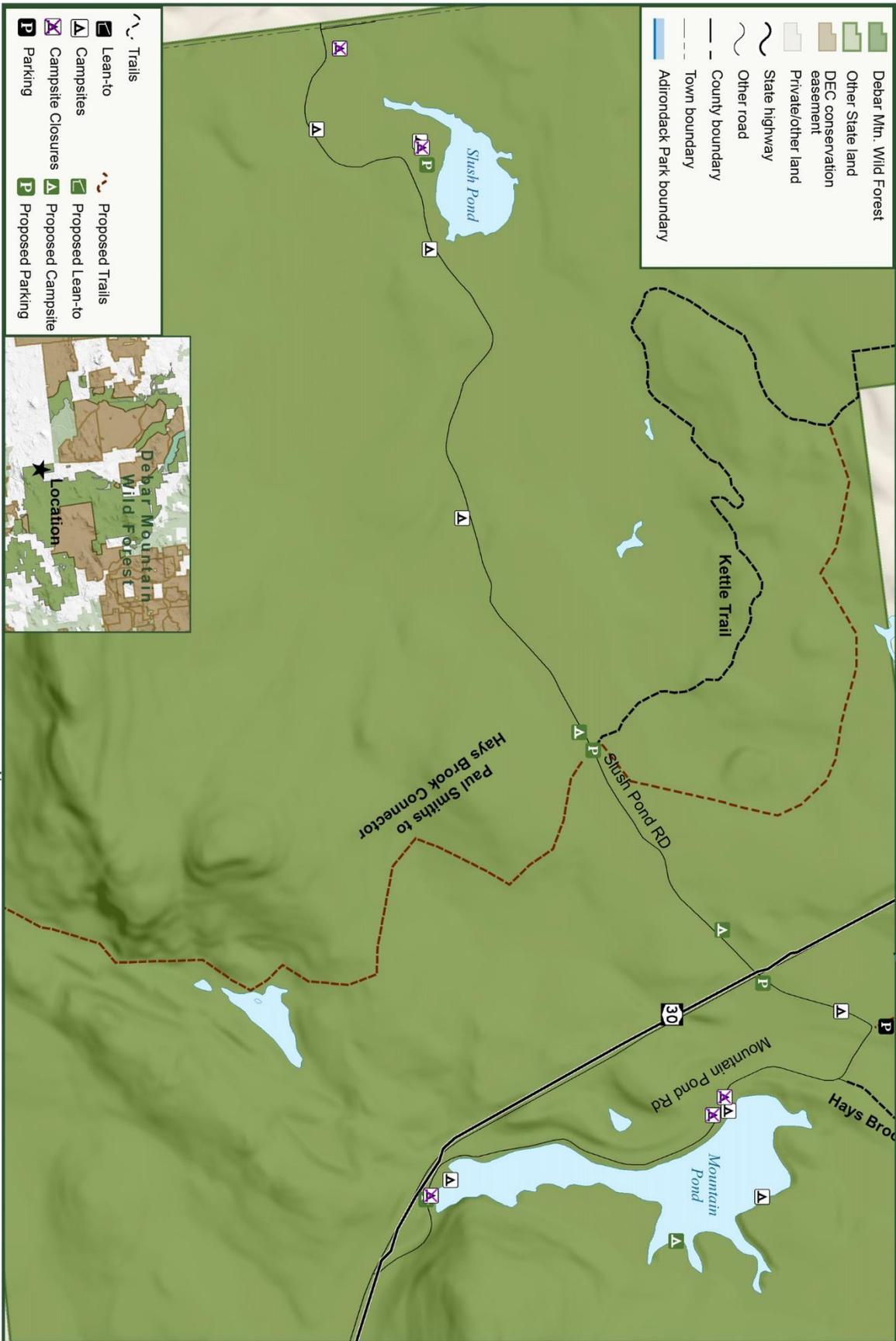
Proposed Facilities- Rainbow Lake



III. Recreational Resources and Human Uses

Debar Mountain Complex UMP

Proposed Facilities- Slush Pond Rd



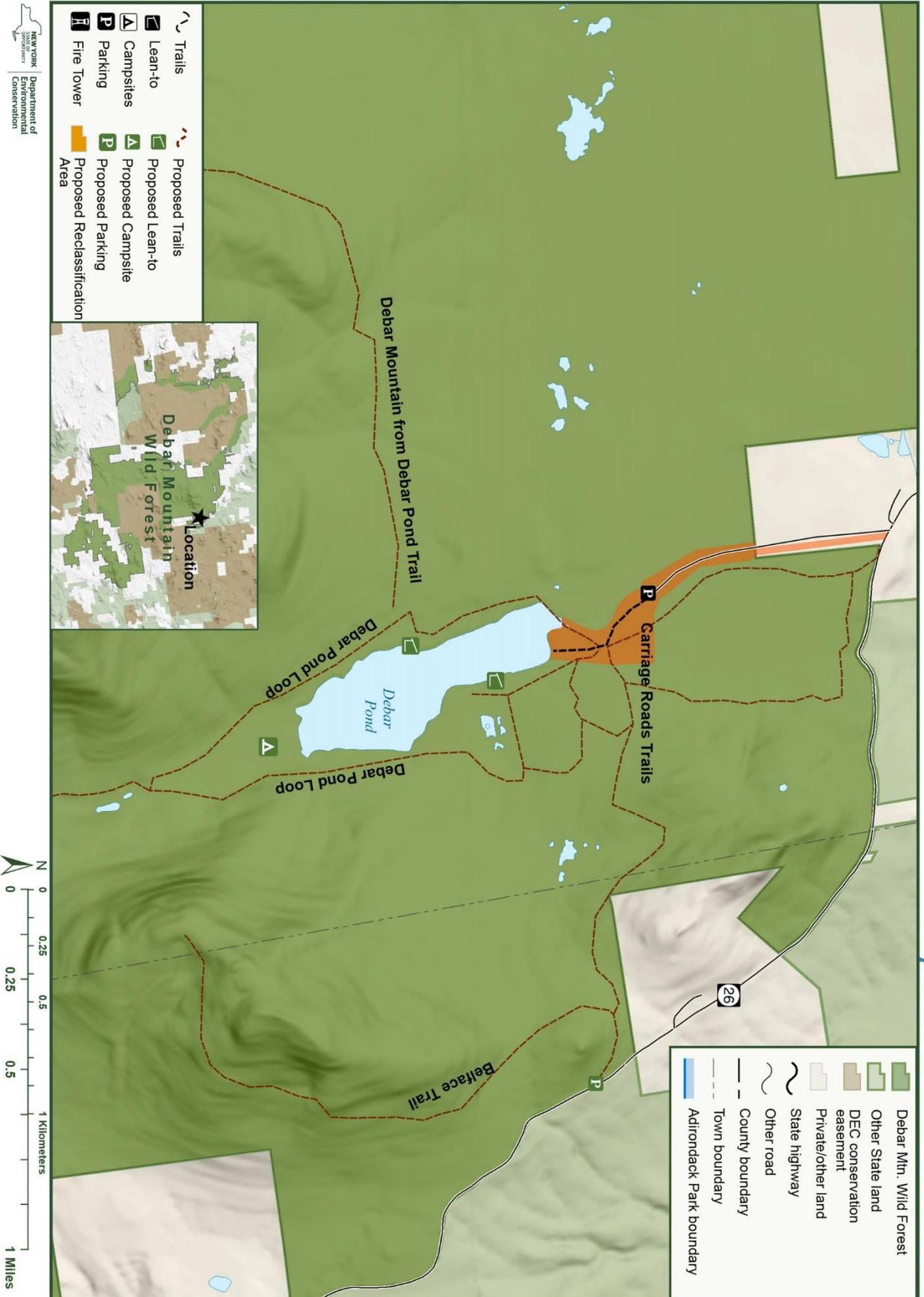
- Trails
- Lean-to
- Campsites
- Campsite Closures
- Parking
- Proposed Trails
- Proposed Lean-to
- Proposed Campsite
- Proposed Parking



III. Recreational Resources and Human Uses

Debar Mountain Complex UMP

Proposed Facilities- Debar Pond



IV. Phases of Implementation

The following five phases of implementation are listed in priority order; Phase One lists the projects/activities likely to be undertaken first (given adequate allocation of resources). However, not all projects/activities in Phase One need to be completed prior to completing something in one of the later phases. The use of phases will allow the Department to evaluate and ensure the physical, biological, and social carrying capacities are not being exceeded and ensure there is a public desire for additional facilities before they are constructed. If monitoring efforts show the limits of acceptable change are being exceeded then management adjustments will be made, and the next phases of the plan will not be considered until corrective measures are successfully completed. This could hold or bring the management back to a previous phase. 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.

Not listed in the phases are annual work activities. The need to maintain facilities and conduct monitoring are not dependent upon a phase. Resources should be allocated to these activities to ensure they are carried out properly. Failure to implement monitoring or to properly maintain facilities may be a reason to halt the progression of phases.

Phase 1

Parking

- Work with Division of Operations to designate parking for the southern end of the Kushaqua Rail Trail.
- Build parking at the proposed Debar Lodge Day Use Area.
- Improve winter parking for Hays Brook Trails.
- Improve the parking for Kettle Trail.

Camping

- Close the site on north shore of Hope Pond.
- Close the Jones Pond camping access road.
- Close Mountain Pond sites # 3 and 5.
- Build a water-accessed site at Mountain Pond.
- Close Slush Pond Road site #3 and 6.
- Build a primitive tent site along Osgood Pond.

IV. Phases of Implementation

Trails

- Reroute and improve the Azure Mountain Trail.
- Build trails near the Debar Lodge Day Use Area.
- Build Quebec Brook Trail.
- Build loop trail connecting with trails at Kate Mountain Park.
- Build trail from Tyler Road to an unnamed peak.
- Upgrade the Kushaqua Rail Trail to meet accessible trail standards.

Other

- Move the gate on the Coal Hill Road.
- Replace a bridge on the Debar Meadows to Meacham Lake trail.

Phase 2

Parking

- Redesign Hays Brook Complex parking area.
- Build parking at end of Tyler Road.
- Construct a parking area at Jones Pond.
- Create a parking area at Mountain Pond.

Camping

- Block vehicle access at Kushaqua north beach site.
- Block the access driveway at the White Fathers Church site.
- Close Jones Pond sites # 1, 3, and 4.
- Close Mountain Pond site #1.
- Build a new campsite along Slush Pond Road.
- Build a lean-to at Debar Pond.
- Build a tent sites in the Madawaska Flow Quebec Brook Primitive Area.
- Build a tent site at Benz Pond.
- Build a primitive tent site along Osgood Pond.

Trails

- Build a 0.5-mile hiking trail to Little Haystack Mountain.
- Build loop trail around Debar Pond.
- Build trail to Kate Mountain.
- Build trails near Meacham Lake Campground.

Other

- Define and harden the fishing and waterway access site on Deer River Flow.
- Provide access to Madawaska Pond.
- Develop a fishing and waterway access site at Mountain Pond.

Phase 3

Parking

- Provide parking at northern end of the Kushaqua Rail Trail.
- Establish a parking area the Buck Pond Access Road.
- Build a parking area at Rainbow.
- Build parking on Sinkhole Road.
- Construct a parking area at Debar Meadows.
- Build a parking area on Red Tavern Road.

Camping

- Build a water-accessed, primitive tent site at Jones Pond.
- Build a new tent site along Slush Pond Road.
- Build a lean-to at Debar Pond.
- Build 2 tent sites in the Madawaska Flow Quebec Brook Primitive Area.
- Build a primitive tent site along Benz Pond Road.
- Build a tent site along the Osgood River.
- Relocate the primitive tent site at Skiff Pond.

Trails

- Build Buck Pond-Lake Kushaqua Trail System.
- Build trail to Baldface Mountain.
- Build trail connects at the Hays Brook Trails.
- Build additional trails at Kate Mountain.
- Build connector trail from Hays Brook trails to Kushaqua Tract Easement.

Other

- Build a canoe carry to East Branch Saint Regis River from Red Tavern Road.

IV. Phases of Implementation

Phase 4

Parking

- Construct parking area at Barnum Pond.
- Create a parking area at Mountain Pond.
- Create a parking area near Slush Pond.

Camping

- Reestablish primitive tent sites along the East Branch and Saint Regis River.
- Build a primitive tent site at Debar Pond.
- Build a tent site at Merrill Road.
- Build 2 tent sites in the Madawaska Flow Quebec Brook Primitive Area.
- Build a primitive tent site along Benz Pond Road.
- Build a tent site along Deer River Flow.
- Build a tent site off Four Mile Road.
- Build a tent site along the Osgood River.
- Relocate the tent site at Long Pond.

Trails

- Build trails near Duck Pond.
- Extend the Kettle Trail.
- Build connector trail from Paul Smiths to Hays Brook trails.
- Build connector trail from Debar Meadows to Debar Pond.

Other

- Develop a fishing and waterway access site at Benz Pond.
- Establish a fishing and waterway access site at Slush Pond.
- Build canoe access to the Osgood River from the Hays Brook trailhead.

Phase 5

Parking

- Construct a parking area at Long Pond.
- Build a four-car parking area at Coal Hill Road.
- Create a parking area at Four Mile Road.

Camping

- Build a tent site on the Debar Meadows to Debar Pond Trail.
- Build a tent site at Bigelow Road.
- Build 3 tent sites in the Madawaska Flow Quebec Brook Primitive Area.
- Build a primitive tent site along Benz Pond Road.
- Build a tent site off Four Mile Road.

Trails

- Build trail to Grass Pond from Benz Pond Road.
- Build trail at Long Pond.
- Build connector trail from Hays Brook trails to Meacham Lake Campground.

Other

- Develop a canoe launch at Deer River from Coal Hill Road.

IV. Phases of Implementation

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Appendix A – 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 lands protected by Article XIV, Section 1 of the New York State Constitution (<https://www.dos.ny.gov/info/constitution.htm>). 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 (https://apa.ny.gov/Documents/Laws_Regs/APSLMP.pdf) 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.

Appendix A – Management and Policy Considerations

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."

Primitive Guidelines for Management and Use

From the Adirondack Park State Land Master Plan:

The primary primitive management guideline will be to achieve and maintain in each designated primitive area a condition as close to wilderness as possible, so as to perpetuate a natural plant and animal community where man's influence is relatively unapparent.

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.

The primary wild forest management guideline will be to protect the natural wild forest setting and to provide those types of outdoor recreation that will afford public enjoyment without impairing the wild forest atmosphere.

Wild Forest Basic Guideline #4: No Material Increase

The guideline in the original (1972) 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 the 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 Debar Mountain Wild Forest, 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.

Debar Mountain Wild Forest Snowmobile Trail Mileage

Base Snowmobile Trail Mileage (pre-UMP):	26.5 miles
Proposed Closure Mileage:	9.3 miles
Proposed New Trail Mileage:	2.9 miles
Total Proposed Trail Mileage (post-UMP):	20.1 miles

Park-wide Snowmobile Trail Mileage

1972 Mileage	Estimated Existing Mileage in All Wild Forest Units	Proposed Net Gain/(Loss) of Mileage in DMWF	New Total Estimated Mileage in All Wild Forest Units	Total Allowable Wild Forest Mileage *
740	789.31	(6.4)	783.31	848.88

APA/DEC Memorandum of Understanding

As agencies of the same New York State Executive Branch, 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 (https://apa.ny.gov/state_land/2010-APA-DEC-MOU_June2018.pdf) 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 (SEQRA)

The State Environmental Quality Review Act (ECL, Article 8) 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 Debar Complex presented in the plan must take into consideration environmental factors to ensure that such development does not degrade that environment. The overall intent of this UMP is to identify mitigating measures to avoid or minimize significant adverse environmental impacts to the natural resources of the State within this 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.

State Historic Preservation Act

The State Historic Preservation Act (SHPA) of 1980 (PRHPL, Article 14) declares it to be the policy of the State to promote the protection, enhancement, use, reuse and conservation of historic resources. Similarly, the New York State Public Buildings Law Article 4-B declares it to be the policy of the State for State agencies to act as good stewards of historic properties under their jurisdiction and to hold those properties in trust for future generations.

The National Historic Preservation Act of 1966 and SHPA established the National and State Registers of Historic Places, which are the official lists of buildings, structures, districts, objects, and sites significant in the history, architecture, archeology, engineering, and culture of New York and the nation. The Commissioner of the Office of Parks Recreation and Historic Preservation (OPRHP) makes the determination whether a property meets the criteria for listing found in 9 NYCRR §427.3. The same eligibility criteria are used for both the State and National Registers.

In consultation with the OPRHP, State agencies are required to consider potential impacts to historic properties listed or eligible for listing in the National and/or State Register for Historic Places early in the planning process and prior to undertaking, approving, permitting or funding of any project. State agencies must fully explore all feasible and prudent alternatives that avoid or mitigate adverse impacts to historic properties.

Snowmobile Management Guidance

In 2009 the 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:

Appendix A – Management and Policy Considerations

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.

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.

Snowmobile Use on Roads – Designated snowmobile routes can exist on Forest Preserve roads, such as the North Branch Road. DEC management of all such roads for motor vehicle use, including snowmobiles, is guided by the DEC “CP-38 Forest Preserve Roads” policy.

Trail Classifications

The following table lists classifications of the trail types used in this UMP.

<u>Trail Type</u>	<u>Marking</u>	<u>Tread and Tread Width</u>	<u>Trail Corridor</u>	<u>Bridges/Ladders</u>	<u>Design and Maintenance</u>
Class I Unmarked Route	None	Intermittently apparent, relatively undisturbed, organic soil horizon	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	Visible w/ some obstruction s Minimal side	None	Same as Class I trails, if social trails develop provide routing and marking to minimize impacts.

Appendix B – Analysis of Alternatives

<u>Trail Type</u>	<u>Marking</u>	<u>Tread and Tread Width</u>	<u>Trail Corridor</u>	<u>Bridges/ Ladders</u>	<u>Design and Maintenance</u>
		occasionally exposed	cutting, blowdown removal only to define route		
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.
Class V Trunk Trail	Trail Markers, signs at junctions, more information and warnings	Wider tread, worn and very evident. Rock exposed, possibly eroded. Extensive natural material trail hardening allowed, non-native materials as a last resort. 18" – 26" wide	6' wide, 12' high Annual blowdown removal and side cutting allowed	Bridges for difficult high water crossings 2'-6' wide, priority given to streams below concentrations of designated camping. Ladders only if reroute not possible.	Purpose built trails routed and built to shed water and hardened to be sustainable. Existing trails, drainage installed to halt erosion. Heavily eroded sections of trails considered for reroute vs hardening in place. Minimize bog bridging through reroutes or turnpiking.

Appendix A – Management and Policy Considerations

<u>Trail Type</u>	<u>Marking</u>	<u>Tread and Tread Width</u>	<u>Trail Corridor</u>	<u>Bridges/Ladders</u>	<u>Design and Maintenance</u>
Class 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 Trail	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.

Invasive Species Management Guidance

In 2010 the Department and Adirondack Park Agency released the guidance document: Inter-Agency Guidelines for Implementing Best Management Practices for the Control of Terrestrial and Aquatic Invasive Species on Forest Preserve Lands in the Adirondack Park (https://www.apa.ny.gov/State_Land/Appendix_F.pdf). 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, and 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.

Application of the Americans with Disabilities Act (ADA)

The Americans with Disabilities Act of 1990 (ADA), along with the Architectural Barriers Act of 1968 (ABA) and the Rehabilitation Act of 1973, Title V, Section 504, has 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.

Consistent with ADA requirements, DEC incorporates accessibility for people with disabilities into siting, planning, construction, and alteration of recreational facilities and assets supporting them. In addition, Title II of the ADA requires, in part, that services, programs, and activities of DEC, when viewed in their entirety, are readily accessible to and usable by people with disabilities. DEC is not required to take any action which would result in a fundamental alteration to the nature of the service, program, or activity, or would present an undue financial or administrative burden. When accommodating access to a program, DEC is not necessarily required to make each existing facility and asset accessible, as long as the program is accessible by other means or at a different facility.

This plan incorporates an inventory of all the recreational facilities and assets on the unit or area, and an assessment of the programs, services, and facilities provided to determine the level of accessibility. In conducting this assessment, DEC employs guidelines which ensure that programs are accessible, including buildings, facilities, and vehicles, in terms of architecture and design, and the transportation of and communication with individuals with disabilities.

In accordance with the US Department of Justice's ADA Title II regulations, all new DEC facilities, or parts of facilities, that are constructed for public use are to be accessible to people with disabilities. Full compliance is not required where DEC can demonstrate that it is structurally impracticable to meet the requirements [28 CFR § 35.151 (a)]. Compliance is still required for parts of the facility that can be made accessible to the extent that it is not structurally impracticable, and for people with various types of disabilities. In addition, all alterations to facilities, or part of facilities, that affect or could affect the usability of the facility will be made in a manner that the altered portion of the

Appendix A – Management and Policy Considerations

facility is readily accessible to and usable by individuals with disabilities [28 CFR § 35.151 (b:1-4)].

DEC uses the Department of Justice’s 2010 Standards for Accessible Design in designing, constructing, and altering buildings and sites. For outdoor recreational facilities not covered under the current ADA standards, DEC uses the standards provided under the ABA to lend credibility to the assessment results and to offer protection to the natural resource (ABA Standards for Outdoor Developed Areas; Sections F201.4, F216.3, F244 to F248, and 1011 to 1019).

Any new facilities, assets, and accessibility improvements to existing facilities, or assets proposed in this plan, are identified in the section containing proposed management actions. A record of accessibility determination is kept with the work planning record.

For further information, please contact Leah Akins, DEC Statewide ADA Accessibility Coordinator, at accessibility@dec.ny.gov

Partnerships and Volunteers

Temporary Revocable Permits

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

Volunteer Stewardship Agreements

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

instances, great work is able to be accomplished through the generosity of these volunteers.

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

Student Conservation Association

DEC has an ongoing contract with the Student Conservation Association (SCA) for trail crews and backcountry stewards. SCA trail crews provide labor to complete implementation of projects on State lands, including trail construction, primitive tent site construction, bridge work, rehabilitation and maintenance of facilities, and much more. These crews allow DEC to accomplish a large amount of work. The backcountry stewards spend their time traversing the backcountry, protecting resources, monitoring usage, and providing public outreach. Both of these programs are indispensable in helping the DEC to accomplish its management objectives.

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Appendix B – Analysis of Alternatives

The alternatives analysis section of the DGEIS will examine several alternatives for the removal of Debar Lodge. This analysis will discuss different alternatives and a “no action” alternative.

Classification alternatives could include reclassification of the land surrounding the Debar Lodge as Intensive Use, Historic or State Administrative, or could include different boundaries to delineate the reclassification area. The "No Action" alternative would leave the lands as Wild Forest. Wilderness, Primitive and Canoe classifications and are not being considered because the size and characteristics of the land do not meet the criteria for those classifications.

Information on the potential beneficial and adverse environmental impacts associated with each option will be presented. This section will provide a clear and thorough explanation of the alternatives and explain why the recommended alternative is the most appropriate choice.

Intensive Use

An Intensive Use alternative could accommodate the proposed day use area or a campground. The APSLMP requires that "[a]ny request for classification of a new acquisition or reclassification of existing lands from another land use category to an intensive use area will be accompanied by a draft unit management plan for the proposed intensive use area that will demonstrate how the applicable guidelines will be respected." APSLMP at 42.

Intensive Use/ Campground: Reclassify the Debar Lodge site as an Intensive Use area with a small campground. The closest private campground is located approximately 7.5 miles away, and the closest public campground is 12 miles away. The site is easily accessible from County route 26, and power is available at the site. Soils and Slopes on the site are generally conducive to this type of development.

Intensive Use/ Day Use Area: Reclassify the Debar Lodge site as an Intensive Use area with a Day Use Area. The APSLMP provides for several ways that Day Use Areas may serve the recreating public. The character of the Debar Lodge site makes it an

appealing destination for public gatherings in a natural setting. The closest DEC Day Use Area is within the Meacham Lake Campground 12 miles away. Soils and Slopes on the site are generally conducive to this type of development.

Historic

Reclassify an area around the Debar Lodge to Historic Area classification under the State Land Master Plan. The primary management guideline for historic areas is to preserve the quality and character of the historic resources. If reclassified as an historic area, the Debar Lodge and supporting structures would continue to be maintained in a manner that preserves their historic character. Public use and access to the site would also be carried out in a manner where historic preservation was the primary objective.

Administrative

An administrative classification would allow use of the Debar lodge for "a variety of specific state purposes that are not primarily designed to accommodate visitors." APSLMP at 46. The APSLMP provides that "[t]he primary management guideline for state administrative areas should be to provide facilities for the administration of state lands or programs in a setting and on a scale that is, to the greatest extent feasible, in harmony with the relatively wild and undeveloped character of the Adirondack Park." The Debar Lodge could be used as a ranger station or a facility for administering state lands, similar to the headquarters buildings at Little Tupper Lake, which were formerly part of a private camp.

The APSLMP Intensive Use Guidelines also require that:

All state administrative facilities should be located, designed and managed so as to blend with the Adirondack environment and to have the minimum adverse impact possible on surrounding state lands and nearby private holdings. Whenever possible, such facilities should be adjacent to or serviceable from existing public road systems within the Park.

Construction and development activities in state administrative areas should:

- avoid material alterations of wetlands;*
- minimize extensive topographical alterations;*
- limit vegetative clearing; and,*

-- preserve the scenic, natural and open space resources of the state administrative area.

APSLMP at 47. The Debar Lodge is a log structure located near the shore of Debar Pond. The building is accessible on a short spur road from County Route 26, an existing public road. There are several outbuildings which could be used to store equipment and vehicles, if needed. Use of the existing buildings for administrative purposes would not require alterations of wetlands or topography or require extensive tree cutting. The use of log in the exterior of the lodge serves to blend the building with the natural environment. The retention of trees around the lodge and the view of the Pond from the lodge could be found to preserve the scenic, natural and open spaces of the area, as required by the APSLMP.

Lastly, additions to the state administrative category should come either from new acquisitions or from the reclassification of appropriate wild forest or intensive use areas. APSLMP at 47. The Debar Lodge and surrounding lands are currently classified as Wild Forest.

In conclusion, the Debar Lodge would be eligible for a State Administrative classification if there was a need for administrative facilities at that location.

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Appendix C – Potential Environmental Impacts and Proposed Mitigation Measures

Historic Resources

Potential Significant Adverse Impacts

The removal of the Debar Lodge will be an adverse impact to a site on the State and National Register of Historic Places. Debar Pond Lodge is a ca. 1940 Adirondack camp located at the north end of Debar Pond, it commands a broad prospect of that body of water and the adjacent Adirondack mountain scenery that frames it. The principal building of the camp is the main lodge, a rambling two-story edifice of rustic conception designed by architect William Distin of Saranac Lake; it is of light-frame construction with an exterior veneer of half and full round logs. In addition, a guide/caretaker house is located nearby. Several additional barns and sheds are part of the listing as well. Debar Pond Lodge is listed in the Register as reflecting the broad patterns of history (Criteria A) and as an architecturally property (Criteria C).

Initial List of Potential Mitigation Measures

DEC and APA are consulting with the Office of Parks, Recreation and Historic Preservation (OPRHP) to review the full inventory of contributing historic structures/features associated with the Debar Lodge and explore ways to mitigate the adverse impacts caused by removal of the structure. In consultation with OPRHP, a plan will be developed to satisfactorily mitigate adverse impacts to the Debar Lodge in accordance with Section 14.09 of New York State Parks, Recreation and Historic Preservation Law (State Historic Preservation Act).

Potential mitigation measures which may be developed in consultation with the OPRHP may include documentation of contributing historic features (buildings) prior to their removal, and the development of public educational materials throughout the day-use area interpreting the history of the Debar Lodge site and the land surrounding it.

Community Character

The removal of Debar Lodge will also cause adverse impacts to the community character of the area, as the building has been a fixture in the local community for many decades. These impacts will be mitigated, in part, through the proposed mitigation measures related to the lodge's removal (listed above), particularly the installation of interpretive elements throughout the site. Additionally, DEC proposes to construct day-use facilities that utilize a similar design aesthetic as the current lodge, thereby minimizing the visual impact (loss of community character) caused by the lodge's removal.

Potential Benefits of the Proposed Action

An adopted UMP will provide the guidance necessary for DEC staff to manage the DMWF in a manner that protects the environment while at the same time providing suitable outdoor recreation opportunities for the public. Without the development and future implementation of the UMP, sensitive environmental resources of this Unit could be negatively impacted, resulting in a decrease in the public's enjoyment of such resources. Management of this Unit pursuant to a UMP allows DEC to improve public use and enjoyment of the area, avoid user conflicts and prevent overuse of the resource.

The reclassification of land on the shore of Debar Pond would further contribute toward the above objectives by allowing for a higher level of public use in a small area where the potential for such use already exists. The Intensive Use classification allows for visitor facilities and the type of management that can effectively control larger concentrations of people while preserving the natural character of the adjacent wild forest lands.

Proposals call for public interpretation of the history of the Debar Lodge site. By creating features that will exist in a similar footprint to the lodge, visitors will be able to appreciate the landscape associated with the Debar Lodge by learning the history of the site while experiencing the unique setting. The creation of these facilities and accompanying interpretive features will encourage a higher-level of visitation and appreciation of these historic elements.

Potential Impacts Not Considered Significant

Potential impacts related to the following subjects were considered in the review of the environmental assessment form and determined not to be environmentally significant:

Fish, Wildlife, Vegetation and Habitat

Several potential impacts were considered including damage or disturbance to vegetation and habitat caused by trail construction; disturbance to wildlife by trail users; and impacts to rare, threatened or endangered species, and significant natural communities during facility construction.

Trees and other vegetation will need to be removed for the construction of facilities, such as trails and parking areas, however such removal will be localized to the immediate project site. Natural revegetation will be allowed to occur where temporary vegetation removal was necessary for construction purposes. Consistent with recreational activities in other locations, localized vegetation loss is expected along trails and within primitive tent sites but is not considered significant overall.

DEC and APA have used existing natural resource information, Natural Heritage biologists and databases, and existing reports documenting the locations of rare, threatened, or endangered species in order to examine the potential impacts of operational and construction activities in the DMWF and have determined that potential impacts to these resources are not significant.

DEC wildlife and fisheries staff have also been consulted and conclude that impacts to wildlife and fisheries will not be significant. While recreation may cause minor displacement of some wildlife species, it is not anticipated to effect wildlife populations overall. The timing of construction activities can be controlled, if necessary, so that nesting/breeding periods of relevant wildlife species are not impacted. Public education, with signs and kiosks, about adjacent significant natural communities, or wildlife nesting areas, and the need for protection of such places, can also be implemented.

Climate Change

New York State agencies are committed to ensuring all programs consider the future physical risks from climate change in order to protect New Yorkers and our environment. Under the 2019 Climate Leadership and Community Protection Act, New York State committed to eliminating greenhouse gas emissions in the state and to ultimately achieve net zero emissions. The Act extends and enhances a number of New York's successful clean energy initiatives to accelerate the development of wind and

Appendix C – Potential Environmental Impacts and Proposed Mitigation

solar power, increase energy efficiency, and facilitate the growth of energy storage technology.

In accordance with Section 7 of the Climate Leadership and Community Protection Act, the management actions proposed in this 2020 UMP Amendment/SEIS will take climate change, greenhouse gas emissions, and the 2019 Climate Leadership and Community Protection Act into consideration. However, DEC and APA do not anticipate significant adverse impacts to air resources due to project construction or public use resulting in the implementation of the UMPs. Several potential impacts will be considered including the reduction in air quality due to continued snowmobile use and a potential increase in motor vehicle use, and acceleration of CO² emissions due to a potential increase in fossil fuel combustion from these activities.

Additionally, DEC and APA do not anticipate an increase in snowmobile use and have determined that any potential increase in motor vehicle use will not cause a significant impact to air quality or CO² emissions.

Land

Proposed trails, parking areas, primitive tent sites, lean-tos, and a day-use area will need to be constructed. Additionally, the Debar Lodge is proposed to be removed. These activities will require localized modifications to the landscape and will cause short-term impacts in the form of soil disturbance but are not expected to create long-term adverse impacts.

Geologic Features

The DMWF contains geologic features such as rocky mountain summits and eskers, as well as cliffs that are of interest to the rock-climbing community. APA and DEC expect short-term impacts to these features when trails are constructed. Public use on and near these features may also cause small, localized impacts but are not considered significant.

Surface Water

Some of the construction required to implement the UMPs will have the potential for causing short term erosion while the soil is disturbed. Best management practices will be employed during construction to minimize impacts such as erosion and sedimentation into nearby wetlands and waterbodies. Some facilities are proposed to be located near wetlands and waterbodies but impacts will be minimized by siting them in a manner that prevents erosion and sedimentation into water resources by either 1)

leaving a vegetated barrier between facilities and the water and/or 2) selectively and minimally hardening surfaces where significant human activity is anticipated, such as the proposed Debar Lodge Day Use Area.

Flooding

Some of the recreational facilities proposed in the UMPs, particularly trails, will be located in areas that experience seasonal and/or temporary flooding. Adverse impacts to these facilities and to water resources will be minimized by designing these facilities to withstand this type of flooding by using trail-hardening techniques that rely on natural materials from surrounding areas and that blend in the with surrounding environment as much as possible.

Open Space and Recreation

It is anticipated that the UMPs will propose the closure of facilities, such as trails and primitive tent sites, that are degraded, poorly sited, or no longer used. These closures may impact recreationists that prefer these specific facilities; however, this impact will be mitigated by the creation of additional facilities throughout this Unit that create a net gain in overall recreational opportunities.

Noise

The construction of parking areas and the removal of the Debar Lodge will require the use of heavy construction equipment. Impacts from the noise emitted by this equipment will be minimized due to the short-term nature of these activities.

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Appendix D – Pond Narratives

Pond Management Classifications

Adirondack Brook Trout Ponds – Adirondack Zone ponds which support and are managed for populations of brook trout, sometimes in company with other salmonid fish species. These waters generally lack warmwater fishes but frequently support bullheads. Management may include stocking.

Coldwater Ponds and Lakes – Lakes and ponds which support and are managed for populations of several salmonids. These waters generally lack warmwater fishes but frequently support bullheads. Management may include stocking.

Other Ponds and Lakes – Fishless waters and waters containing fish communities consisting of native and nonnative fishes which will be managed for their intrinsic ecological value.

Two-Story Ponds and Lakes – Waters which simultaneously support and are managed for populations of coldwater and warmwater game fishes. The bulk of the lake trout and rainbow trout resource fall within this class of waters. Management may include stocking.

Unknown Ponds and Lakes – Waters which could not be assigned to the subprogram categories specifically addressed in this document due to a lack of or paucity of survey information.

Warmwater Ponds and Lakes – Waters which support and are managed for populations of warmwater game fishes and lack significant populations of salmonid fishes. Management may include stocking.

Baker Pond (SC-P 187)

Baker Pond is an interesting water located adjacent to the Osgood River. It has a moderate maximum depth and has a high pH and alkalinity despite its bog type nature. The first biological survey was a Conservation Department effort in June of 1957. Because the pond has a very low gradient outlet which connects to the Osgood River it shares many or all of the same fish species. The 1957 netting captured nonnative northern pike, white sucker, brown bullhead (NBWI) and pumpkinseed (NBWI). The pond received a second survey by ALSC in 1984. This survey documented the same species as those captured in 1957 plus nonnative yellow perch. The air equilibrium pH during the survey was 7.25 and the ANC was 244.1, unusually high for an Adirondack Pond.

Appendix D – Pond Narratives

Because the pond is located on a flat plain and is contiguous with the Osgood River it cannot be reclaimed to remove nonnative fish species. Baker Pond will be managed to preserve its native fishes in the presence of nonnative species and historically associated species.

Management Class: Warmwater

Barnum Pond (SC-P262)

Barnum Pond has a long history of fisheries management. It was only given a cursory examination during the original 1930's biological survey, when bullhead (NBWI), pumpkinseed (NBWI) and brook trout were reported. The first netting survey in 1955 verified the presence of bullhead, pumpkinseed and white sucker and showed that nonnative golden shiner were established. Trout management became impossible due to the establishment of nonnative yellow perch. The presence of this harmful species was documented in a 1964 netting survey. Barnum Pond was reclaimed with the fish pesticide rotenone in the fall of 1968 to remove the trout competitors. This chemical reclamation was successful in removing most of the unwanted fish, but some individuals apparently survived. Although the pond provided good angling for several years, periodic surveys showed a gradual resurgence of the trout competitors. Barnum Pond was reclaimed a second time in 1973. Again, some trout competitors survived, but the species considered most harmful, yellow perch, was successfully eliminated. The pond provided an excellent brook trout fishery for several years following the 1973 reclamation project. By the time of an ALSC survey in 1984, the pond again contained several competitive fish species, including golden shiner, brown bullhead, creek chub and white sucker. It did still contain moderate numbers of brook trout. Barnum Pond continued to provide fair angling for brook trout for more than another decade, although this angling was supported by significant stocking. Reports of bass were received in the mid 1990's and a survey in 1998 showed that largemouth bass had been introduced and were moderately abundant. The establishment of a bass population in Barnum Pond effectively rules out trout management unless the pond is again reclaimed. Because of the existence of difficult wetlands and other complications, another reclamation of Barnum Pond is not anticipated at this time. In 2016 a localized harmful algal bloom was present on Barnum Pond with blue green chlorophyll levels of 173µg/l and microscopic analysis found *Aphanocapsa* and *Woroinichia*. The bloom was fairly short-lived, lasting only a week or two. For the expected duration of this unit management plan, Barnum Pond will be managed to preserve its native fishes in the presence of nonnative species and historically associated species.

Management Class: Warmwater

Benz Pond (P - SC 221)

Benz Pond is a 25-acre pond located about one third of a mile north of the Saint Regis River, in the Town of Santa Clara. The pond was acquired by New York State in 1998 and received a primitive land classification. It was visited during the original biological survey of New York State on July 28, 1930. The pond was described as having a boggy shoreline, but not being a classic bog pond in that it had clear water and a hard-sandy bottom in some places. Benz Pond does not have the dark stained water characteristic of a bog pond. The pond was considered to be fishless at the time of the survey but no netting or other biological sampling was undertaken. Because Benz Pond was privately owned and posted for many years, there is little information about the pond until the state acquired the property in 1999.

In the late 1990s a private sportsmen's club that leased Benz Pond became interested in fish management and determined that Benz Pond would be a suitable pond for brook trout if the pH were improved. They obtained a Use of Lime in Wetlands Permit from the Adirondack Park Agency and limed the pond in 1997. Prior to the purchase by the state Benz Pond was limed and stocked with Temiscamie x Domestic hybrid brook trout. Following acquisition by the State of New York, Benz Pond was the subject of a general fisheries survey. This survey showed that the liming of Benz Pond had been successful in providing suitable water quality conditions for fish survival and in fact the brook trout population was doing well. The October 2000 netting showed Benz Pond to have a native fish community consisting of brook trout, brown bullhead and pumpkinseed. Since acquisition by the state of New York, the Bureau of Fisheries has annually monitored the water chemistry of Benz Pond to determine the longevity of the improved water chemistry due to the liming, just as it does with waters in its own pond liming program. The persistence of favorable chemistry conditions has been remarkable. When the Department first measured the water quality parameters in October of 2000, the air equilibrium pH was 7.16 and the acid neutralizing capacity (ANC) was 104.6. Both measurements have slowly, but steadily dropped and in July of 2019, the pH was 5.40 and the ANC was down to 2.50. The Department of Environmental Conservation re-limes the waters in its limed waters program when the ANC drops below 25 units. This is a threshold level which prevents the pond from incurring a sharp drop in pH following exhaustion of the buffering capacity of the pond and protects the aquatic community from drastic fluctuations in water quality.

In 2019, in consultation with the APA it was determined that Benz Pond met the general criteria for inclusion in the New York State Department of Environmental Conservation Program of Liming Selected Acidified Waters (liming program) as outlined in the program's generic environmental impact statement (GEIS). This meant that Benz pond could be limed, and all necessary permits were obtained. On February 27, 2020 19 tons

of agricultural lime were applied to the ice on Benz Pond. Although draft horses were planned to be used, ice conditions made this unworkable. DEC staff and volunteers from Paul Smiths College successfully applied the lime by hand. Should chemical conditions eventually deteriorate Benz Pond should be limed again.

Benz Pond will be stocked as required with brook trout.

Management Class: Adirondack Brook Trout

Beaver Valley Pond (SC-P 201)

Beaver Valley is a small, shallow pond, located in the vicinity of the Hayes Brook truck trail. It is shown on some maps as Grass Pond. It first received a biological survey in May of 1955. Species documented in this survey included brown bullhead (NBWI), pumpkinseed (NBWI), golden shiner (nonnative) and brook trout. Brook trout were surprisingly common despite the pond's shallow nature. Beaver Valley Pond was again surveyed in 1976. This sampling effort showed that the pond had received several fish introductions during the intervening years, including creek chub (NBWI), white sucker (native) and yellow perch (nonnative). No longer able to support a significant trout population in the face of so many competing fish species, Beaver Valley Pond was no longer considered a candidate for brook trout management. It was stocked with largemouth bass by the DEC in 1995. These fish were captured in another local pond and transferred to Beaver Valley Pond. A follow up survey could be undertaken to evaluate the success of this introduction. Beaver Valley Pond will be managed to preserve its native fishes in the presence of nonnative species and historically associated species.

Management Class: Warmwater

Buck Pond (C-P 61)

Despite the presence of a State DEC campground on Buck Pond there is surprisingly little fisheries information. This is largely attributable to the fact that Buck Pond connects broadly to Lake Kushaqua, and doubtless shares many of the same fish species. The lake was visited briefly during the New York State Biological Survey on August 30, 1929. Lake trout, brook trout and brown bullhead were reported. The first netting survey did not take place until July of 1947. This survey captured native white sucker, creek chub (NBWI), brown bullhead (NBWI), pumpkinseed (NBWI) and nonnative yellow perch and golden shiner. Buck Pond was the recipient of an experimental tiger musky stocking program during the early 1980's. An ALSC survey was conducted on Buck Pond in 1984.

This survey revealed a fish community dominated by numerous nonnative fish species. Nonnatives included yellow perch, northern pike, rock bass, golden shiner and banded killifish. White sucker, brown bullhead, bluntnose minnow and pumpkinseed were also captured. It likely now also contains largemouth and smallmouth bass, both of which are present in Lake Kushaqua. Only one tiger musky was taken in the survey netting. The experimental stocking policy was terminated following the ALSC survey due to the poor results. Buck Pond will be managed to preserve its native fishes in the presence of nonnative species and historically associated species.

Management Class: Warmwater

Buck Pond (SC-P 85)

This Buck Pond is a small water body which lies directly north of Boy Scout Clear Pond, adjacent to N Y State Route 30. About half of its shoreline is in State ownership, the remainder is owned by Camp Bedford, a Boy Scout property. First surveyed in 1965, the pond was described as being “a unique, shallow, spring fed, marl type pond, highly alkaline chemistry for this area”. A gillnet catch at that time included brook trout and white sucker. Creek chubs and dace were observed. Survey notes indicated that the pond would be a reclamation candidate if a barrier dam were built on the outlet of the pond. Buck Pond was surveyed by the ALSC in 1986. Fish species captured during this effort included brook trout, northern redbelly dace (native), white sucker (native) and pumpkinseed (NBWI). The brook trout catch population in this pond is self-sustaining, despite its shallow nature (maximum depth 7 feet). There are no plans to build a barrier dam and reclaim Buck Pond during the 5-year scope of this unit management plan. However, if additional competitive species become established, a reclamation may become necessary. When a reclamation is determined to be necessary and an agreement is reached with the boy scouts, the UMP will be amended to include it in the Schedule for Implementation and the pond narrative will be revised to reflect the new survey data. A barrier dam will be constructed and the pond reclaimed.

Management Class: Adirondack Brook Trout

Chub Pond (C-P56)

Chub Pond is a small (7 acre) waterbody adjacent to the extreme north end of Lake Kushaqua. It was thought to be a trout pond when observed in 1929 but no sampling was conducted. When the pond was surveyed in July of 1954 it contained a native fish fauna of brook trout, white sucker, creek chub (NBWI), and common shiners. It was thought at the time that some brook trout stocking had occurred sporadically. ALSC

surveyed Chub Pond in 1985. This survey showed that pumpkinseed (NBWI) and nonnative golden shiners had become established during the interim years. This finding led to the initiation of a brown trout stocking policy because brown trout are better suited than brook trout to compete in waters with numerous fish species. A DEC net check in 1994 showed that the brown trout providing a fishery in association with the above species. Investigations in 1999 found that there are two problematic wetlands on the tributary stream of Chub Pond which would complicate a fish reclamation so but not make one impossible. A 2012 survey found that brown trout are still providing a fishery in association with the other species in the pond, which now include white sucker, creek chub (NBWI), golden shiner(nonnative), fathead minnow (nonnative), rainbow smelt (nonnative), and northern redbelly dace (native). Chub Pond will be managed to preserve its native fishes in the presence of nonnative and historically associated species until such time as a pond reclamation is deemed advisable for the restoration of Adirondack brook trout. When a reclamation is determined to be advisable the UMP will be amended to include it in the Schedule for Implementation.

Management Class: Coldwater

Clear Lake (SC -195)

Little fisheries data exists for 28-acre Clear Lake It is largely in private ownership and has never been surveyed by New York State. The lake did receive an ALSC survey in 1985. At that time the fish community was dominated by nonnative species including northern pike, yellow perch, and golden shiners. It also contained brown bullhead (NBWI), pumpkinseed (NBWI) and white suckers (native). With an air equilibrated pH of 5.8, the acidity level is below optimum for many species, but would be suitable for brook trout. The ALSC survey indicated that the pond would be a reclamation candidate. It has a nominal amount of wetlands, and no outlet. DEC will investigate the possibility of reclaiming Clear Lake with agreement from the private landowner. If a reclamation is determined to be acceptable, the UMP will be amended to include it in the Schedule for Implementation and the pond narrative will be revised to reflect the new information. The pond will be reclaimed and managed as a native fish community.

Management Class: Adirondack Brook Trout

Clear Pond (C-P 70)

Clear Pond lies immediately adjacent to Rainbow Lake and is connected by a navigable channel. Despite the physical connection between the two waters, they are physically and chemically rather different. Rainbow Lake has more productive shallows, darker

stained water and a higher flushing rate. A stocking program for walleye is currently in effect for Rainbow Lake. Clear Pond is a deep, rather clear, coldwater lake. A cursory examination on July 24, 1929 noted the physical characteristics necessary for lake trout. Clear Pond received a biological survey in July of 1954. This survey documented lake trout, brook trout, white sucker (native), longnose sucker (native), brown bullhead (NBWI) and yellow perch (non-native). Survey remarks included the note that “white fish and lake trout fishing is reported to have dropped off completely since perch became established in this pond.” The decline in the sport fishery led to the implementation of a splake stocking program in 1962. The stocking of splake did provide a fair fishery that was locally popular for several years. Various surveys over the years documented the introduction of nonnative largemouth bass, rock bass, and golden shiner, and native bluntnose minnows. The most recent biological survey of Clear Pond was an ALSC effort in 1985. This survey added nonnative northern pike and banded killifish to the species documented to occur. Splake stocking was discontinued when it was felt that the posting of private land resulted in insufficient access to warrant the stocking. However, because Clear Pond is accessible by boat from Rainbow Lake, there is some public access. The ease of accessing Clear Pond will be reconsidered, and the possibility of stocking a cold-water species may be explored. Clear Pond will be managed as a two-story lake to preserve its native fishes in the presence of historically associated and nonnative species.

Management Class: Two Story

Clear Pond (SC-P 85A)

This Clear Pond is also commonly known as Boy Scout Clear, because of the long-standing presence of a Boy Scout camp on its shore. The pond was completely owned by the boy scouts until the early 1990's when New York State purchased a significant portion of the pond. Because the Boy Scouts of America (BSA) have always been generous in allowing public access to the pond, there is long history of fish management. First surveyed by New York in 1955, only native white sucker, brown bullhead (NBWI) and pumpkinseed (NBWI) were taken. Survey comments included: “no trout are reported as having been caught from this pond in recent years”. The survey documented favorable temperature and pH conditions. An experimental splake stocking program was initiated soon after this survey and satisfactory results led to the policy becoming one of long standing. Experimental stocking of wild strain brook trout (Windfall) also produced good results and the water was used a brood stock source. Numerous nettings during the 1960's documented a native fish fauna consisting of white sucker, brook trout, lake trout, pumpkinseed, brown bullhead and splake. The first nonnative fish species captured was golden shiner which appeared in 1968. The white sucker, brown bullhead

and pumpkinseed populations thrived and they became increasingly dominant in trap net catches. A reclamation of the pond was proposed and discussed with the BSA on more than one occasion, but such a project was never undertaken. Stocking ceased for a time when public fishing was suspended, but then was resumed after New York State acquired part of the pond. Boy Scout Clear Pond was surveyed in August of 1991. Species handled during this survey included brook trout, lake trout and splake, white sucker, brown bullhead, pumpkinseed, golden shiner and three new species: bluntnose minnow, creek chub (NBWI) and rainbow smelt (non-native). The survey reaffirmed the reclamation potential of this water body. In 2000 a somewhat abbreviated survey designed to evaluate stocking success was conducted and sockeye salmon, splake and white sucker were collected. It is currently reported that black crappie are now present in this water. Stocking of coldwater species will continue. Currently the lake receives splake. An experimental kokanee salmon stocking produced some angling, but because DEC no longer has an egg source for this species no stocking has occurred recently. At the time of this writing the status of the Boy Scout Camp on Clear Pond remains in the ownership of the Boy Scouts but is now owned by a different boy Scout Council (Twin Rivers), but it was, at least for a time, for sale. If discussions with the current or future owner determine that a fish reclamation is desirable, the UMP will be amended to include it in the Schedule for Implementation and the pond narrative will be revised to reflect the new information. The pond will be reclaimed and managed as a coldwater lake.

Management Class: Coldwater

Debar Pond (SC-P 38)

Debar Pond was in private ownership for many years, and thus little historical data was ever collected by DEC. The first biological survey of this 87-acre lake took place in 1980. This rather extensive survey revealed a diverse fish community consisting of mostly native fish species. These included brook trout, white suckers, brown bullheads, creek chubs, blacknose dace and slimy sculpins. The only nonnative fish species encountered was the brook stickleback, a species whose original distribution is not well documented. ALSC conducted a second biological survey in 1984. This survey documented three additional species in the lake, lake chubs (native), pearl dace (native) and nonnative rainbow smelt. The smelt were thought to be a recent unauthorized introduction. The ALSC survey, like the DEC survey of a few years earlier, documented favorable conditions for salmonids, including high oxygen levels in deep water and pH values above 7.0.

Following these surveys, two stocking policies were initiated. Splake (a lake trout X brook trout hybrid) were introduced as they often survive and grow well in fish

communities with abundant competitive/prey species. Landlocked Atlantic salmon were also stocked because it is a species that can often do well where rainbow smelt provide forage. Debar Pond was most recently surveyed by DEC in July, 2000. This survey indicated that the stocking of splake and Atlantic salmon has been successful in providing a sport fishery. Splake were plentiful in the netting catch and one fish exceeded 20". Debar Pond will be managed to preserve its native fishes in the presence of nonnative and historically associated species.

Management Class: Coldwater

Deer River Flow (SC-P 73)

Deer Rive Flow is a warm, 408-acre shallow impoundment on the Deer River in Duane, NY. The first biological survey on record is July 1953. An extensive trap net effort captured nonnative yellow perch, smallmouth bass and golden shiner. Other species collected included brown bullheads (NBWI), pumpkinseeds (NBWI), white suckers and American eels. The flow was again surveyed by ALSC in 1986. Two additional nonnative species were identified in this survey: northern pike and rock bass. The water chemistry showed favorably high pH and ANC. Deer River flow was the recipient of an electro-fishing survey in June of 1990. The species composition of the catch was similar to previous surveys with one new species recorded; bluntnose minnows. The catch of game fish was considered low, but the electro-fishing boat at that time was outmoded and inefficient. A similar effort with the more efficient boat now available would probably catch far more fish. Deer River Flow will be managed to preserve its native fishes in the presence of historically associated and nonnative species.

Management Class: Warmwater

Duck Pond (SC-P 40)

Duck Pond, located in the Town of Franklin, is in an area where there are a number of small waters that have been impacted by acidification. Duck Pond, despite its shallow nature, once had a history of providing fair fishing for brook trout. With a mean depth of less than 5 feet, there is no doubt that springs have provided a refuge from warm summer temperatures. When first surveyed in 1955, the pond contained brook trout, native-but-widely-introduced brown bullhead, creek chub, native white sucker and nonnative golden shiners. The pH on May 11, 1955 was measured at 5.6. When surveyed again in 1966 the only species captured was brown bullhead and the pH was measured at 4.9. A more sudden reduction in species present would be difficult to document. Experimental applications of hydrated limestone did little to raise the pH, no

doubt because the flushing rate is significantly higher than the rate of 2.0 times per year normally considered the upper limit to identify good liming candidates. However, by 1980, conditions seem to have improved enough for several fish species to recolonize the pond. A September 1980 gillnet survey identified brown bullhead, white sucker, and native-but-widely-introduced pumpkinseed and creek chub. Measured pH values were little improved, with the highest reading being 5.16. An ALSC survey in 1984 virtually mirrored the results of the 1980 DEC survey, the only difference being the reappearance of golden shiner. Extensive wetlands make a reclamation unfeasible. Duck Pond will be managed to preserve its native fish species in the presence of nonnative fish species.

Management Class: Other

Gourdshell Pond (SC-P 74)

This 5-acre pond has received but one biological survey, a 1986 ALSC study. This survey revealed a shallow, warmwater pond dominated by nonnative yellow perch, golden shiner and northern pike. Brown bullheads (NBWI) and pumpkinseeds (NBWI) were also present. The water chemistry was favorable with high pH and ANC levels. Gourdshell Pond (SC-P 74) will be managed to preserve its native fish species in the presence of nonnative and historically associated fish species.

Management Class: Warmwater

Gourdshell Pond (SC-P 75)

Lying immediately south of Gourdshell Pond (SC-P 74), it is tempting to assume that the two ponds are similar in water chemistry and fish communities. However, as no file information exists for this water, this assumption cannot be verified. There appears to be water exchange between the two via wetland seepage. The aquatic communities could be quite different. A biological survey of Gourdshell Pond (SC-P75) will be undertaken in order to arrive at a fish management strategy.

Management Class: Unknown

Grass Pond (SC-P 171)

Grass Pond is a 4-acre scenic bog pond located 2.5 miles southeast of the Village of St. Regis Falls and adjacent to Long Pond. Grass Pond appears to be naturally acidic bog pond with a classic bog plant community. It was fishless when netted in by New York State in 1955 and 1977 and by ALSC in 1984. The air equilibrated pH in July of 1984

was 4.6. In July of 2014 the chemical conditions remain largely unchanged as the air equilibrated pH was measured at 4.59 with an ANC of $-13.30\mu\text{eq/L}$. An abundance of water chemistry information is available for this water as it was included as part of the ALSC long term monitoring program, which began in 1992. Grass Pond will be managed to preserve its aquatic resources for their intrinsic ecological value.

Management Class: Other

Grass Pond (SC-P 192)

This Grass Pond is located at the head of tributary 2 of Hays Brook. It is less than four acres in size. A survey sheet from 1930 records bullheads as reported. No fish were collected during a brief gillnetting effort in 1957 or in an overnight effort by ALSC in 1984. The air equilibrium pH in July of 1984 was 4.45 and the ANC was -31, two exceptionally low measurements. Grass Pond will be managed to preserve its remaining aquatic resources for their intrinsic ecological value.

Management Class: Other

Hope Pond (CH-P 59)

Hope Pond is a 23-acre pond located 1.3 miles north of the Hamlet of Onchiota, adjacent to the old railroad grade. It is fed by Little Hope Pond, which lies to the northwest, and flows to Unnamed Pond (CH-P 60). Hope Pond was not surveyed during the original New York State Biological Survey. It appears that it was visited briefly on July 26, 1929 and recorded notes state that the pond was a good trout pond and contained brook trout, lake trout and whitefish. When first surveyed in 1954, an overnight gillnet set captured brown bullhead (NBWI) pumpkinseed (NBWI), and white suckers (native). No game fish were captured, although lake trout and brook trout were thought to still be present in the pond. After another disappointing net catch in 1959, the pond was stocked with brook trout. A brief netting on May 22, 1963 captured brook trout, brown bullhead, pumpkinseed, white sucker, and one lake trout. The brook trout stocking policy continued for a time and then was changed to an experimental splake stocking policy. Splake seemed to perform better than brook trout in Hope Pond and they were stocked for many years following. Hope Pond was not surveyed again until ALSC conducted a biological survey in May of 1984. There is an abundance of water chemistry information here as Hope Pond has been one of the long-term monitoring waters studied by the ALSC. The air equilibrated pH here has generally varied around 6 pH units for much of the length of the ALSC study. This survey documented the same species as previous surveys and revealed that non-native golden shiners were now established. Hope Pond was

investigated by DEC in 1999 as a reclamation candidate. This survey revealed that Hope Pond would be a suitable reclamation candidate due to its lack of problematic wetlands and natural outlet barrier. Hope Pond, along with Little Hope Pond and Unnamed Pond (CH-P 60) were reclaimed in August of 2000. Post-treatment netting indicated that the reclamation was successful in eliminating trout competitors and that a productive and popular fishery quickly developed. A second net check in June of 2005 showed brook trout to be abundant, but golden shiner had been reintroduced. Hope Pond will be managed as an Adirondack brook trout pond and will again be reclaimed upon establishment of additional fish(es) to enhance and restore a native fish community. When a reclamation is determined to be necessary, the UMP will be amended to include it in the Schedule for Implementation and the pond narrative will be revised to reflect the new survey data.

Management Class: Adirondack Brook Trout

Jones Pond (SC-P 206)

Surprisingly little information exists for this 142-acre roadside water. By the time that Jones Pond received a cursory examination on September 8, 1930 the fish community was dominated by nonnative fish. However, E.R. Wallace, in his 1894 Wallace's Guide to the Adirondacks suggests that Jones Pond was historically a fine trout water. He states "This locality is especially attractive to sportsmen, for in few places are the trout finer, larger or more abundant. The waters most noted for angling purposes are Rainbow L. (named from its shape), Jones P., Round P. (1 ½ X 1), Buck P. (1 X ¾) Lily P. (½ X ¼), Elbow Pond (½ X ¼) and Plumadore P." The 1930 examination of Jones Pond identified the shallow nature of the pond and reported that brook trout, northern pike, "pickerel", yellow perch and smallmouth bass were present. The report of pickerel is suspect as no species of pickerel is known to be established in this locale. ALSC surveyed Jones Pond in May of 1984. The survey documented a fish community dominated by nonnative species. Nonnative fishes included northern pike, golden shiner and yellow perch. White sucker, brown bullhead (NBWI) and pumpkinseed (NBWI) were also caught. It is widely known by local anglers that both largemouth and smallmouth bass are commonly found in Jones Pond as well.

Of some historical interest is the fact that Jones Pond was the site of repeated fish kills during the summer months during the 1950's and 1960's. Heavy algae blooms and complaints of excessive vegetation suggest non-point source nutrient enrichment.

Jones Pond will be managed to preserve its native fishes in the presence of historically associated and nonnative species.

Management Class: Warmwater

Lake Kushaqua (C-P 55)

Lake Kushaqua is a 378-acre lake which lies high in the watershed of the North Branch of the Saranac River. Of historical interest, in Wallace’s Guide to the Adirondacks (1894), E.R. Wallace reports of superior fishing for lake trout (in that era often called salmon trout) in Lake Kushaqua (at that time known as Round Pond). “... Rainbow L. and Round P. abound in superior “lakers” –frequently attaining enormous proportions, especially in the latter sheet. It was in Round Pond that the largest salmon trout on record was caught, reaching the extraordinary weight of 52 lbs. The Quackenbush party of Troy were the lucky captors of this monster. This sheet has recently been styled “Lake Kushaqua...”

Kushaqua is a natural waterbody, but there is a 15' high man-made dam on its outlet. This dam adds depth and area not only to Lake Kushaqua, but also to Rainbow Lake and other waters in this interconnected chain of lakes. Like many of the waters in the Debar Mountain Complex, Lake Kushaqua was not studied during the original New York Biological Survey. Much of the attention in this region was expended on Lake Champlain studies. Brook trout were reported. When first surveyed by the Conservation Department in 1954, Lake Kushaqua still had a fish community largely comprised of native species. The catch included brook trout, lake trout, longnose sucker, white sucker, pumpkinseed and nonnative yellow perch. Only two yellow perch were captured, suggesting that they might have been a rather recent introduction, as normally yellow perch rapidly become a major component of the fish fauna. The pH in 1954 was a satisfactory 6.0. Lake trout, longnose sucker and white sucker were still found during the next survey in 1957, but yellow perch were far more abundant than during the previous survey. A survey just one year later in 1958 had similar results. Nine rainbow trout were taken by angling during the 1958 survey and the angling for this species was considered good, especially in the spring. No doubt this fishery was supported by annual stocking of rainbows. Lake Kushaqua was next surveyed in 1966. Several nonnative species had established during the prior 8 years. Rock bass were captured in the nets and northern pike and largemouth bass were reported. The latter two species were not taken in gillnets, but that is not surprising given that the nets were set deep in an attempt to assess the salmonid populations. Lake trout seemed to be declining when catch rates are compared to earlier surveys.

A 1984 survey by ALSC, which deployed fine mesh minnow nets as well as conventional survey nets, captured the most species of any Lake Kushaqua study and the species included the following; nonnative: northern pike, golden shiner, rock bass and yellow

perch, native-but-widely-introduced: brown bullhead and pumpkinseed, native: lake trout, white sucker, longnose sucker, common shiner, bluntnose minnow and longnose dace. a 1994 survey showed that rainbow smelt were now present, but not abundant and that lake trout stocking was important to providing a cold-water fishery. A 2008 survey was undertaken to evaluate the lake trout stocking policy and to check for the presence of walleye stocked in nearby Rainbow Lake. Lake trout were in excellent condition and the lake trout population appeared to be thriving. No walleye were caught during the survey but it was reported they were caught occasionally. Now new fish species were added during this survey. Lake Kushaqua will be managed to preserve its native species in the presence of nonnative and historically associated species.

Management Class: Two Story

Lake Margaret (SC-P 184)

Lake Margaret is a three-acre pond located just off the Osgood River and a short distance south of Meacham Lake. It did receive a biological survey in 1930 during the original New York State Biological Survey. A gillnet set overnight caught 7 pumpkinseed (NBWI). The pond was netted a second time in May of 1955. No fish were captured and the pH was measured at 5.4. The pond was theorized to be chemically unsuitable for fish survival. No other data exists on this water. Lake Margaret will be managed to preserve its remaining aquatic resources for their intrinsic value.

Management Class: Other

Little Clear Pond (SC-P 172)

Little Clear Pond lies just 500 north of Grass Pond (SC -P 171) yet provides an interesting contrast to it. As described above, Grass Pond is a classic acid bog ringed with acid loving vegetation. In sharp contrast Little Clear Pond, has a shoreline that is predominately hardwood forest, mixed hardwood and coniferous forest and deciduous shrubs. Where Grass Pond is considered to likely be naturally acidic, Little Clear Pond has been acidified by atmospheric deposition (acid rain). When visited during the NYS Biological Survey in 1930, the pond was thought to be fishless; although it appears that no netting was undertaken. However, when surveyed in 1955, brown bullhead and brook trout were captured in an overnight gillnet set. The pH was measured at 5.6 and the crew reported that “Although chemical conditions are far from ideal, this pond seems to be growing trout quite satisfactorily.” Little Clear Pond was included in an early experimental liming study in 1961 and treated with lime and stocked. Upon completion of the liming study, stocking continued as the pond was a popular fishery in an area where

few trout ponds exist. When netted by ALSC in 1984, the pond was still providing angling for brook trout and brown bullheads. pH values were relatively high in mid-summer, but dipped to 5.01 in October when the netting took place. A 1994 ALSC survey indicated that brook trout were in decline. In response to a request by the Franklin County Federation, DEC submitted a liming jurisdictional inquiry to the Adirondack Park Agency for the re-liming of Little Clear Pond. The APA agreed that the pond met the Division of Fish and Wildlife's criteria for limed water candidates and ruled that a liming was not a jurisdictional matter. Little Clear Pond was limed by the Franklin County Federation of Fish and Game Clubs in cooperation with DEC on February 12, 1996. Five tons of pulverized agricultural limestone were applied. This treatment raised the pH to a satisfactory level and the elevated levels have been lasted extremely well. The air equilibrated pH of Little Clear Pond on July 1, 2014, was 6.51 and the acid neutralizing capacity (ANC) was 43.71. For comparison, the air equilibrium pH of adjacent Grass Pond on the same date was 4.59 and the ANC was -13.30. Little Clear Pond remains a popular local fishing spot. An abundance of water chemistry information is available for this water as it was included in part of the ALSC long term monitoring program, which began in 1992. The mid-summer pH of Little Clear Pond will continue to be monitored. When the pH drops below 6.0 or the ANC drops below 25 ueq./l, the pond will be re-limed as described in the Division of Fish and Wildlife's Final Generic Environmental Impact Statement on the New York State Department of Environmental Conservation Program of Liming Selected Acidified Waters. It will be managed as an Adirondack brook trout pond and will be reclaimed upon establishment of additional fishes to enhance and restore a native fish community. When a reclamation is determined to be necessary, the UMP will be amended to include it in the Schedule for Implementation and the pond narrative will be revised to reflect the new survey data.

Management Class: Adirondack Brook Trout

Little Hope Pond (CH-P 58)

Little Hope Pond has a survey history similar to that of Hope Pond, to which it flows. It received but a glance during the original New York State Biological Survey. When netted by New York State in 1959, the fish community contained brook trout, pumpkinseed (NBWI), brown bullhead (NBWI), and white sucker. Smallmouth bass had been reportedly stocked, but had not established. Likely this was due to the low pH which was measured at 5.6. There is an abundance of water chemistry information here as Little Hope Pond has been one of the long-term monitoring waters studied by the ALSC. The air equilibrated pH (and associated water chemistry) here has improved greatly over the years, from an average of 5.46 in 1993 to an average of 6.45 in 2009. Following the 1959 survey, a long-standing annual brook trout stocking program was initiated in

response to the private land owner's commitment to allow public fishing. When netted again in 1977, nonnative rock bass had become established and no brook trout were captured. Stocking of Little Hope Pond was terminated at this time, based upon the poor results. Little Hope Pond was next surveyed in 1984 by ALSC. The fish species in the catch included nonnative golden shiner, pumpkinseed, brown bullhead and northern redbelly dace (native). Little Hope Pond was investigated by DEC in 1999 as a reclamation candidate. This survey revealed that Little Hope Pond would be a suitable reclamation candidate due to its lack of problematic wetlands, but would necessarily be reclaimed concurrently with Hope Pond and Unnamed Pond (CH-P 60), as one of a chain of three ponds. Little Hope Pond, along with Hope Pond and Unnamed Pond (CH-P 60) was reclaimed in August of 2000. Netting conducted shortly after the reclamation showed that the reclamation was successful in eliminating trout competitors and that a productive and popular fishery was developing. A second net check conducted in June of 2005 showed the brook trout population to be doing well, but that golden shiner has been reintroduced. Little Hope Pond will be managed as an Adirondack brook trout pond and will again be reclaimed upon establishment of additional fishes to enhance and restore a native fish community. When a reclamation is determined to be necessary, the UMP will be amended to include it in the Schedule for Implementation and the pond narrative will be revised to reflect the new survey data.

Management Class: Adirondack Brook Trout

Long Pond (SC-P 170A)

Long Pond, also known as Echo Lake, is a 33-acre water that is located along the St. Regis River 2.5 miles southeast of the village of St. Regis Falls. This pond has long history of trout management. When first visited during the New York State Biological Survey in August of 1930, brown bullhead, brook trout and pumpkinseed were documented. The survey comments indicate that lake trout had been stocked, but had not become established. The pond was considered to be rather unproductive and the physical description of the pond suggest that it might have been rather acidic. Like many waters in the DMC, Long Pond received a biological survey in 1955. Only native-but-widely-introduced pumpkinseed and brown bullheads were captured during this survey, and a survey note explains that brook trout scheduled for stocking in Long Pond had possibly been diverted to other waters. The pH in June of 1955 was recorded to range from 5.2 to 5.5. A netting survey in 1963 mirrored the results of the 1955 study and liming and reclamation were mentioned as possible management actions. The pond was reclaimed with rotenone in 1965, and brook trout survival seemed to improve, although growth and condition of brook trout remained poor. Low pH continued to be problematic and was considered to be the limiting factor to fish production. No further biological

surveys were undertaken until 1983. Bullhead and pumpkinseed had become reestablished and the pH had continued to decline. pH readings on August 30, 1983 were below 4.9. Subsequent to this survey, the pond was limed. The Franklin County Federation of Fish and Game Clubs, in cooperation with DEC applied agricultural limestone to Long Pond in May of 1985. This treatment successfully raised the pH to above 7.0. Annual water chemistry monitoring showed that the pH of Long Pond remained elevated for a very satisfactory time period, with annual pH readings of greater than 6.0 through 1996. Thus, it was over a decade before the pH dropped below 6.0 and the ANC declined to less than 25 meq./l., the thresholds outlined in the Generic Liming Environmental Impact Statement indicating that a retreatment should be undertaken. The most recent general biological survey of Long pond was undertaken in 2010. Fish species collected include brook trout, white sucker, brown bullhead, pumpkinseed, and golden shiner. Given the paucity of good trout fishing ponds in the area surrounding St. Regis Falls, it would be gratifying to more effectively manage Long Pond for trout. It has a history of liming and reclamation, but because the two projects occurred decades apart, it has never had a favorable fish community and good water chemistry concurrently. Long Pond will be reclaimed to remove its trout competitors. It will be limed and again included in the DEC program of liming selected waters. A jurisdictional determination relative to the liming of Long Pond was received from the Adirondack Park Agency on June 8, 1995. The Agency determined the liming of Long Pond to be non-jurisdictional.

Management Class: Adirondack Brook Trout

Loon Pond (CH-P 69)

Loon Pond is a 20-acre bog pond that outlets to Clear Pond (CH-P 70). Loon Pond was not surveyed during the original New York State survey. A 1924 survey sheet simply states “not visited - unimportant”, and notes that brook trout were stocked a few years prior. The first known fisheries survey occurred on July 19-20, 1954. That survey showed a native fish community consisting of brook trout (stocked) and native-but-widely-introduced brown bullhead and pumpkinseed. A 1976 survey documented the same fish community. A 1984 ALSC effort again showed the fish community to consist of brook trout, pumpkinseed and brown bullhead. Physical surveys have shown that there is no demonstrable fish barrier between Loon Pond and Clear Pond, yet non-native yellow perch have never ascended the outlet stream and colonized Loon Pond. Yellow perch and largemouth bass are not strong swimmers and it is common for them to not migrate upstream to other waters. Under the present situation there is no plan to reclaim Loon Pond. However, if Loon Pond were to become infested with yellow perch or largemouth bass a reclamation would be warranted because experience has shown that

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management for native brook trout is not possible when yellow perch or largemouth bass are established in a lake or pond. Loon Pond will be managed as an Adirondack brook trout pond. If Loon Pond should become infested with yellow perch or largemouth bass, it will be reclaimed to enhance and restore a native fish community. When a reclamation is determined to be necessary, the UMP will be amended to include it in the Schedule for Implementation and the pond narrative will be revised to reflect the new survey data.

Management Class: Adirondack Brook Trout

Lost Pond (SC-P200)

Lost Pond is a six-acre pond located southeast of Mountain Pond (SC-P 198). The pond was not visited during the original New York State biological survey, but was said to have been stocked with brook trout prior to that time (circa 1930). When first surveyed in 1955, only native white sucker were captured. The suckers were especially abundant; over 100 were captured in an overnight gillnet set. White sucker are known to be serious competitor to brook trout, and the pond was reclaimed in the fall of 1969 to facilitate management with native brook trout. Lost Pond was netted again in 1976. The 1976 survey showed the pond to be a brook trout monoculture. The Adirondack Lake Survey Corporation surveyed Lost Pond in 1984. This survey reaffirmed that Lost Pond contained only brook trout. Both the 1976 DEC survey and the 1984 ALSC survey found that the pH of Lost Pond was at a critically low level, yet the pond was able to sustain a good brook trout population. Another unusual feature of Lost Pond was observed during the ALSC survey: Lost Pond sits in a large depression. It has a flowing outlet which disappears underground a short distance from the pond. The most recent survey of Lost Pond was a 2005 DEC survey conducted for unit management plan purposes. This survey showed that golden shiner have now been introduced to the pond and that the pond should again be reclaimed with rotenone, it is noteworthy that it has been very nearly 40 years since the previous reclamation. Lost Pond was reclaimed with rotenone to restore a native fish population in 2016. The Adirondack Park Agency was consulted and Use of Pesticides permit was obtained. Although it is not anticipated at this time should a reclamation, due to the introduction of competitive fish species, again become necessary, the UMP will be amended to include Lost Pond in the Schedule for Implementation and the pond narrative will be revised to reflect the new information.

Management Class: Adirondack Brook Trout

Madawaska Pond (SC-P 225)

Madawaska Pond was recently acquired by New York State as part of the Champion International purchase in the Town of Santa Clara, Franklin County. It was studied briefly during the original New York State Biological Survey on August 11-12, 1930. Brook trout, brown bullhead (NBWI), creek chub (NBWI), pumpkinseed (NBWI), white sucker and common shiner were taken in an overnight gillnet set. A fallfish (nonnative) was taken by angling at the time of the survey. The water was described as a large meandering flow, with a six-foot dam at the outlet. Likely that description holds true today. The only other survey information on record is a 1984 ALSC survey. This survey confirmed the maximum depth to be only 11' indicating the lake owes its existence to the outlet dam. Species captured included native white sucker, native-but-widely-introduced brown bullhead and pumpkinseed and non-native yellow perch and golden shiner. Only one brook trout was taken, not surprising, given the fact that yellow perch, a species devastating to brook trout populations, were very abundant. The air equilibrated pH was favorable at 6.75. Madawaska Pond is fed by Quebec Brook and has extensive wetlands, making a reclamation to remove undesirable fish species infeasible. The lake will be managed to preserve its native fish species in the presence of nonnative and historically associated species.

Management Class: Warmwater

McColloms Pond (SC-P 188)

McColloms Pond has many of the same attributes of nearby Baker Pond; both are located adjacent to the Osgood River and connect to it via short, low gradient outlets. Despite its boggy nature and dark stained water, it has high pH and alkalinity. The first biological survey was a Conservation Department effort in June of 1957. Because the pond connects to the Osgood River it shares many or all of the same fish species. The 1957 netting captured nonnative northern pike, yellow perch and golden shiner, and native-but-widely-introduced brown bullhead and pumpkinseed. The pond received a second survey by ALSC in 1984. This survey documented the same species as those captured in 1957 plus white suckers (native). The air equilibrated pH during the survey was 7.05 and the ANC was 156.4, quite high for an Adirondack pond. Because the pond is located on a flat plain and is contiguous with the Osgood River it cannot be reclaimed to remove nonnative fish species. McColloms Pond will be managed to preserve its native fishes in the presence of nonnative species and historically associated species.

Management Class: Warmwater

Meacham Lake (SC-P 179A)

The earliest fisheries data for Meacham Lake in DEC files is an April 19-22, 1955 survey. By 1955 the fish community included a number of nonnative species including, northern pike, yellow perch, golden shiner, and lake whitefish. Other species captured during the survey included native brook trout, lake trout, ciscoes and white sucker, native-but-widely-introduced pumpkinseed and brown bullhead and introduced brown trout. The ciscoes and lake whitefish were considered to be abundant. A second survey conducted in 1964 documented a similar fish community, with nonnative smallmouth bass and fallfish showing up in the net catch. In 1971 a survey employing gillnets, trapnets and angling failed to catch any salmonids. Smallmouth bass, white sucker, brown bullhead, golden shiner, pumpkinseed, fallfish, yellow perch and golden shiner were all represented in the catch. It is possible that no salmonid species were taken during this survey because all the survey gear was deployed in the shallow south end of the lake. In 1984 two new species appeared in a survey, nonnative rainbow smelt, and common shiner. Lake whitefish, ciscoes and lake trout were again represented in the catch, but not in high numbers.

Another biological survey of Meacham Lake occurred in June of 1990. The fish community was again dominated by nonnative fishes including northern pike, golden shiner, smallmouth bass, yellow perch, and fallfish. Nonnative rainbow smelt and pickerel were captured for the first time. Lake whitefish and stocked splake (both salmonids) were represented in the net catch, suggesting that 1984 survey did not fully represent the species present. Native white sucker and pumpkinseed were again documented. The most recent biological survey of Meacham Lake took place in 2001, with a netting result very similar to that of the 1991 effort. Splake were much more abundant in the catch, perhaps reflecting refinement of the stocking policy for this hybrid. Landlocked salmon were not captured despite annual stocking and the lack of landlocked salmon lead to the cancellation of this stocking policy, although surplus landlocks are occasionally stocked here. There are reports that the northern pike population is reduced and this species often can be susceptible to a variety of very common infections. Meacham Lake continues to provide a very popular fishery in both summer and winter.

One feature of the Meacham Lake fish community that should be mentioned is that high levels of mercury that have been found in yellow perch and other species. The New York State Health Department now advises to eat no smallmouth bass or yellow perch over 12" taken from Meacham Lake and to eat no more than 1 meal per month of northern pike or smaller yellow perch. Advisories for children and women of child bearing age are even more conservative. The suspected sources include airborne transport from industrial pollution. Many lakes, rivers and ponds in New York are now included in the

Health Department advisories. A new boat launch has been constructed at Meacham Lake providing improved angler access.

Meacham Lake will be managed to preserve its native species in the presence of nonnative and historically associated species.

Management Class: Two-story

Mountain Pond (SC-P 57)

Little historical fisheries data exists for 29-acre Mountain Pond, located 1 mile east of the northern end of Lake Kushaqua. Not studied during the original New York State Biological Survey, it was noted to be the water supply for the Lake Kushaqua Sanatorium. A similar notation was made in July of 1953. The pond shoreline is now partly in the DMC and mostly in recently acquired Kushaqua Tract Conservation Easement Lands. The pond received a fisheries survey in 1985, conducted by the Adirondack Lake Survey Corp. The ALSC survey documented favorable pH and oxygen levels, with the air equilibrium pH values near neutral. The pond is shallow with a maximum depth of 6.9 feet. The survey showed that the fish community at that time consisted of all native species including brook trout, northern redbelly dace, white sucker and native-but-widely-introduced creek chub and brown bullhead. This water was surveyed again in 2014 as part of the planning process for the Kushaqua Tract Recreation Management Plan and was found to contain white sucker, creek chub, and brown bullhead. With a maximum depth of less than seven feet and fairly extensive wetlands on the inlet and outlet, management options for Mountain Pond are limited. Due to the abundance of competitors and the warm shallow nature of the pond a stocking policy for brown trout was initiated. Mountain Pond will be managed to preserve its native fishes in the presence of nonnative and historically associated species.

Management Class: Cold Water

Mountain Pond (SC-P 198)

This Mountain Pond is a 59-acre water located just east of New York State Route 30, approximately 3 miles north of Paul Smiths College. The pond has a long and extensive history of fish management. Its moderate size, ease of access and limited watershed has made it an ideal candidate for intensive management, including pond reclamation with the fish pesticide rotenone.

Mountain Pond was visited, but not surveyed during the original New York State Biological Survey circa 1930. Largemouth bass and brown bullhead were reported. It

was netted in May of 1950. The fish community consisted of non-native yellow perch, largemouth bass, native-but-widely-introduced brown bullhead and native white sucker and brook trout. Mountain Pond was reclaimed with rotenone in August of 1950, making it one of the first area waters to have undesirable fish removed chemically. The new technique whereby formerly unproductive waters were restored to brook trout was evidently very popular; creel survey data in 1955 recorded up to 40 anglers per day on Mountain Pond during early May. The relatively controlled environment at Mountain Pond i.e. without multiple non-trout competitors was also useful for early studies involving different trout strains and species.

Since Mountain Pond was reclaimed in 1950 it has cycled between providing a very productive fishery and being dominated by trout competitors. Although it has tended to have a history of unauthorized fish introduction, its roadside nature has at the same time made it an ideal water for experimental and brood stock purposes. To enumerate all the studies that have taken place at Mountain Pond is beyond the scope of this unit management plan. It has been reclaimed three times since the 1950 treatment, including the most recent reclamation which occurred in 1997. Since the 1997 rotenone treatment, Mountain Pond has been a haven for Windfall strain brook trout, an Adirondack heritage strain. It has been a very valuable source of eggs for the New York State wild trout program. Other species have become established since 1997 including native common shiner, non-native golden shiner and native-but-widely-introduced brown bullhead and creek chub. Mountain Pond continues to provide a possibly source of eggs for the wild trout program. However, given the importance of this program, a reclamation will be conducted when the Bureau of Fisheries determines it to be necessary. The Adirondack Park Agency will be advised of the fish community status and a Use of Pesticides in Wetlands Permit will be obtained from APA prior to a treatment.

Management Class: Adirondack Brook Trout

Mud Pond (SC -P 168)

Mud Pond was first surveyed during the original New York State Biological Survey in August of 1930. It was reported to be shallow and to be dominated by northern pike and brown bullheads. Sunfish and white suckers were also reported. Mud Pond was netted more extensively by the Adirondack Lake Survey Corporation in 1985. This survey showed the pond to be dominated by non-native yellow perch, golden shiner and northern pike. Native white suckers and native-but-widely-introduced brown bullhead and pumpkinseed were also present. A bottom sounding map was made during this survey which showed the maximum depth to be only 3 feet. Given the shallow nature of this pond and its direct connection to the Saint Regis River, management options are limited.

Mud Pond will be managed to preserve its native species in the presence of non-native and historically associated species.

Management Class: Warmwater

Mud Pond (SC-P 185)

This 5.7-acre pond lies just off the Osgood River in the Town of Brighton, Franklin County, and is directly connected to the Osgood River by a short, low gradient outlet. The pond is reported to be only one foot deep. Mud Pond has never received a biological survey but is thought to contain generally the same fish species as the adjacent river; non-native yellow perch, and native-but-widely-introduced brown bullhead and pumpkinseed. Mud Pond will be managed to preserve its aquatic resources for their intrinsic ecological value.

Management Class: Other

Oregon Pond (CH-P83)

This 20-acre pond has received very little fish management attention despite its close proximity to public roads. Significant portions of the shoreline are in private ownership and it has many seasonal and year-around residents. However, given that portions of the shoreline are in the Debar Mt. Wild Forest and the Buck Pond intensive use area, it is somewhat surprising that Oregon Pond has not been biologically sampled more frequently.

Oregon Pond was netted and snorkeled by DEC in 1967. Fish actually captured in this survey included non-native yellow perch and golden shiner and native white sucker. Also, “Catfish family” and smallmouth bass were observed. Oregon Pond received a second biological survey in a 1986 Adirondack Lake Survey Corporation effort. The 1986 study documented non-native yellow perch, native-but-widely-introduced brown bullhead and pumpkinseed and native white sucker. The water chemistry of Oregon Pond was favorable for fish production, although one pH reading from August 1986 was slightly below 6.0. Because Oregon Pond has no inlet and no outlet it was at one time considered as a candidate for chemical reclamation with rotenone to remove the non-native yellow perch so that it could be managed for salmonids. The project was never pursued because of the number of private camps that used the water for household purposes. A 2012 chemistry survey performed by NYSDEC showed abundant dissolved oxygen to a level of about 20 feet but little dissolved oxygen below that point and the air equilibrated pH was 6.5. Oregon Pond will receive an updated biological survey to document the present fish community. Future fish management options, including

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stocking of additional species, will be evaluated following the collection of updated information. The pond will be managed to preserve its native species in the presence of non-native and historically associated species.

Management Class: Warmwater

Osgood Pond (SC-P 202)

Osgood Pond is a significant water body with portions of its shoreline in public and private ownership. It is one of the best examples of the finality of the problems encountered when non-native fish species are introduced to large lowland bodies of water. Osgood Pond was historically an excellent brook trout water which was sustained by natural reproduction. Unfortunately, it is a lake which was subjected to several unwise fish introductions early on. By the time of the original biological survey of New York State, which took place around 1930, Osgood Pond was known to have a fish community dominated by non-native fish species including smallmouth bass, yellow perch, largemouth bass and northern pike. At over 600 acres Osgood Pond represents a huge brook trout resource that cannot be recovered. Like most other large lowland waters, it cannot be reclaimed due to extensive wetlands, a low gradient outlet, a large watershed including other lakes, and the sheer magnitude of such a project. Osgood Pond was surveyed by the New York State Conservation Department (now Department of Environmental Conservation) several times between 1950 and 1974. It consistently had a fish community consisting of a few native species including white sucker, brown bullhead (NBWI) and pumpkinseed (NBWI), with non-native smallmouth bass, largemouth bass, golden shiner, yellow perch and northern pike. It should be noted that Osgood Pond is considered a productive body of water and growth rates of the warmwater species were considered to be very good. There is currently a health advisory in effect for Osgood Pond; it is recommended that no more than 1 meal per month of smallmouth bass be eaten from this water. Advisories for children and women of childbearing age are even more conservative. The suspected sources include airborne transport from industrial pollution. Many lakes, rivers and ponds in New York are now included in the Health Department advisories.

Osgood Pond will be managed to preserve its native species in the presence of non-native and historically associated species.

Management Class: Warmwater

Rainbow Lake (CH-P 65)

Like Osgood Pond, Rainbow Lake is a rather large lake that was formerly a good brook trout water, now dominated by non-native fish species. Rainbow Lake is 354 acres in size and is located in the Towns of Franklin and Brighton in Franklin County. There is a moderate number of private homes and camps on the southern and western shoreline while a significant amount of the northern shore is in state ownership. The public can reach Rainbow Lake by launching at the Buck Pond campground and traveling from Kushaqua Lake and Rainbow Narrows.

A short article which appeared in the August 22, 1886 edition of *Forest & Stream*, a weekly sportsmen's publication, gives one an idea of what the brook trout fishing was like in Rainbow Lake and the surrounding area before the turn of the 20th century; "The Waters around Rainbow are full of trout. I know of no better place to fish, and I have caught many trout there. I once caught a mess weighing all the way from 3/4 to 1 lb. each. It was one of my best fishing times.... I have just returned from a fishing trip up Rainbow. I caught a good many [trout] weighing 1/4 lb. each. I fished up Rainbow River and Lilypad Pond, and a friend, the same day, fishing up the Big Inlet, came in with a number weighing over 1 lb. each. Mr. Wardner [the local innkeeper] was so pleased with our days catch that he too, thorough sportsman that he is, could not resist the temptation to go that very evening up the stream to try his luck."

Rainbow Lake was not studied in depth during the original biological survey (circa 1930). The lake is thought to have still contained a mostly native fish community at that time. Yellow perch are thought to have been introduced into the system sometime in the mid-1930s. Survey notes in 1954 indicate that largemouth bass were introduced shortly before 1950 and that brook trout fishing was very poor except in the early spring. The 1954 New York State Conservation Department survey documented non-native largemouth bass, yellow perch and golden shiner, native white sucker, longnose sucker and brook trout and native-but-widely-introduced pumpkinseed and brown bullhead. A survey conducted by New York in 1979 added two more non-native fish species; rock bass and northern pike.

Because of the dominance of non-native, warmwater species, recent fish management actions have focused on this type of fishery. Manipulation of the size limit for northern pike had little impact on the fishery. A cooperative fish stocking effort with the Rainbow Lake Association to introduce walleye was undertaken in 1990-1992. Follow-up survey work conducted in 1997 indicated that walleye survival from these introductory stockings was low, however NYSDEC again stocked walleye from 2003 to 2006. A 2009 survey found that walleye were surviving but that natural reproduction was limited. Currently walleye are stocked here on a limited basis. Both the 1997 and 2009 surveys

documented fish communities dominated by non-native introduced fishes, with yellow perch being particularly abundant, smallmouth bass were also documented in the 2009 survey. The abundant yellow perch population apparently is providing the forage base for the walleye population. This survey also documented the presence of native minnow species including common shiner and creek chub.

Because Rainbow Lake has extensive wetland areas and a very large watershed, no chemical reclamation to remove the non-native fish species is possible. Instead it remains an example of the type of large lake systems which used to be prime habitat for native brook trout.

Rainbow Lake will be managed to preserve its native species in the presence of non-native and historically associated species.

Management Class: Warmwater

Rice Lake (SC - P 178)

Very little historical fisheries information exists for this 135-acre lake, not doubt because it is virtually surrounded by private land. One small parcel of state land exists on the north shore, but this parcel is inaccessible from public land. A 1930 survey sheet indicated brown bullhead and suckers were known to inhabit the lake and a few soundings showed the lake to be shallow.

Introduced fish species became a problem in Rice Lake, and the lake was reclaimed with rotenone privately during the early 1980s. It was stocked with brook trout following the reclamation and the trout grew exceptionally well following the reclamation. Natural reproduction of brook trout was insufficient to maintain the population and the private landowner stocked the pond with largemouth bass and no longer managed the pond for largemouth bass.

At this time the public has no access to Rice Lake and there are no management plans for this water.

Management Class: Other

Saint Regis Falls Impoundment (SC-P5250)

This impoundment of the Saint Regis River is found in the village of St. Regis Falls. The impoundment is relatively long and narrow and is 157 acres in size, it is formed by the Azure Mountain Hydroelectric dam. Access to this water is provided by a town launch on

the south side of the lake not far from the dam. An electrofishing survey was performed by DEC in 2012 and the following nonnative species were collected; northern pike, golden shiner, rockbass, smallmouth bass, largemouth bass, yellow perch and fallfish. Three native but widely introduced species were also collected; brown bullhead, white sucker, and pumpkinseed. Subsequent to the 2012 survey a walleye stocking policy was initiated, beginning in 2014. In 2016 another survey was undertaken to assess the walleye stocking. Two new species were added to the species assemblage; the nonnative black crappie and the recently stocked walleye. Three walleye were collected in the 2016 survey proving that currently walleye are surviving in this impoundment.

Saint Regis Falls Impoundment will be managed to preserve its native species in the presence of non-native and historically associated species.

Management Class: Warmwater

Santa Clara Flow (SC-P207)

Santa Clara Flow is an impoundment of the Middle Branch of the St. Regis River, it is about 5 miles long, 248 acres in size, and is formed by a dam near the Town of Santa Clara. During the biological survey of 1930 Santa Clara Flow itself was not examined because of a failure with the dam in Santa Clara. Reports suggest that excellent brook trout fishing was found here, primarily due to the extensive tributary system. Restoration of the dam was expected to restore the trout fishery but the introduction of nonnative yellow perch at the time of the dam failure essentially ended the trout fishery in Santa Clara Flow proper, although brook trout persisted in the cold-water inlets. The first survey was performed by DEC in 1964. This survey collected nonnative yellow perch, and golden shiner, native but widely introduced pumpkinseed, and brown bullhead, and native white sucker, longnose sucker, and common shiner. The tributary system was also sampled and native cutlips minnow, creek chub, brook trout, and madtom were collected. With the addition of yellow perch to the system, but a lack of large warmwater predators a rainbow trout stocking policy was initiated following this survey. A 1975 DEC survey found only one additional species, the introduced rainbow trout. The rainbow trout stocking policy was terminated in 1982 following the addition of nonnative northern pike into the system. This species was documented during an ALSC survey in 1986 as was one other additional fish species, the brook stickleback.

Santa Clara Flow will be managed to preserve its native species in the presence of non-native and historically associated species.

Management Class: Warmwater

Skiff Pond (SC - P 5075)

Skiff Pond is a small man-made pond near the headwaters of Hatch Brook on what was formerly the Debar Mountain Wildlife Management Area. Its depth is controlled by a metal standpipe. The simple structure creates a pond slightly over 9 acres in area. The only known fisheries survey of Skiff Pond is a 1984 Adirondack Lake Survey Corporation effort which took place on October 22, 1984. This survey documented a native fish community consisting of brook trout, northern redbelly dace and pearl dace. These species are likely the same species that existed in the brook prior to construction of the spillway. The brook trout were rather abundant and were naturally reproducing. The water chemistry was good for fish survival with favorable pH and high ANC values. Skiff Pond will be managed to preserve its native fish community. The existing dam structure will be inspected and repaired if necessary.

Management Class: Adirondack Brook Trout

Slush Pond (SC P - 245)

Slush Pond, approximately 17 acres in size, is historically a productive brook trout pond. It was surveyed during the original biological survey of New York in July of 1930. Species collected during the survey included native brook trout, white sucker, longnose sucker, common shiner, and native-but-widely-introduced brown bullhead, creek chub and pumpkinseed. There were two survey comments, both worth noting, “S.T. [brook trout] excel. in spring of year.” and “No perch in this pond”. The comments are noteworthy because they show that it was widely realized that the introduction of yellow perch was the death knell to brook trout fishing. By 1952, the formerly native fish community in Slush Pond had become dominated by non-native species. A July 1952 survey captured native brook trout (by now uncommon), white sucker, longnose sucker, brown bullhead and pumpkinseed and non-native yellow perch and golden shiner. Slush Pond was reclaimed with rotenone in August of 1952 to remove the brook trout competitors. The reclamation showed that non-native rainbow smelt had also been introduced to the pond. Native creek chub and black nose dace were also observed.

Netting conducted in Slush Pond in June of 1966 indicated that the reclamation had been successful in eliminating many of the trout competitors including yellow perch, rainbow smelt, both species of sucker, pumpkinseed and creek chub. Golden shiner, dace and brown bullhead were still present, but the brook trout were numerous, including small, naturally spawned fish in the main tributary. A gillnet and seine survey in July, 1972 had similar findings to the 1966 effort. Although the trout populations in Slush Pond was still relatively healthy in 1972, the pond was reclaimed again in 1974 in cooperation with Cornell University. The University wished to reclaim a large body of water

downstream of Slush Pond for research purposes and hoped to manage the water as a brook trout monoculture. A follow up survey in July of 1977 captured brook trout and northern redbelly dace.

Slush Pond was netted by the Adirondack Lake Survey Corporation in 1984. This survey showed that several trout competitors had reestablished in Slush Pond; the catch consisted of brook trout, white sucker, golden shiner, creek chub and blacknose dace. Likely the poor results of this second reclamation were related to the project treatment concentration. The target concentration was 0.5 parts per million, only half the concentration now considered necessary to effectively remove brown bullheads and golden shiners.

The most recent survey effort of Slush Pond was a DEC trap net survey in 2014. Although this water is not stocked, brook trout remain and golden shiner, creek chub and brown bullhead were also collected. Fish collected in this survey were sent to the USFWS as part of a wild fish health surveillance program. Slush Pond will be managed to preserve its native fish species in the presence of non-native and native-but-widely-introduced fish species.

Management Class: Adirondack Brook Trout.

Spring Pond (SC P - 76)

Spring Pond is a small pond just east of State Route 30 near the southern end of the Deer River Flow. The only fisheries survey on record is a 1985 Adirondack Lake Survey Corporation study that occurred in October of that year. This survey showed that Spring Pond is shallow, with a maximum depth of 7 feet, and has a diverse fish community consisting of native and non-native fish species. The catch consisted of native white sucker and brown bullhead (NBWI) and non-native northern pike, yellow perch and golden shiner. Given the small size of the pond (3 acres) and its shallow nature, it has limited fish management potential.

Spring Pond will be managed to preserve its native fish species in the presence of non-native species.

Management Class: Warmwater

Star Mountain Pond (SC P - 182)

This Pond, called Northern Star Mountain Pond by the Adirondack Lake Survey Corporation has little historical fish information. The 1985 ALSC survey showed it to be

small; approximately 3 acres, and shallow; maximum depth 4 feet. The pH measured during this survey was quite high for an Adirondack water at 7.17 and the ANC was 155. The pond contained brook trout in a fish community consisting of native fish species including creek chub, pearl dace, and northern redbelly dace. Although there was no visible inlet to the pond, it had a significant outlet. This suggests spring flow that would explain the pond's ability to support brook trout despite its shallow nature.

Star Mountain Pond (P 182) will be managed to preserve its native fish community.

Management Class: Adirondack Brook Trout

Star Mountain Pond (SC P - 183)

This Pond, also known as Southern Star Mountain Pond, has many similarities with its sister water to the north. Like Northern Star Mountain Pond, it is shallow and has no inlet, but a flowing outlet, indicating significant spring flow. Like its twin, when surveyed by the Adirondack Lake Survey Corporation in 1985, it had a native fish community consisting of brook trout, creek chub, pearl dace and northern redbelly dace. At 8 acres, the southern pond is larger and has more bog type habitat., but the water chemistry was quite favorable with a pH of 7.3 and an ANC of 175.2.

Star Mountain Pond (P 183) will be managed to preserve its native fish community.

Management Class: Adirondack Brook Trout

Toad Pond (SC P - 244)

Toad Pond is an 8-acre pond which sits in a depression near the end of the Slush Pond Road in the Town of Brighton. It has some bog type areas, but is largely surrounded by coniferous forest. The pond is shallow over much of its area, but has an 18-foot-deep basin on the southern end. Toad Pond was stocked for many years with brook trout, but this stocking may have not been very productive due to low pH. An overnight gill net set in May of 1955 captured no fish. 300 feet of gillnet set overnight on July 29-30, 1958 captured 21 brook trout which led to a decision to continue trout stocking. A DEC acid rain study conducted in 1976 incorporated a minnow trap, rotenone and gill nets. No fish were captured in this effort and the stocking policy was discontinued. Toad Pond received a full biological survey in 1984 by the Adirondack Lake Survey Corporation. This survey determined that the pond was fishless and was critically acidified with a pH of 4.47. In 2012 a DEC water chemistry survey found that the pH had risen to 5.43 with an ANC of 10.62 along with a toxic aluminum value of 0.41 $\mu\text{moles/L}$ (2.0 $\mu\text{moles/L}$ or less is generally considered the level at which brook trout survival is possible). However,

very poor dissolved oxygen levels make fish survival at this time unlikely. If chemical conditions improve in the future, Toad Pond will be stocked. brook trout.

Until such a time as chemical conditions allow fish stocking Toad Pond will be managed to preserve its remaining aquatic resources for their intrinsic value.

Management Class: Adirondack brook trout

Unnamed Pond (CH-P54)

This unnamed pond is part of the inlet system for Chub Pond, it is quite shallow and has little fisheries potential. Should a reclamation be undertaken for Chub Pond (CH-P56) this water would need to be reclaimed as well. Fathead minnows were documented here in a 2012 DEC survey. Should undesirable fish species remain problematic in Chub Pond, Unnamed (CH-P54) will also be scheduled for reclamation with rotenone. In that event, it will again be necessary to reclaim Unnamed Pond (CH - 54) as well. When a reclamation is determined to be necessary, the UMP will be amended to include it in the Schedule for Implementation and the pond narrative will be revised to reflect the new survey data.

Management Class: Adirondack Brook Trout

Unnamed Pond (SLC-P5213)

This is a seasonal waterbody on the outlet of Lost Pond (SC-P200), the water level can vary significantly here, with little open water in some years. This water was reclaimed in 2016 as part of the reclamation of Lost Pond. Although it is not anticipated at this time should a reclamation, due to the introduction of competitive fish species, again become necessary, the UMP will be amended to include Lost Pond in the Schedule for Implementation and the pond narrative will be revised to reflect the new information.

Management Class: Adirondack Brook Trout

Unnamed Pond (CH - P 60)

This Unnamed Pond receives the outlet of Big Hope Pond. From Unnamed Pond, the outlet flow disappears underground rather than connecting to a visible stream. Unnamed Pond (CH- 60) is important from a fisheries standpoint, as it was reclaimed with rotenone in year 2000 in concert with Hope Pond and Little Hope Pond. It was necessary to reclaim the Unnamed Pond in order to remove undesirable fish from the entire system. While Unnamed Pond (CH - 60) has little fish management potential due to its small size

Appendix D – Pond Narratives

and shallow nature, it is important from a fish reclamation standpoint. Should undesirable fish species again become problematic in Hope and Little Hope Ponds, they will be scheduled for reclamation with rotenone as described above. In that event, it will again be necessary to reclaim Unnamed Pond (CH - 60) as well. When a reclamation is determined to be necessary, the UMP will be amended to include it in the Schedule for Implementation and the pond narrative will be revised to reflect the new survey data.

Management Class: Adirondack Brook Trout

Unnamed Ponds

Thirty-two other unnamed ponds, at least partly located within this Unit, range in size from 0.2 to 10 acres and comprise a total of 86.8 acres. Most of these ponds have never been surveyed, they probably contain native and nonnative fish communities. Some of these waters are directly connected to stream systems and others, due to their small size and shallow nature, have little fisheries potential.

For the planning period these unnamed ponds will be managed to protect the fish species present for their intrinsic value.

Management Class: Unknown, Other.

Winnebago Pond (P - SC 5141)

Winnebago Pond is a small pond with a mean depth of only 2.6 feet. It was surveyed by the New York State Conservation Department in July of 1957 and by the Adirondack Lake Survey Corporation (ALSC) in 1984. Brook trout were present in both surveys. The ALSC survey also captured native pearl dace and creek chub and non-native golden shiner and brook stickleback. The persistence of brook trout in such a shallow pond suggests that the pond is spring fed. Winnebago Pond will be managed to preserve its native species in the presence of non-native species.

Management Class: Adirondack Brook Trout

Table 1. Physical Inventory Data for Pondered Waters in the Debar Mountain Complex

Name	Pond #	Quad Name	Area (acres)	Max Depth (ft)	Mean Depth (ft)	Management Class
Baker Pond	P187	Meacham Lake	17.8	23	10.5	Warmwater
Barnum Pond	P262	Saint Regis	90.9	10	6.9	Warmwater
Benz Pond	P221	Meno	24.5	22	9.9	Adirondack Brook Trout
Beaver Valley Pond	P201	Saint Regis	12.6	6	2.6	Warmwater
Buck Pond	P61	Loon Lake	128.2	14	7.5	Warmwater
Buck Pond	P85	Meacham Lake	9.1	7	4.6	Adirondack Brook Trout
Chub Pond	P56	Loon Lake	7.4	20	9.5	Coldwater
Clear Lake	P195	Saint Regis	28.4	25	10.8	Adirondack Brook Trout
Clear Pond	P70	Gabriels	96.9	55	24	Two-Story
Clear Pond	P85A	Meacham Lake	81.5	63	27.9	Coldwater
Debar Pond	P38	Owls Head	86.5	30	15.1	Coldwater
Deer River Flow	P73	Lake Titus	408.2	12	3.6	Warmwater
Duck Pond	P40	Debar Mountain	58.8	12	4.3	Other
Gourdshell Ponds	P74	Lake Titus	5.4	5	2.3	Warmwater
Gourdshell Ponds	P75	Lake Titus	4.7			Unknown
Grass Pond	P171	Santa Clara	4	23	13.8	Other
Grass Pond	P192	Saint Regis	3.5	12	7.2	Other
Hope Pond	P59	Loon Lake	22.7	38	19	Adirondack Brook Trout
Jones Pond	P206	Gabriels	142.6	9	4.3	Warmwater
Lake Kushaqua	P55	Loon Lake	377.6	91	20.3	Two-Story
Lake Margaret	P184	Meacham Lake	3.7	30		Other
Little Clear Pond	P172	Santa Clara	4.9	46	18	Adirondack Brook Trout
Little Hope Pond	P58	Debar Mountain	7.2	20	11.5	Adirondack Brook Trout
Long Pond	P170A	Santa Clara	33.4	60		Coldwater
Loon Pond	P69	Gabriels	19.5	15	6.9	Adirondack Brook Trout
Lost Pond	P200	Saint Regis	6.7	13	6.9	Adirondack Brook Trout
Madawaska Pond	P225	Meno	227.6	11	3	Warmwater
McCulloms Pond	P188	Meacham Lake	16.8	20	6.9	Warmwater
Meacham Lake	P179A	Meacham Lake	1184.6	100		Two-Story
Mountain Pond	P57	Debar Mountain	28.4	7	2.6	Adirondack Brook Trout
Mountain Pond	P198	Saint Regis	58.6	29	8.9	Adirondack Brook Trout
Mud Pond	P168	Saint Regis Falls	8.2	3	2.6	Other
Mud Pond	P185	Meacham Lake	5.7	1		Warmwater
Oregon Pond	P64	Bloomingtondale	20	37	14.8	Warmwater
Osgood Pond	P202	Saint Regis	508.5	15		Warmwater
Rainbow Lake	P66	Gabriels	588.6	9	2.6	Warmwater

Appendix D – Pond Narratives

Name	Pond #	Quad Name	Area (acres)	Max Depth (ft)	Mean Depth (ft)	Management Class
Rice Lake	P178	Meacham Lake	135.4	8		Other
Skiff Pond	P5075	Debar Mountain	9.6	14	5.2	Adirondack Brook Trout
Slush Pond	P245	Saint Regis	16.8	15	7.5	Adirondack Brook Trout
Spring Pond	P76	Lake Titus	3.2	7	4.3	Warmwater
Star Mountain Pond	P182	Meacham Lake	3	4	3.6	Adirondack Brook Trout
Star Mountain Pond	P183	Meacham Lake	7.7	4	3.9	Adirondack Brook Trout
Toad Pond	P244	Saint Regis	6.7	18	3.6	Other
Unnamed Water	P54	Loon Lake	1			Unknown
Unnamed Water	P60	Debar Mountain	0.7	12	5.9	Adirondack Brook Trout
Unnamed Water	P68	Gabriels	1.7	26	7.5	
Unnamed Water	P71	Gabriels	0.2			
Unnamed Water	P189	Meacham Lake	0.5	23	11.5	
Unnamed Water	P191	Saint Regis	0.7			
Unnamed Water	P197	Saint Regis	0.5			
Unnamed Water	P206A	Gabriels	3.7			
Unnamed Water	P5054	Owls Head	1.5			
Unnamed Water	P5055	Owls Head	6.9			
Unnamed Water	P5056	Owls Head	1.2			
Unnamed Water	P5058	Owls Head	1.5			
Unnamed Water	P5059	Owls Head	1			
Unnamed Water	P5060	Owls Head	1.5			
Unnamed Water	P5070	Debar Mountain	1.2			
Unnamed Water	P5078	Debar Mountain	2.2			
Unnamed Water	P5081	Santa Clara	3.2	24	8.2	
Unnamed Water	P5084	Lake Titus	0.7			
Unnamed Water	P5085	Lake Titus	2.5			
Unnamed Water	P5113	Owls Head	0.7			
Unnamed Water	P5115	Owls Head	1.2			
Unnamed Water	P5140	Lake Titus	3			
Unnamed Water	P5142	Meacham Lake	2.2			
Unnamed Water	P5176	Brandon	2			
Unnamed Water	P5203	Saint Regis	1.7			
Unnamed Water	P5206	Saint Regis	3.5			
Unnamed Water	P5213	Saint Regis	0.5			
Unnamed Water	P5248	Saint Regis	1.7			
Winnebago Pond	P5141	Debar Mountain	3.5	3	2.6	Other

Table 2. Chemical and Biological Survey Data for Ponded Waters in the Debar Mountain Complex.

Name	Pond #	Most Recent Chemical Survey					Most Recent Biological Survey		
		Date	Source	ANC (ueq/l)	pH	Conductivity	Year	Source	Fish Species and Number Caught
Baker Pond	P187	07/18/84	ALSC	244.1	7.25	43.6	1984	ALSC	NP(5), WS(10), BB(3), PKS(4), YP(15)
Barnum Pond	P262	06/29/98	DEC	123.82	7.13	90.9	1998	DEC	LMB(7), ST(4), PKS(9), BB(124), GS(30)
Benz Pond	P221	08/14/06	DEC	29.7	6.37	9.46	2000	DEC	ST(9), BB(4), PKS(1).
Beaver Valley Pond	P201	07/13/94	DEC	138.4	6.97	27.9	1994	DEC	BB(57), PKS(17), WS(16), NRD(170), GS(9), CC(3), &
Buck Pond	P61	07/18/84	ALSC	223.1	7.14	37.5	1984	ALSC	NP(10), YP(299), BB(85), PKS(29), RB(6), KF(54), WS(12), GS(31), BNM(27), TGM(1)
Buck Pond	P85	08/07/86	ALSC	610.6	7.78	92.7	1986	ALSC	ST(13), WS(45), NRD(2), BB(1), PKS(1)
Chub Pond	P56	07/12/94	DEC	111.9	7.09	26.9	1994	DEC	BT(5), WS(12), GS(5), CSH(1), NRD(5), CC(1)
Clear Lake	P195	07/11/85	ALSC	7.9	5.68	12.5	1985	ALSC	NP(7), GS(1), WS(18), BB(68), PKS(1), LMB(1), YP(10)
Clear Pond	P70	08/05/85	ALSC	117.7	7.25	33.6	1985	ALSC	SPK(1), NP(3), GS(16), BNM(5), WS(24), BB(3), KF(3), RB(18), PKS(1), LMB(3), YP(94)
Clear Pond	P85A	07/19/00	DEC	15.91	6.32	56.8	2000	DEC	SPK(3), KOK(1), WS(1). In 1991-ST(1), LT(1), SPK(5), RSM(4), GS(51), BNM(119), CC(13), WS(95), BB(5), PKS(29)
Debar Pond	P38	07/05/00	DEC	138.4	7.44	28	2000	DEC	LLS(5), ST(3), SPK(22), WS(33), BB(11). In 1984-ST(1), RSM(33), lake chub(5), NRD(43), CC(29), pearl dace(1), WS(132), BB(55), brook stickleback(5)
Deer River Flow	P73	08/07/86	ALSC	366.2	7.5	58.6	1990	DEC	NP(3), SMB(6), BB(6), PKS(7), YP(6), RB(3), GS(14), BNM(1). Also, LMB, angler reports.

Appendix D – Pond Narratives

Name	Pond #	Most Recent Chemical Survey					Most Recent Biological Survey		
		Date	Source	ANC (ueq/l)	pH	Conductivity	Year	Source	Fish Species and Number Caught
Duck Pond	P40	07/17/84	ALSC	-2.6	5.04	14	1984	ALSC	BB(89), PKS(21), WS(19), GS(9)
Gourdshell Ponds	P74	08/07/86	ALSC	323.7	7.51	71.2	1986	ALSC	NP(11), GS(4), BB(25), PKS(2), YP(6)
Gourdshell Ponds	P75								No information.
Grass Pond	P171	07/12/01	ALSC	-22	4.6	16.5	1998	ALSC	No fish caught.
Grass Pond	P192	07/23/84	ALSC	-31.4	4.45	17.8	1984	ALSC	No fish caught.
Hope Pond	P59	06/23/05	DEC	45.9	6.49	19.6	2005	DEC	ST(37), GS(204)
Jones Pond	P206	07/18/84	ALSC	322.4	7.49	57.2	1984	ALSC	NP(13), BB(198), PKS(17), WS(8), GS(2), YP(8)
Lake Kushaqua	P55	06/07/94	DEC	215.9	7.36	37.3	1994	DEC	BT(3), LT(4), RSM(2), YP(201), BB(1), LNS(15), WS(40). Also, SMB, NP reported
Lake Margaret	P184	05/25/55	DEC		5.4		1955	DEC	No fish caught. 1930 survey caught 7 "sunfish".
Little Clear Pond	P172	07/12/01	ALSC	132.5	7.2	20.2	1994	ALSC	ST(3), BB(80), NP(1)
Little Hope Pond	P58	06/23/05	DEC	30.7	5.4	18.1	2005	DEC	ST(20), GS(149).
Long Pond	P170 A	08/14/06	DEC	5.39	5.39	11.62	2000	DEC	ST(4), WS(10), BB(4). Also, 1999 survey caught GS(2).
Loon Pond	P69	07/18/84	ALSC	-7.8	4.88	22.6	1984	ALSC	ST(33), BB(124), PKS(42)
Lost Pond	P200	08/03/84	ALSC	3	5.43	19.6	1984	ALSC	ST(10)
Madawaska Pond	P225	08/02/85	ALSC	77.3	6.75	19.7	1985	ALSC	ST(1), GS(3), WS(70), BB(380), PKS(13), YP(231)
McColloms Pond	P188	07/18/84	ALSC	118.9	7.02	30.1	1984	ALSC	NP(10), GS(1), WS(4), BB(54), PKS(1), YP(10)

Appendix D – Pond Narratives

Name	Pond #	Most Recent Chemical Survey					Most Recent Biological Survey		
		Date	Source	ANC (ueq/l)	pH	Conduc tivity	Year	Source	Fish Species and Number Caught
Meacham Lake	P179 A	06/13/01	DEC	166.5	7.4	39.8	2001	DEC	BT(3), SPK(33), RSM(2), NP(4), GS(12), WS(8), BB(6), SMB(5),
Mountain Pond	P57	07/08/85	ALSC	153.6	7.1	29.6	1985	ALSC	ST(5), NRD(29), CC(37), WS(69), BB(39)
Mountain Pond	P198	06/29/98	DEC	62	6.77	79.9	2001	DEC	ST(179)-egg take. Also, during 2000 egg take, BB(2) caught.
Mud Pond	P168	08/14/85	ALSC	1208.4	8.17	126.8	1985	ALSC	NP(7), GS(3), CSH(6), CC(1), WS(1), BB(22), PKS(6), YP(11)
Mud Pond	P185	06/25/57	DEC		6.6		1957	DEC	YP, PKS, BB (observed, no nets set)
Oregon Pond	P64	08/07/86	ALSC	18	5.98	11.5	1986	ALSC	WS(15), BB(19), PKS(1), YP(125). Also, LMB, angler reports. And
Osgood Pond	P202						1974	DEC	WS(11), BB(26), YP(10), PKS(8), GS(5), SMB(2). Also, NP(10) in a 1965 survey, and LMB(15) in a 1955
Rainbow Lake	P66	06/01/97	DEC	218.36	7.64	38.4	1997	DEC	NP(14), GS(44), WAE(2), LMB(1), RB(8), YP(414), PKS(27), BB(29), CC(3), CSH(3), WS(26)
Rice Lake	P178						1930	DEC	Never netted. BB & WS reported. ST privately stocked.
Skiff Pond	P507 5	07/17/84	ALSC	326.2	7.62	55.6	1984	ALSC	ST(13), NRD(9), pearl dace (35).
Slush Pond	P245	07/23/84	ALSC	273.8	7.38	45.4	1984	ALSC	ST(12), BB(23), WS(1), BND(2), GS(1)
Spring Pond	P76	07/26/85	ALSC	569	7.74	68	1985	ALSC	NP(2), BB(19), WS(25), YP(8), GS(9)
Star Mountain	P182	08/02/85	ALSC	155	7.17	39.1	1985	ALSC	ST(5), CC(48), NRD(7), pearl dace (51)
Star Mountain	P183	08/02/85	ALSC	175.2	7.3	36.9	1985	ALSC	ST(6), CC(41), NRD(49), pearl dace (76)
Toad Pond	P244	07/23/84	ALSC	-36.5	4.47	20.2	1984	ALSC	No fish caught.

Appendix D – Pond Narratives

Name	Pond #	Most Recent Chemical Survey					Most Recent Biological Survey		
		Date	Source	ANC (ueq/l)	pH	Conductivity	Year	Source	Fish Species and Number Caught
Unnamed Water	P54								No information.
Unnamed Water	P60	07/16/85	ALSC	21	5.69	19.5	2001	DEC	RT, ST, as per Hope Pond post-reclamation survey.
Unnamed Water	P68	07/11/85	ALSC	-110.5	3.99	44.7	1985	ALSC	No fish caught.
Unnamed Water	P71								No information.
Unnamed Water	P189	07/18/84	ALSC	-62	4.26	27.6	1984	ALSC	No fish caught.
Unnamed Water	P191								No information.
Unnamed Water	P197								No information.
Unnamed Water	P206 A								No information.
Unnamed Water	P505 4								No information.
Unnamed Water	P505 5								No information.
Unnamed Water	P505 6								No information.
Unnamed Water	P505 8								No information.
Unnamed Water	P505 9								No information.
Unnamed Water	P506 0								No information.
Unnamed Water	P507 0								No information.
Unnamed Water	P507 8								No information.

Appendix D – Pond Narratives

Name	Pond #	Most Recent Chemical Survey					Most Recent Biological Survey		
		Date	Source	ANC (ueq/l)	pH	Conduc tivity	Year	Source	Fish Species and Number Caught
Unnamed Water	P508 1	10/11/84	ALSC	-57.9	4.29	33.1	1984	ALSC	No fish caught.
Unnamed Water	P508 4								No information.
Unnamed Water	P508 5								No information.
Unnamed Water	P511 3								No information.
Unnamed Water	P511 5								No information.
Unnamed Water	P514 0						1990	DEC	NP, SMB, BB, PKS, YP, RB, GS, BNM & LMB, as per Deer River
Unnamed Water	P514 2								No information.
Unnamed Water	P517 6								No information.
Unnamed Water	P520 3								No information.
Unnamed Water	P520 6								No information.
Unnamed Water	P521 3								No information.
Unnamed Water	P524 8								No information.
Winnebago Pond	P514 1	07/18/84	ALSC	251.7	6.85	42	1984	ALSC	ST(4), GS(8), CC(7), pearl dace (23), brook stickleback(1)

Species Abbreviations

A-Alewife

C-Cisco

GS-Golden shiner

LLS-Landlocked Salmon

RbS-Redbreast sunfish

ST-Brook trout

BND-Blacknose dace

CC-Creek chub

KOK-Kokanee Salmon

NOP-Northern pike

RT-Rainbow trout

WS-White Sucker

Appendix D – Pond Narratives

BB-Brown Bullhead	CCS-Creek chub sucker	LND-Longnose dace
PD-Pearl dace	S-Smelt	YP-Yellow perch
BK-Banded killifish	CS-Common shiner	LmB-Largemouth bass
PKL-Chain Pickerel	SFS-Spotfin shiner	WF-Whitefish
BnM-Bluntnose minnow	LT-Lake trout	PkS-Pumpkinseed
SmB-Smallmouth bass	Spl-Splake	BT-Brown trout
FF-Fallfish	NRD-Northern redbelly dace	RB-Rock bass
ClM-Cutlips minnow	Unknown - No biological survey	

Appendix E – Public Use Information

Debar Complex Register Data

Year	Azure Mountain	Debar Mountain	Debar Pond	Hays Brook Truck Trail	Osgood Pond
1999	1,442x	X	X	810	X
2000	X	X	X	569	X
2001	X	X	X	685	1,037
2002	2,129x	940x	X	549	969
2003	4,282	1,172	X	649	713
2004	5,158	1,312	X	670	550
2005	3,858	1,206	X	916	685
2006	4,235	1,258	406	778	572
2014	X	665x	345	406x	371x
2015	2,052x	1,267	230x	105x	600
2016	2,909x	1,430	458	827	113x
2017	X	1,221	699	791	630
2018	5,739	1,185	1,054	719	547
2019	4,116x	X	933	566	339x

X- incomplete data

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Appendix F – OPRHP Consultation

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Appendix G – Public Comment

UMP Kickoff Public Meeting

Summary of comments received, sorted by topic, since the announcement of public meeting that were held on February 22, 2017 in Duane and March 1, 2017 in Vermontville.

- **Access - ADA**
 - Access for everyone.
 - Improve accessibility to people with disabilities
 - Area around Debar Pond including road.
 - ADA access is important both interior and exterior (Backcountry and Front country)
 - Provide more accessible features to allow more people to enjoy the land.
 - Provide opportunities for all people – ATVs should be included in this
 - Improve trail access for all abilities.
 - Need to provide opportunities/access for seniors with limited in ability to travel long distances.

- **Access - General**
 - Create and Maintain as much access as possible.
 - Improve parking – provide more, larger parking areas.
 - Provide 4-season parking lots to get folks off roadsides.
 - Keep logging roads open. Gates and rocks are blocking old roads and trails
 - State land marking and signage - Improve marking of State land so people know where they can legally recreate.
 - Improve signage interior and exterior – need good signage to keep folks from getting lost.
 - Support enhanced access opportunities.
 - Oppose anything that would permanently limit access.

- **Access - Motorized**
 - Snowmobile

- Develop a better snowmobile connector trail from Franklin C7 (National Grid Pole Line) to Franklin C8 (Debar Meadows-Meacham Lake Trail) via the Kushaqua Tract Conservation Easement Lands. Two Options for this trail are already approved in the Kushaqua Tract RMP. Development of this connector will move several miles of the trail off County Route 26.
- Provide snowmobile access from Kushaqua Tract Conservation Easement to Debar Mountain Wild Forest.
- Move trail off County Route 26. Utilize old Brooklyn Cooperage rail line.
- Improve condition of Debar Meadows – Meacham Lake Trail
 - Improve trail surface on the Debar Meadows-Meacham Lake Trail (C8) east of Winnebago Pond. Current trail conditions preclude public snowmobiling during periods of low snow, and early in the snowmobile season.
 - Improve drainage and widen bridges on Debar Meadows-Meacham Lake Trail (C8).
- Development of trail along State Routes 30 and 458 to provide a safer alternative for the C8 Snowmobile Trail between Meacham Lake and the Madawaska Road. Trail should include dedicated bridge over the East Branch of the Saint Regis River to move snowmobile and pedestrian traffic off of State Route 30.
 - Build snowmobile bridge over east Branch of Saint Regis River.
- Improve and repair existing trails for user safety and environmental protection.
- Users need to be allowed to repair drainage and remove rocks and obstacles; especially on the Debar Mountain Trail (C8).
- Provide new trails to avoid using public highways. Consider a trail between County Route 14 (near Everton) to the Madawaska Road.
- Consider a trail to go south of Route 30 to lower congestion on the Debar Mountain Trail (C8).
- Provide more secondary trails. A trail to a mountain top would be a big draw for the area.
- 30 miles of trail on 88,000 acres of land is low ratio given the undeniable economic impact snowmobiling has on the state.
- Do not support the creation of additional snowmobile trails or other motorized uses.
- Keep S72 trail open and address maintenance issues.

- ATVs
 - ATV use of Forest preserve lands is illegal and should not be prohibited.
 - All attempts to allow ATV use on State lands have been shut down due to environmental damage.
 - Provide opportunities for all people – ATVs should be included in this.
 - ATV Trails are preferred over road riding.
 - ATV community seeks legitimate trail opportunities.
- Provide Trail from County Route 14 to Route 458 for ATVs, snowmobiles and hiking.
- **Access - Trails**
 - Maintenance of existing trails for motorized, biking and foot traffic which they are currently designed for.
 - Support for integrated trail system that forms one or more loops and connects with adjacent lands to provide long distance trail opportunities.
 - Trails could serve hikers, backpackers, skiers, hunters and trappers.
 - Develop Trails south of County Route 60 (Town of Franklin).
 - Construct new trail to Azure Mountain that provides a gentler, more sustainable route.
 - Keep Baldface Mountain trailless.
 - Support connector trail from Kushaqua Tract Conservation Easement to Hays Brook Trails. Concerned that this may be a vector for motorized use of Forest Preserve. keep trail development similar to a footpath.
 - Provide better signage/communication regarding the Loon Lake Mountain Trail across the Kushaqua Tract Conservation Easement. Explain allowed public uses better. Explain any necessary closures better.
 - Open and maintain northern portion of 4-Mile Road (off Blue Mountain Road) as a trail for hiking and skiing.
 - Rehabilitate old trail system that has fallen into disrepair.
 - (re)Build Trail from Sheep Meadow to Meacham Lake via Star Pond.
 - Build loop from Grass Pond to Sheep Meadow via bridge at the end of Hays Brook Tuck Trail.
 - Provide all terrain bike trails in sandy esker portion of Hays Brook area.
 - Develop a multiple use trail system and link it to other trail systems.
 - Provide Trail to Kate Mountain.
 - Create Trail system on State land adjacent to Kate Mountain. Provide extension of existing town trails for hiking, biking, skiing, snowshoeing.

- **Access - Water**

- Boat access to all waterways is greatly underutilized. Hand launches, or motorized, not everyone can carry a vessel through the woods.
- Provide better signage for paddlers at the Madawaska parking area, put-ins, and carries.
- Provide Access to the Lower Osgood River from Route 30.
- Provide access to Duck Pond off County Route 26.
- Improve parking and signage for Barnum Pond launch. Current situation poses safety hazard.
- Improve access to the Deer River within the Deer River Primitive Area. Provide access from County Route 14 to flatwater portion of river (downstream from current canoe carry access trail [old Walkerville Road]).
- Both ends of the carry around the rapids on the St. Regis River, upstream from Santa Clara Flow, is located too close to the rapids.
- Provide a canoe carry trail from Rainbow Lake to Clear Pond and Loon Lake.
- Build trails to ponds in vicinity of Hays Brook and Star Mountain.
- Develop a system of canoe carries to link Debar Mountain Wild Forest with St. Regis Canoe Area.
- Provide boat launch at Deer River Flow.
- Provide boat access to the East Branch of the St. Regis River.
- Accessibility to boat launches – don't block off. Need access that is not 0.5 miles away.

- **Camping**

- Camping areas are underutilized.
- Provide one or two primitive campsites on Quebec Brook, upstream from Madawaska Pond.
- Rehabilitate primitive tent sites on East Branch of St. Regis River between Vanderwalker launch and Everton Falls.
- Two existing tent sites on Santa Clara Flow are excellent and should be retained.
- Link lean-tos with trail system for multi-day trip options.
- Add primitive tent sites at Rainbow Lake, Loon Lake, St. Regis River, Clear, Mountain, Osgood, Debar, and Barnum Ponds.
- Provide opportunities for camping in small trailers.

- **Debar Pond/Lodge**

- State is missing opportunities at Debar Lodge. Could be run as a conservation camp. Could be used for horseback riding.
- Use Debar Lodge for rehabilitative services/retreats for veterans (Homeward Bound ADKs).
- Support Homeward Bound’s proposal to maintain the lodge as resource for veterans and for the public. Could be used for Hut to Hut initiative.
- Debar Lodge can be maintained and utilized as a community asset.
- Fix up lodge as a nature center (Malone School)
- Open lodge for tours.
- Improve access to Debar Pond.
- Provide access that is suitable for canoe carts/carriers.
 - Gate is an issue (gate was replaced in Summer of 2017 to provide better access).
- Provide trails around pond.
 - Provide nature interpretation trails around Pond.
- Debar Pond is being used year-round for camping, hiking fishing and paddling.
- Remove structures (Debar Lodge) from Debar Pond.
 - Preservation at taxpayer expense is not a good idea.
 - Hut to hut facility would be impractical and illegal.
 - Removing Debar may be more feasible than maintaining it.
 - Remove buildings. Do not allow commercial use.
- Move gate closer to pond to improve canoe/kayak access.
- The value of Adirondack great camps is incalculable in terms of their value being rooted in our shared history and from whence we came. Please do everything you can to preserve and make available to continued public use this remarkable example of Great Camp Architecture.
- Operate Debar Lodge like the VIC for educational purposes, or run as a bed and breakfast. In either case, do not close off to public access.
- Air B&B at the Lodge.
- If existing buildings are useable they should be retained.
- Preserve the buildings and eventually open them up to the public.
- Buildings should be repaired/maintained just enough so the public can use/view them.
- Debar Lodge should be used for a conservation camp for the youth. This would help introduce today’s youth to nature.
- Existing walkway to Debar Pond is dangerous (walkway was closed in summer of 2017).

- **Fire Towers**
 - Maintain both fire towers in the unit for public use, Azure Mountain and Loon Lake Mountain.
 - Towers are historical resources that also serve as recreational assets.
 - Develop a Volunteer Stewardship Agreement for the restoration and maintenance of Loon Lake Mountain.
 - Maintain Trails to fire towers.

- **General Comments**
 - Do not construct additional recreational facilities, or promote additional recreation use to the point that it degrades spectacular natural resources of the area.
 - Preserve Debar Mountain Wild Forest and the Madawaska Pond/ Quebec Brook Primitive Area as they are or preferably elevated to Wilderness status.
 - Preserve solitude and wildlife habitat.
 - The area adjacent to Bigelow Road (especially near the D&H railbed) is the site of various forms of littering and illegal dumping.
 - Slush Pond Road is a nice ski. Discourage driving on the Slush Pond Road in the Winter.
 - Improve snow plowing at Hays Brook Trailhead.
 - Put specific signage at campsites to address the most common infractions; to clarify regulations that are least likely to be followed.
 - Continue to provide public use opportunities as they exist now.
 - Maintenance is need at facilities.
 - Keep campsites and trails open and maintained.
 - Conservation Department is not listening.
 - New York State is not listening.
 - Concerned about overuse and what DEC would do to address it.
 - There needs to be more (recreational) opportunities in this part of the park.

- **Historical Resources**
 - Take advantage of history and incorporate as possible.

- **Hut to Hut**
 - DEC must not consider dining and lodging facilities as they are described in the model Conceptual Plan for a Hut-to-Hut Destination Trail System for

the Five Towns in the Debar Mountain Wild Forest UMP. To do so would invite litigation.

- Look at Hut to Hut opportunities like in White Mountains.
- Support Homeward Bound’s proposal to maintain the lodge as resource for veterans and for the public. Could be used for Hut to Hut initiative.

- **Invasive Species**

- Aquatic Invasives
 - Osgood Pond is currently free of aquatic invasive species. Provide a boat/trailer washing station between Osgood Pond and other nearby waterbodies that are currently infested with aquatic invasive species.
 - Provide week-long Pond Steward coverage provided at the Waterway Access Site.
 - Close the boat launch at the Jones Pond camping area to trailers.
 - Concern about the spread of aquatic invasive. DEC should take a more active role in reducing the risk through signing, monitoring, and limiting the most likely carriers (motorboats?).
 - Provide boat wash stations with receptacles for aquatic plants and fishing line. Osgood and Church ponds specifically named as locations.
 - Purple loosestrife noted in St. Regis River upstream from Santa Clara Flow.
 - The UMP should explain how the waterbodies in the unit fit into Adirondack Park-wide AIS spread prevention plans, and the successful program of watercraft decontamination, management and control activities across the Adirondack Park.
 - Continue to build an effective AIS spread prevention and decontamination network Across the Adirondacks. Comprised of coordinated inspection locations and strategically located decontamination facilities.

- **Land Acquisition**

- The state should prioritize acquisition of the Northern Flow River Corridors as described in the 2016 New York State Open Space Conservation Plan. Deer River and St. Regis River are both considered “Northern Flow” Rivers.

- **Local Communities**
 - Help to keep the local community viable.
 - Town (Duane) needs State help to remain viable.
 - Utilize what you have to support community.

- **Wildlife**
 - Need to address Moose Management - Habitat
 - Trapping
 - Request that trapping be listed as an acceptable activity in the unit just as hunting and fishing are.
 - Promote trapping.

The following comments were also considered in the development of the UMP. These comments were received prior to the 2017 public meetings. Information has been obtained from the public by way of Open Houses (held on March 5, 2003 at Paul Smith's College and March 11, 2003 at St. Regis Falls Central School), by mail, and email.

- Reopen the Jones-Blue Hill trail to public use
- Create designated cross-country ski trails in the unit.
- DEC should better enforce current laws, rules and regulations
- Gate the Jackrabbit Trail to prevent use by snowmobiles.
- Gate the Osgood Pond fishing and waterway access site to prevent the launching of trailered boats. Provide private landowners with deeded access with a key.
- Impose a 10 HP motor size limit on Osgood Pond
- Preserve the Debar Lodge buildings
- Allow continued use of the Osgood Pond fishing and waterway access by persons launching trailered boats.
- DMWF UMP should state that the Azure Mountain fire tower should be preserved and used for public enjoyment.
- Do not construct additional foot trail mileage on Azure Mountain.
- Avoid creating more roads, trails, campsites, parking areas or boat launching sites.
- Restrict motorized vehicle use to limited designated areas.
- Ban All Terrain Vehicles
- Reopen public access to Loon Lake Mountain and restore the fire tower for public use.
- Reopen the Iron Bridge canoe carry or provide an alternate means of access.
- DEC should provide better trailhead information at kiosks.
- Update and make corrections to the Santa Clara Tract Brochure.

- Don't impose horsepower limits or motor restrictions on Osgood Pond or the Osgood River.
- Construct a boat washing station at the Osgood Pond fishing and waterway access site.
- Construct a boat washing station at the Jones Pond fishing and waterway access site.
- Post invasive species signage at boat launches and fishing and waterway access sites.
- DEC should enforce against illegal ATV use and dumping on the Bigelow Road.
- DEC should suspend the deer feeding ban in the Adirondack Park
- Open a foot trail/canoe carry to the Osgood River from the Hays Brook Assembly Area parking lot.
- Trim encroaching vegetation and remove other obstructions from the Osgood River.
- Create a canoe carry to the East Branch St. Regis River from the highway at Meacham Lake Outlet.
- Purchase the rights to permit legal public access to Rice Brook.
- Develop more designated campsites on the East Branch St. Regis River
- Develop a parking area and fishing and waterway access site to provide public access to the Deer River Primitive Corridor.
- Develop campsites and canoe carries on the Deer River.
- Develop more campsites on the Main Branch St. Regis River.
- Develop campsites at Madawaska Pond
- Develop more snowmobile trails in the unit.
- Develop ATV trails in the unit.

- Construct a deep-water launch site to accommodate trailered boats at Meacham Lake.
- Construct a hiking trail accessing Baldface Mountain.
- Construct a loop trail off of the existing hiking trail accessing Azure Mountain.
- Re-route the Debar Pond canoe carry through the Debar Lodge area.
- Designate Debar Pond as a motor-less pond.
- Provide access to the Lower Osgood River from State Route 30.
- Ban all campfires.
- Forest Rangers should inspect all designated campsites at least once daily.
- Ban the use of motors on the Osgood River.
- All campsites should have designated areas for camping and parking.
- State lands need better signage and boundary marking.
- Provide more parking facilities.
- Snowmobile use should only be permitted immediately adjacent to highway corridors.
- Develop All Terrain Biking trails
- DEC Fisheries should continue with liming of Benz Pond.

Appendix G – Public Comment

- Provide parking and car top boat access to Benz Pond.
- Develop a designated canoe launch at Madawaska Pond.
- Reopen the trail from the Sheep Meadows to Meacham Lake.
- Remove the Loon Lake Mountain fire tower.
- DEC should continue to maintain the Deer River Flow, Meacham Lake and Madawaska Dams.
- Remove all existing buildings in the Debar Lodge Complex.
- Control invasive plants and non-native species.
- DEC should develop rowboat access to sites currently designed for canoe use only in order to accommodate the elderly and persons with disabilities.
- Restrict Jones Pond campsites to walk in access only.
- DEC should implement trail fees for hikers, snowmobilers, ATV riders and mountain bikers.
- Designate trails for use by dog sled teams and mushers only. Allow these trails to be groomed using a snowmobile.
- Develop a trail from Debar Meadows to Debar Pond using the old railroad bed.
- DEC should preserve sportsmen's clubs when negotiating fee title and conservation easement acquisitions.
- DMWF UMP should recommend the classification of the northern flow river corridors as Canoe Area.
- DEC should conduct a survey of the Azure Mountain parcel boundary.
- Construct extended hiking trails like the Northville-Placid Trail.
- Extend the residency of hunting camps on the Champion fee lands beyond five years after the date of acquisition.
- Preserve the highway bridge crossing over the Deer River.

Appendix H – Debar Lodge Day Use Area Draft Unit Management Plan

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